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International Intellectual Property Law and Human Security

Robin Ramcharan

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"A major objective will be to have intellectual property rights systems that advance human security through the efficient development of appropriate drugs and the facilitation of their extensive use. Any resolution of the current impasse should favor flexibility and overcome import and export controls on the drugs and vaccines needed for emergencies. A balance must be crafted to provide incentives for research and development for both profitable products and technologies to fight diseases of the poor. That balance should also provide equitable access to life-saving essential drugs and vaccines for people unable to purchase technologies from the global marketplace. The balance should recognize the very large public investments in basic research that underlie product development by all manufacturers, including private ones"

Human Security Now
Commission on Human Security, 2003

Foreword

With this book Professor Robin Ramcharan has made a distinct contribution to the literature on international intellectual property law. As former Chairman of the Advisory Board of the World Intellectual Property Organization (WIPO) Worldwide Academy (WWA), and as former Director of the Raoul Wallenberg Institute of Human Rights and Humanitarian Law (RWI) when an LL.M program on international intellectual property rights law and human rights law was established in cooperation with the WWA at the University of Lund, I had the occasion to witness at first hand the debate about, and the need for, the modernization of the regime of international intellectual property law.

The perspectives of human security and human rights provide a helpful framework from which to approach this modernization, and Professor Ramcharan has helped to identify new vistas to that end. His proposal to set up an international equity panel within the WIPO is timely and innovative, and the intellectual property community should welcome his effort to make the case for this policy option.

I have known Robin for a long time and have enjoyed the opportunity to follow closely his educational, research, and professional endeavors. When he worked at the WWA I had the pleasure of cooperating with him. I am particularly pleased that his consistent pursuit of learning and research, his service with the WWA and his other academic undertakings have led to this highly creative book. I congratulate him warmly and commend his book to the intellectual property community.

Gudmundur Alfredsson
Professor at the Universities of Akureyri and Strasbourg
Former Chair, Advisory Board of the WIPO Worldwide Academy

Preface

This book looks at the regime of international intellectual property law from the perspectives of human security. The concept of human security, we believe, provides a good framework for a contemporary reassessment of international intellectual property laws and for their modernization.

The concept of human security, though not directly labeled as such, received initial attention in theoretical works such as Barry Buzan's *People States and Fear,* which argued that national and international security must be anchored in individual security.[1] Subsequently, as the concept received express affirmation and prominence in the 1990s, it came to signify that the rationale of human endeavors nationally, regionally, and internationally should be to advance the security of human beings as individuals, as groups, and as constituent elements of humanity as a whole.

Professors McFarlane and Khong in their authoritative work on the intellectual history of human security at the United Nations, discuss how the concept of human security came about, how it came to refer to the individual as the subject in need of security, and how the concept has fared in its development dimensions and its protection dimensions (human rights).[2]

Seen in broad terms the regime of international intellectual property laws can be said to have had a core rationale from the outset of advancing human security by fostering and protecting the creativity of human beings so that it can help advance human progress and development. The literature on the regime of international intellectual property law has many examples of scholars and practitioners arguing that it helps to promote economic and social development. At the same time it is contended more and more that due to power imbalances in the world and the differing stages of economic development of many countries the regime of international intellectual property law operates often to the detriment of human security and welfare. The debate over access to drugs needed for the protection of human life is a case in point. There is well-documented evidence that, in practice, international intellectual property laws operate to the detriment of protection

[1] Barry Buzan 1985.

[2] MacFarlane and Khong 2006, 10.

of the rights to life, to health, and to food in many situations. There are also many claims that the traditional knowledge of societies in Asia, Africa, and Latin America, which is their birthright, has been appropriated by the allocation of patents to corporations in western, developed countries.

A contemporary reassessment and modernization of international intellectual property laws must strive for reconciliation between the approach that intellectual property laws help promote economic growth and development and the countervailing contentions that they often operate to the detriment of people in developing countries. The ongoing 'Development Agenda' deliberations[3] within the WIPO seek to examine how WIPO as an institution, and its programmes and operations, could help advance the Millennium Development Goals articulated by the United Nations General Assembly. That is a broader debate which has many political ramifications. In this book we take as our starting point the perspective of the enhancement of human security and we seek to inquire how such an approach might help attenuate international intellectual property laws. The human security framework can help the international community arrive at equitable balances between the regime of international intellectual property law and the needs of developing countries and indigenous peoples on the ground.

Recent publications in countries such as India and South Africa help to bring out the need for new perspectives poignantly. A recent publication on *Indian Patents Law,* based on a conference organized by the Goa Institute of Management, highlighted the strains on Indian patent law as a result of India's having to bring its legislation in conformity with the requirement of the TRIPS Agreement. Opening the Conference, Dr. Anil Kakodkar, remarked that the question of patents and intellectual property rights had become a very crucial and important matter, particularly for India, which, he said, was going through a civilizational transition: India needed to bring about a synergistic impact of modern knowledge and traditional knowledge which was its heritage.[4] The need was to preserve old knowledge and build on it with the new. The book highlighted the case of the patenting of turmeric in the USA, which had required the Indian Government to initiate legal proceedings to get the patent revoked.

As changes were taking place in the management of knowledge, he continued, there was corresponding need for a transition of the people from weaker economies to stronger economies. The intellectual property system needed to be sensitive to the requirements of the poor and the less endowed and to requirements of national importance.[5] He highlighted concerns regarding access to medicines for the poor and the weak. As a nuclear scientist himself, he gave the example of a plumbing valve that could have helped filter radioactivity and better protect people in their water supplies. He said that when he and his colleagues thought of getting

[3] See http://www.wipo.int. Accessed 1 June 2012.

[4] Kakodkar 2009, 3.

[5] Id., 3.

the valve from the market they had been told that it had been built under technology license from a foreign manufacturer and could not be used for the nuclear industry. He complained, "We cannot copy that valve because it is protected under IPR-Patent regime. I would object to granting of patent in such a case. If the product cannot be used in a program of national importance what is the wisdom in granting it?"[6]

In a powerful presentation in the book, Professor N.R. Madhava Menon pleaded that because India had to comply with the TRIPS regime and modify its patent laws, Indian society was suddenly moving from a culture of openness and sharing to a culture in which information was considered a commercial product to be "encashed" in the international market without concern for the disadvantaged sections of the people. He stressed the need for an integrated approach to knowledge in order to promote creativity, innovation, and development.[7] He highlighted problems for Indian society stemming from the TRIPS Agreement. The revised Indian Patents Act, he complained, "was adopted not particularly to meet the immediate needs and aspirations of the people of India; it was adopted because of the compulsions of TRIPS and to be able to discharge the obligations that India has undertaken under the WTO."[8] He added plaintively: "Very few people to my mind in the developing world consider the TRIPS Agreement as a fair arrangement for all the trading nations because it imposes unbearable burden on technologically backward countries."[9] He noted that developing countries, struggling to fulfill the basic needs of their people in relation to health, nutrition, and food, were encountering problems in having to deal with an IPR regime developed in the west during their industrialization:

> …if an IPR regime developed in the west during industrialization were to be applied across the board to all products and processes regardless of the social cost and benefit, we may end up jeopardizing the livelihood of millions of people and exposing them to the risk of loss of livelihood, malnutrition and ill-health. Biodiversity, agriculture, traditional systems of medicines, folklore and similar common property assets today subserve the health of Indians. They are not owned by any single person. It is a community resource, a shared resource which cannot be monopolized or appropriated to the common detriment. Now we are suddenly told that these knowledge systems are to be put into the IPR route if they are to be saved by its legitimate owners, the communities to which they belong. It is an impossible task and will take a long time and expense. However, that seems to be the only way which western countries will recognize this wealth which we have been enjoying for hundreds of years and sharing it with non-Indians as well. We are suddenly faced with the situation in which neem or turmeric will be patented elsewhere and we will have to spend hard-earned dollars to fight the cases against it in foreign courts. Is this the only way in which intellectual property rights can be so organized to give the inventor his due and at the same time make it available for public good?[10]

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[6] Ibid.

[7] Menon 2009, 7.

[8] Id., 9. WTO refers to the World Trade Organization.

[9] Ibid.

[10] Id., 10.

Professor Menon made a powerful argument for fairness and equity in the regime of intellectual property law:

> The rules of the game are to be fair and equitable to both sides. Fresh negotiations to change the rules appropriately seem to be the only suitable option available to countries like India seeking to increase their share in global trade…There is no doubt of the possible conflict of private rights and public interests when it comes to patenting of food, drugs and pharmaceuticals as it concerns the basic necessities of life of a large number of people living below the poverty line.[11]

Professor Menon went on to point out potential threats to bio-diversity and traditional knowledge in the TRIPS regime: "In my view a separate treaty like the TRIPS Agreement would be also necessary for the purpose" of protecting biodiversity and traditional knowledge.[12] "Developing countries like India having rich unexplored biodiversity and a wealth of traditional knowledge have to realize that they are in risk of losing heavily under the TRIPS regime if they fail to persuade the TRIPS Council to establish effective mechanisms within TRIPS or parallel to it to protect these sources of wealth of developing countries."[13]

Professor Menon recognized that the originators of innovations should get their just reward by way of suitable royalties and that there should be no grudge in providing the same. Simultaneously the door should be open for obligatory licensing involving the domestic enterprises in the production of patented drugs. The profit-driven model of the TRIPS was not suited to the health needs of the developing and poor countries.[14]

We see similar arguments in Africa generally and South Africa in particular. Armstrong et al., have advanced the view that the beginning of the twenty-first century foreshadowed a new phase in global intellectual property governance, characterized neither by universal expansion nor reduction of standards, but rather by contextual 'calibration'. They considered that a systemic calibration was taking

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[11] Keayla 2009, 39. The argument for equity was made as follows by Dr. Yusuf K. Hamied, then Chairman and Managing Director of Cipla Limited and a leading scientist, who is quoted in Kealya as follows: "[T]he patent regime in this country should be devised so that the utmost priority is granted to securing people's rights of access to affordable and quality healthcare, without monopoly." Id., 32–33.

[12] Menon (2009), 15.

[13] Id., 16.

[14] Id., 39. The need for equity regarding price control was made as follows: "TRIPS Agreement is silent about the price control of patented products. The products protected under patents would enjoy monopoly in the market place and would command high prices. Appropriate law should be strengthened to deal with the prices of the patented products at least for the initial period of 5 years. The importance of this aspect can be understood on the basis of examples of prices of similar products sold in India, Pakistan and India. A pack of ten 500 mg tablets of Ciprofloxacin costs Rs 29 in India whereas the prices in Pakistan is Rs 424 and in Indonesia it is Rs 393 (converted to Indian rupees). The prices of other pharmaceutical products are almost in the similar proportion." Keayla 2009, "The Amendment Patents Act of 1970: A Critique," in Parulekar and D'Souza 2009, 38.

place, based on an understanding of the positive *and* negative implications of intellectual property for broad areas of public policy:

> In essence, a newly emerging intellectual property paradigm is based on a richer understanding of the concept of development. While development was once defined as mainly an issue of economic growth, there is now a more nuanced view, a view that emphasizes the connections between development and human freedom… WIPO's new 'development agenda', formally adopted in 2007, is premised on promoting a more holistic appreciation of the real relationships among intellectual property and economic, social, cultural, and human development.[15]

In similar vein, as we shall see later, Brazil has taken a leading role in pushing for a development agenda within WIPO. All three IBSA countries (India, Brazil, and South Africa) are thus in the vanguard of efforts for a more equitable regime of international intellectual property laws.

In this book, we shall argue that the underlying rationale of the regime for the international protection of intellectual property rights needs to change so as to strike a balance between the rights of authors and the requirements of human security. At the beginning of the twenty-first century it is increasingly recognized that international protection regimes must be mindful of the need to do justice to those in dire need.

Until now one can say that the rationale of the regime of international protection of intellectual property rights has been premised primarily, if not exclusively, on protection of the creativity and the rights of authors/inventors so as to foster innovation.

However, authors and inventors do not create in a vacuum. They create in a national environment that has been shaped by intellectual currents from different parts of the world, and it must be recognized that creativity and authorship need to advance the interests and rights of humanity. In this book, it will be suggested that the rights of access of poor people to medicines and to the basic means of survival must influence the future evolution of the regime of international intellectual property law.

[15] Armstrong et al., 2010, 4.

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Abbreviations

ABS	Access and Benefit Sharing
APEC	Asia Pacific Economic Cooperation
ARV	Anti Retro Viral
ASEAN	Association of Southeast Asian Nations
BIRPI	*Bureau international reuni pour la propriete intellectuelle* (WIPO)
CBD	Convention on Biological Diversity
CISA	Indian Council of South America
CDIP	Commission on Intellectual Property and Development
CL	Compulsory Licenses (see NVL)
DAG	Development Agenda Group
ECOSOC	Economic and Social Council
EDV	Essentially Derived Variety
EPO	European Patent Organization
EST	Environmentally Sound Technology
FAIRA	Foundation for Aboriginal and Islander Research Action
FFM	Fact Finding Mission
FAO	Food and Agriculture Organization
FTA	Free Trade Agreement
GATT	General Agreement on Trade and Tariffs
GNP	Gross National Product
GRTKF	Genetic Resources, Traditional Knowledge and Folklore
GRULAC	*Grupo Latin America y Caribe* (Latin America and Caribbean Group)
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune-Deficiency Syndrome
IBO	International Business Organization
IBSA	India, Brazil, and South Africa
ICC	International Chamber of Commerce
ICT	Information Communication Technology
IFPMA	International Federation of Pharmaceutical Manufacturers Associations

IGC	Intergovernmental Committee (on GRTKF)
IGO	Intergovernmental Organization
ILO	International Labour Organization
IPEG	Intellectual Property Expert Group (ICC)
IWG	Intersessional Working Group (of the IGC–GRTKF)
JPO	Japan Patent Office
LDC	Least Developed Country
MAT	Mutually Agreed Terms
MDG	Millennium Development Goals
MERCOSUR	Mercado del Sur
NVL	Non-Voluntary Licenses (see CL)
NTD	Neglected Tropical Diseases
PCT	Patent Cooperation Treaty
SCCR	Standing Committee on Copyright and Related Rights
SCP	Standing Committee on Patents
TK	Traditional Knowledge
TM	Traditional Medicine
TPM	Technological Protection Measure
TRIPS	Trade Related Aspects of Intellectual Property
UN	United Nations
UNCTAD	UN Conference on Trade and Development
UNDP	UN Development Program
UNESCO	UN Educational, Scientific and Cultural Organization
UNIDO	UN Industrial Development Organization
UNSC	UN Security Council
US	United States
WCT	WIPO Copyright Treaty
WEF	World Economic Forum
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WPPT	WIPO Performances and Phonograms Treaty
WTO	World Trade Organization
WWA	WIPO Worldwide Academy

Chapter 1
Introduction

This chapter introduces the relationship between intellectual property rights and human security. The latter is anchored in the protection of fundamental human rights and in the right to development. It examines, briefly, the role of IPR in economic development and justifications for the protection of IPRs. It concludes with a review of the powerful calls by the international community and Member States of WIPO for a more equitable international intellectual property regime.

1.1 IPR and Economic Development

In seeking to attenuate and modernize the regime of international intellectual property law, a fair analysis must recognize both the merits of the existing regime and the evidence that it needs to be attenuated and modernized so as to promote human security worldwide. In opening this work, therefore, we discuss the contribution of the regime to innovation and economic growth, as well as calls for its attenuation and modernization.

Within the last two decades, the international intellectual property regime has gained greater prominence in international commercial relations among countries.[1] While the protection of intellectual property pre-dates by over a century the 1994 Agreement on Trade Related Aspects of Intellectual Property (TRIPS) concluded in the context of the Uruguay Round of the GATT negotiations, it is the

[1] For a very brief overview of intellectual property see WIPO 2003, What is Intellectual Property. For a more detailed survey see WIPO 2004, Handbook on Intellectual Property.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9_1,

TRIPS Agreement that catapulted international intellectual property laws dramatically into the international spotlight. Moreover, with the progression of the industrialized countries and advanced developing countries toward knowledge economies, the conventional wisdom that intellectual property is beneficial for wealth creation was highlighted by the fact that the mere possession of intellectual property rights constitutes valuable assets that can be traded or licensed for profit.[2]

Beyond the commercial aspects of the international intellectual property system is its role in fostering creativity and spurring technological change. Copyright laws, for example, grant rights for exclusive commercial exploitation of literary, dramatic, musical and artistic works to authors of such works as well as to related works.

It is acknowledged that the protection of IP rights has had a beneficial impact on invention and creativity, which in turn benefits the economy of a country. While definite proof of the claim that IP protection leads to economic growth is yet to emerge, Kamil Idris, former Director General of the World Intellectual Property Organization, in a book titled *Intellectual Property: A Power Tool for Economic Growth* suggested the beneficial impact that IP has on the economic development of countries.[3] He argued that there were rewards to be gained from proper domestic protection of copyright and related rights, patents, trademarks, industrial designs, geographic indications and other forms of IP rights. Shahid Ali Khan, has also discussed the economic impact of IP in developing countries.[4] Other studies, in the field of copyright for example, have demonstrated the economic importance of copyright industries for the national economy of some countries. In the United States, a leader in technological innovation and creativity, it was estimated that copyright industries had contributed some six percent of gross domestic product in 2011.[5]

1.1.1 Copyright and Economic Development

The economic importance of copyright industries is well documented.[6] Lord David Puttnam, a successful film producer and Deputy Chairman of British public service broadcaster Channel 4, has argued that "an economy based on our creative industries is considerably more sustainable in the long run than one based on credit default swaps." With careful management, "our intellectual property could well prove to be one of the crucial drivers of growth going forward."[7] The industries referred to in Table 1.1 are important contributors to national economies and create jobs in every

[2] For a discussion on the economic impact of intellectual property see Alikhan 2000 and Idris 2003. On the valuation of intellectual property assets see Caledonia 2006.

[3] Kamil Idris 2003.

[4] Alikhan 2000.

[5] Siwek 2011.

[6] See Jehoram 1989; Silberston 1998.

[7] Lord Puttnam 2011, 3.

Table 1.1 Copyright industries

	Primary copyright/neighboring rights industries	Some beneficiary groups of dependent industries related to copyright
1	Printing/publishing	Printing trade persons, library, librarians
2	Music industry	Composers, lyricists, musicians/performers, music publishing, recording companies, concerts or musical promotions
3	Computer/games software	Computer hardware manufacturers
4	Arts, photography and related matters	Museums, galleries
5	Radio, television, cable (terrestrial/satellite)	Producers, directors, actors, announcers, advertisers
6	Advertising	Most suppliers of goods and services
7	Films and videos	Producers, directors, actors

Source WIPO 2001c, p. 3

country. By the late 1980s, studies of European countries indicated that the copyright industries contributed 2.77 % to the gross national product (GNP) of the Netherlands, 2.06 % in Austria, and 2.92 % in Finland. In the United Kingdom (UK), the value added to gross domestic product (GDP) of the UK in 1990 was 3.6 %.

Those industries, which directly depended on copyright, employed about 800,000 people.[8] The Commission of the European Communities has estimated that the market for copyright goods and services in the Community ranges between 5 and 7 % of the GNP of the European Communities Member States.[9] The music industry in the European Union alone accounted for an estimated turnover of 18 million ECU and employed over 600,000 people in 1995.[10]

In the United States (US), the Washington-based Intellectual Property Alliance estimated that the core copyright industries (publishing, broadcasting, sound recording, and audio-visual) accounted for 5.24 % of GDP in 2001. In dollar terms, this amounts to US$ 535.1 billion, an increase of over $75 billion since 1999. Copyright industries led the US economy in their contributions to job growth, GDP, and foreign sales/exports.[11] Over the last 25 years, the US copyright industry's share of GDP grew more than twice as fast as the remainder of the US economy. Employment in the US copyright industries doubled to 4.7 million

[8] WIPO/ACAD/E/01, Table 1.1.

[9] PCIPD/3/9, 3.

[10] Laing 1999.

[11] IIPA, Press Release, April 22, 2002. http://www.iipa.com.

between 1997 and 2001.[12] In Japan, the copyright industry reached an estimated scale of 2.3 % of GDP in terms of value added in 1998.[13]

Using statistics from WIPO and other sources, the ICC estimated in February 2011, that in the G8 countries, copyright-based industries and interdependent sectors alone accounted for approximately 4–11 % of Gross Domestic Product—3.4 % in Japan, 4.7 % in Canada, 6.06 % in Russia, 6.9 % in the EU, and 11.09 % in the US. It noted that these sectors also produced a substantial number of jobs—approximately 3–8 % of all employment within the G8—3.0 % of all domestic employment in Japan, 5.4 % in Canada, 6.5 % in the EU, 7.3 % in Russia, and 8.53 % in the US.[14]

In the countries of the Southern Market in Latin America (MERCOSUR) and Chile, a WIPO study estimated that the value added by the copyright industries to the GDP in Argentina was 6.6 % in 1993, 6.7 % in Brazil in 1998, 6 % in Uruguay in 1997 an average of 2 % for Chile between 1990 and 1998 and an average of 1 % for Paraguay between 1995 and 1999.[15]

In Australia, the copyright industries contributed $19.2 billion in industry gross product, which represented 3.3 % of Australia's GDP. This marked a steady growth from just over 2 % in 1980–1981. In June 2000, 3.8 % (345,000 people) of Australia's workforce were employed in copyright industries. Employment in these industries grew at an average of 2.7 % from 312,000 in 1995–1996.[16]

On the Asian continent, one may note the importance of the copyright industries in China and India. Alikhan found that China, with one of the fastest growing economies since the late 1970s, had made intellectual property rights a priority on its reform agenda. Indeed, it possessed a huge cultural industry which had continued to grow since. In 1994, the book publishing industry had recorded 104,000 titles of which 61,000 were new. The number of printed copies stood at over 3 billion while some 150 films had been produced with attendance in cinemas at around 14.5 billion. Sales of music were over $280 million in 1998. China was tipped to become one of the world's largest internet markets. The number of Internet users in China had increased more than fourfold from 2.1 million in December 1998 to 8.9 million in December 1999. As of 1998, the software industry alone had created some 60,000 jobs and had generated over $220 million in tax payments in 1997.[17]

In India, Alikhan found that as of 1997, the contribution of the cultural industry to its GNP was 5.06 %. It had a sophisticated book industry with an annual book title production of around 57,400 titles in 1997, producing a turnover of over $455 million. Its film industry was the largest in the world, producing some 800 films per year. Retail values of music in 1997 were around $334 million and the

[12] Ibid.

[13] PCIPD/3/9, 5.

[14] ICC February 2011, 1.

[15] WIPO and State University of Campinas 2002.

[16] The Allen Consulting Group 2001.

[17] Alikhan 2000, 64–65.

potential of the recording industry was enormous, especially given the size of its huge middle class of some 300 million people.

There are other areas of Asia with economically significant cultural industries such as South Korea and Singapore. The latter for example, with a population of around 4 million people, boasts over 100 publishing companies. The island city-state had made intellectual property one of its priority areas as it sought to become an "intelligent island" which could serve as an information technology hub for the Southeast Asia region.[18] It has invested massively in the software industry. Already in 1993, the contribution of the cultural industry to its GNP was 2.7 %.

Singapore's Creative Industries Development Strategy was announced in September 2002. The Economic Review Committee announced that "Singapore must now embark on a journey of reinvention to harness multi-dimensional creativity of our people to develop a Creative Economy. This would look at how we can fuse arts, business and advantage."[19] It considered the creative industries to be those "which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property", namely arts and culture, design and media."[20]

Creative industries were estimated to have contributed a total value-added of S$2.98 billion (Singapore dollars), or about 1.9 % of GDP. Distribution industries associated with these core creative industries had added S$2.02 billion, bringing the total value added of the copyright industries to S$5.00 billion or 3.2 % of GDP. In 2000, employment in creative industries was 47,000 (2.2 % of total employment), with an additional 32,000 persons in distribution industries. The total employment in this creative cluster in 2000 was 79,000 or 3.8 % of total employment. The sector with the highest value-added was the IT sector, which accounted for 38 % of the value added and 31 % of employment. From 1986 to 2000, the creative industries had grown by an average of 17.2 % per annum, as compared to average annual GDP growth of 10.5 %. Growth in the creative cluster during the same period was 14.0 % per annum.[21]

The vision of the Creative Industries Development Strategy's was "to develop a vibrant and sustainable creative cluster to propel the growth of Singapore's Creative Economy. Targets for the year 2012 include doubling the percentage contribution of the creative cluster from 3 % of GDP in 2000 to 6 % and to establish a reputation for Singapore as a "New Asia Creative Hub."[22] The three key initiatives are Renaissance City 2.0, Design Singapore, and Media 21. The first focuses on "developing software to maximize the potential of our arts infrastructure." The second aims to foster "a Global Cultural and Business Hub for the design of products, content and services, where design consciousness and creativity permeates all aspects of work, home and recreation." Design will be integrated into business

[18] See Ramcharan 2006.

[19] ERC Service Industries Subcommittee Workgroup on Creative Industries 2002.

[20] Ibid.

[21] Department of Statistics (Singapore) 2003.

[22] Ibid.

as "a strategic business tool to drive innovation and growth." The third aspires to increase the GDP contribution of the media industry from 1.6 % in 2000 to 3.5 % in 2012. A "Mediapolis" is projected to serve to "cluster high value-adding media production and R&D activities in a conducive 'work, live, play, and learn' environment that supports experimentation and multidisciplinary cross-pollination."[23]

The economic impact of copyright and related rights industries, such as film, music, broadcasting, software, and the Internet in Singapore has been noted. Strong copyright protection is considered indispensable for creativity and economic growth in this sector. Issues of concern, however, related to access to information, copyright protection for its software industry and electronic commerce, and the skilled manpower necessary to service the IT sector.

We have thus far established that copyright industries can, and do, play an important economic role in economies in Asia, Europe, North America and, Latin America. What about the situation in Africa? Alikhan assessed that Africa's cultural industry, especially in book publishing and music, "is on a progressive path."[24] The most promising market he cited was South Africa, where the copyright industry "registered a sizable increase during the 1990s." Book sales amounted to some $250 million in 1997 and the retail value of music was around $222.2 million in the same year. He also noted sizeable book and music industries in Nigeria, Ghana, Zimbabwe, Côte d'Ivoire, and Kenya.

Unfortunately, however, there have been very few statistics that one could use to provide a comprehensive and accurate indication of the relative importance of copyright industries in Africa. A 2008 study commissioned by the Department of Labour of South Africa acknowledged that "research in South Africa (and more generally in the rest of Africa) suffers from poor availability of quantitative and qualitative data resulting in no real possibility for comparative analysis with international data. There is no single official source of data for the industries as we define them."[25] The WIPO has been actively engaged in African States to help remedy this situation. This is one of the issues addressed in the Standing Committee on Copyright and Related Rights (SCCR), which convened at the WIPO from 4 to 8 November 2002 and which has been discussed since. Member States participating in the SCCR noted that "Although some countries have done survey work and shown the contribution of cultural and information industries to the national economy, that contribution is not sufficiently demonstrated, particularly in developing countries…" In light of this WIPO and the Finnish government, following a meeting in July 2002, cooperated on the preparation of a handbook on survey guidelines for assessing the economic volume of creative industries.[26]

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[23] Ibid.

[24] Alikhan 2000, 70.

[25] Joffe and Newton 2008, 11. In 2008, the African Union adopted the Nairobi Plan of Action for the Development of the Cultural Industries in Africa.

[26] WIPO 2002, paras 28 and 29.

A study on Francophone Africa by Papa Toumané Ndiaye, reveals some of the issues and difficulties. Ndiaye, writing in 1996 about cultural industries, noted a shift away from cultural and ideological considerations "towards economic concerns…probably due to the fact that the main features of present-day culture are the importance of its industrial dimension, the force of its political and economic impact, and its means of dissemination, which through the information superhighways, are turning the world into a 'global village'". The cultural industries, which exercise the greatest influence, are "in order of importance music (radio, phonograms and television), the audiovisual media (cinema and television), the press (daily newspapers and magazines) and publishing (books)." Assessing their relative economic importance, however, is daunting task as "there are so few reliable indicators as to their economic and social importance."[27]

The ICC has recently pointed to the contributions of the copyright sector in developing countries. Particularly noteworthy is the fact that the Mexican copyright industries directly or indirectly employed some 11 % of the work force of that country.[28]

1.1.2 Industrial Property and Economic Development

The various forms of Industrial property are also seen as important to innovation and ultimately economic progress. The International Chamber of Commerce (ICC) has argued that intellectual property rights (IPRs) "have a vital role in growing the economies of developed and developing countries all over the world, in spurring innovation, in giving large and small firms a range of tools to help drive their success, and in benefitting consumers and society through a continuous stream of innovative, competitive products and services and an expansion of society's overall state of knowledge."[29] The Chamber has noted that business sectors that depend on intellectual property protection present an important and growing part of every modern economy, as they move up the technological ladder.[30]

The ICC has pointed to World Economic Forum (WEF) studies over the past three decades, such as the Global Competitiveness Report, pointing to the important role that IP protection plays in economic competitiveness of countries. It notes that extensive WEF surveys confirm that a country's intellectual property protection is linked with its economic 'competitiveness'. Intellectual property is identified as being among the Key factors deemed to be determinant of economic

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[27] Papa Toumané Ndiaye 1996, 4.

[28] ICC 2011.

[29] ICC 2011, "Intellectual Property: Powerhouse for Innovation and Economic Growth," February 2011, 1. Available at http://www.iccwbo.org/uploadedFiles/BASCAP/Pages/IP_Powerhouse percent 20 for percent 20 Innovation percent 20 and percent 20 Economic percent 20 Growth percent 20(2).pdf. Accessed in November 2011.

[30] Id., 1.

growth and explanatory of the success of some countries over others: "Intellectual property protection is identified in the WEF surveys as one of the key national 'institutions' within which individuals, companies and governments interact to generate income and wealth in the economy." The ICC notes that countries perceived as having the strongest intellectual property protection are routinely found to be among the most economically competitive countries in the WEF surveys. Those perceived as having the weakest IPR systems tend to rank among the bottom for growth and competitiveness. In the 2009–2010 WEF survey, there had again been a high degree of correlation between a country's intellectual property ranking and its overall competitiveness ranking among the 133 countries surveyed.[31]

In a 2009–2010 Survey the WEF argued that "The quality of institutions [which include intellectual property] has a strong bearing on competitiveness and growth. It influences investment decisions and the organization of production and plays a central role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies. For example, owners of land, corporate shares, or intellectual property are unwilling to invest in the improvement and upkeep of their property if their rights as owners are insecure."[32]

The Intellectual Property Expert Group (IPEG) of the Asia Pacific Economic Conference, acting in the belief that IPR protection and enforcement "is a key factor for promoting foreign trade and investment, as well as for boosting economic development" has been following a work program since their creation in 1996, which aims to: "Deepen the dialogue on intellectual property policy; survey and exchange information on the current status of IPR protection and administrative systems; study measures for the effective enforcement of IPR; fully implement the TRIPS Agreement; and facilitate technical cooperation to help economies implement TRIPS."[33] In their Joint Statement of 2000 in Darwin Australia, the APEC member economies recognized the important role of the TRIPS Agreement administered by the WTO, based on the understanding "that the extension of an adequate protection to intellectual property rights contributes to the economic development of the APEC member economies as well as to the promotion of sound trade and investment in the APEC region."[34]

WIPO has also documented the same arguments in the course of its work. The linkage between industrial property and economic development comes through in the WIPO Handbook on Intellectual property which contended that: "At the beginning of our new millennium, worldwide economic development, with the creation of employment, economic growth and the reinforcement of the industrial network, cannot be realized without innovation at all levels."[35]

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[31] Id., 10.

[32] Ibid.

[33] Intellectual Property Rights Experts Group (IPEG), http://www.apec.org/Home/Groups/Committee-on-Trade-and-Investment/Intellectual-Property-Rights-Experts-Group.

[34] IPEG 2000.

[35] WIPO 2004, 168.

The ICC has highlighted patent dependent sectors and their role in the overall economy. It has noted that less research seems to have been done to date in estimating the economic contribution of patent, trademark and other IP-reliant sectors to the overall domestic or regional economy. Some research in the UK, however, has suggested that these sectors alone "were found to contribute a conservative £25.2 billion of Gross Value Added (4.23 % of the UK's GDP), and to employ nearly one million people or 3.72 % of the total UK workforce."[36] It noted that if patent-intensive industries are ranked not according to those making the most patent filings but rather by those that make the largest contribution to the economy, Gross Value Added of the top 10 patent-intensive industries so defined represented 7.8 % of GDP, and 36.7 % of all industrial output in the UK. It drew attention to a recent US study of both patent and copyright dependent sectors which had similarly found that these two sectors together accounted for $1.9 trillion or 17.3 % of the US GDP.[37]

WIPO has discussed the contribution of patents from the point of view of their contribution to enhancing productivity (i.e. output per unit of input), the improvement of which facilitates economic growth.[38] It considered that governmental policies aimed at encouraging innovation are vital for greater productivity. WIPO has called attention to arguments that "innovation is one of the key factors of the creation of new industries and the revitalization of existing ones, in both developed and developing countries. A recent study found that 20 % of existing international trade relied on new patents. In a globalizing economy, the competitiveness of industries can only be maintained by continuous innovation."[39] Promoting innovation is a national policy objective, which can be attained only if all the economic players of a country participate in such a policy. Therefore, innovation support structures should be considered a public service for innovative minds, entrepreneurs and SMEs, as well as other public services on offer, for example, healthcare or education. This public service should give incentives to and reinforce inventors, innovators, and SMEs investing their ideas and transforming them into products, processes, and technologies, which ultimately benefit society as a whole.[40]

Total registration and grant numbers for various IPRs had shown annual growth despite decreases in patent and trademark applications for some years and this growth was relatively high compared to that for patent, trademark and design applications. This could be explained by national IP offices' allocation of additional resources to processing applications that were filed in previous years and awaiting examination.[41]

Patent applications have served as an important indicator of overall economic vitality of national and international economies: for the period 2009–2010, the top

[36] Ibid.

[37] ICC 2011, pp. 1–2.

[38] WIPO 2004, 166.

[39] Id., 169.

[40] Id., 171.

[41] Id., 7.

ten patent offices accounted for approximately 87 % of total patent applications, with the top 3, the US, Japan and China filing about 60 % of the total. Together, the top 20 offices filed 94 % of all patent applications. Between 2008 and 2009, of the top 3 offices, Japan witnessed a 10.8 % drop in the number of applications received, the US remained almost unchanged, and China saw an increase in applications by 8.5 %. Whereas most of these offices show a drop in applications from 2008 to 2009, about half indicate positive 5-year growth.[42] The Economic downturn had accelerated the slowdown in patent applications worldwide and had brought about the first ever decline in applications under the Patent Cooperation Treaty (PCT).[43]

In the early phase of the recent global financial crisis, patent applications worldwide grew by 2.6 % in 2008, albeit a slower rate than in previous years. Approximately, 1.91 % patent applications were filed across the world in 2008, consisting of 1.1 resident applications and 0.8 million non-resident applications. A further downward trend in patent applications was expected in 2009. The available data for eight large patent offices showed a 2.7 % decrease in patent applications in 2009. As these offices accounted for around 80 % of the world total, a worldwide drop in patent applications was projected for 2009, which would constitute the first decline since 2002.[44] At the height of the economic crisis in 2009, applications filed through the Patent Cooperation Treaty (PCT) dropped by 4.5 %, the first drop since the inception of the PCT System. This drop was preceded by declining growth rates starting in 2005.

Data by origin of the applicant show that US residents filed 4.1 % fewer applications across the world in 2008 compared to 2007. In contrast, residents of China filed 26.7 % more applications in 2008. Patent applications in offices of middle-income and low-income economies seemed to be less affected by the early phase of the global economic downturn. At the majority of these offices, the number of applications saw considerable growth in 2008. For example, applications in Belize, Peru, Romania, and Turkey recorded double-digit growth. In the majority of middle-income and low-income economies, non-resident applicants accounted for the largest share of total applications.

The available 2009 data showed a substantial drop in applications in a number of offices compared to 2008. For example, patent applications at the European Patent Office (EPO) declined by 7.9 % in 2009, which constitutes the first drop in the number of applications since 2002. The 10.8 % decline in application numbers at the Japan Patent Office (JPO) is the largest in recent history.

In 2009, PCT applications filed by residents of the US (−10.8 %), Germany (−11.3 %), Canada (−11.8 %) and Sweden (−13.4 %) experienced sharper than average declines. Despite the challenging economic conditions, residents of China (+29.1 %), Japan (+3.6 %), the Netherlands (+2.4 %), and the Republic of Korea (+1.9 %) filed more PCT applications in 2009 than in 2008. Indeed, continued

[42] WIPO 2010, 7.

[43] WIPO 2010, 8–9.

[44] Ibid.

growth in PCT filings in the case of Japan and the Republic of Korea took place against the backdrop of falling resident applications at the JPO and the Korean Intellectual Property Office (KIPO), respectively.

The share of high-income economies in total patent applications (74.1 %) was 15.4 percentage points higher than their GDP share (58.7 %). Resident applications accounted for 57.4 % of the total number in high-income economies. In contrast, only one-fifth of all applications in low-income economies were resident applications.

The North East Asian countries filed the highest number of patents per GDP. The Republic of Korea, Japan and China were the three top ranked countries in terms of resident patents-to-GDP ratio and resident patents-to-R&D ratio. In 2008, residents of the Republic of Korea and Japan filed, respectively, 103 and 82 patents per billion GDP. The Republic of Korea was the only country with more than 100 patents per billion GDP. Middle-income economies—such as Azerbaijan, Chile and Turkey—have a resident patents-to-GDP ratio similar to that of Greece, Singapore and Spain, which are high-income economies.

Globally, in 2011 patent applications under the PCT increased by some 10 % compared to the previous year. This was the highest increase since 2005.[45] The majority of applications (80 %) came from China, Japan, and the United States. A distinctive aspect of total applications was the increase in Asia's share of total applications to 38.8 %. North America occupied the number one place by 2007. A noteworthy fact is that while it took 26 years to reach 1 million PCT applications in 2004, it took only 7 years to reach 2 million in 2011.

In relation to trademarks, ICC studies have shown that branded goods industries reliant on trademarks likewise represent a substantial portion of many countries' manufacturing sectors. It has pointed to research in Germany which found, that the branded goods sectors represent 22 % of the domestic manufacturing industry, 20 % of the country's exports, and 7 % of the overall economy. Similar figures were found for Spain where the Brands industries accounted for some 74 billion or 6.8 % of GDP. Estimate for the UK industry also pointed to brand manufacturing accounting for some 14 % of all UK manufacturing and over £50 billion of gross output.[46]

In its most recent studies, WIPO has noted that the global economic downturn hit trademark applications including applications through the WIPO-regulated 'Madrid' registrations system.[47] The growth in trademark applications worldwide started to slow in 2006. The global economic downturn accelerated this decline and, in 2008, total trademark applications worldwide fell by 0.9 %. An estimated 3.30 million trademark applications were filed across the world in 2008, consisting of around 2.33 million resident applications and approximately 0.97 million non-resident applications. International trademark registrations via the Madrid System decreased by 12.3 % in 2009, representing the first decrease in applications since

[45] WIPO 2012.

[46] ICC 2011, 2.

[47] See WIPO's website for the most recent studies. Figures cited are those available at the time of writing. See http://www.wipo.int/ipstats/en/statistics/marks/. Accessed on 25 June 2012.

2002–2003. Compared to resident trademark applications filed with national IP offices, international registrations via the Madrid System declined at a faster rate in the majority of countries. The 12.3 % drop in 2009 is primarily due to a fall in applications from residents of France, Germany and the US.[48]

The majority of the top 20 IP offices saw a drop in the number of trademark applications. In 2008, the IP offices of Japan (−16.6 %), Spain (−13.3 %) and the United Kingdom (−11.8 %) saw the largest decreases in applications received in 2008 compared to 2007. In contrast, the IP offices of many middle-income economies—e.g., Brazil, India, and Thailand—experienced growth in application numbers over the same period. At the top three IP offices—China, the Republic of Korea, and the US—the decrease in resident applications accounted for the overall decrease in applications, as non-resident applications actually grew between 2007 and 2008.

In 2009, available data for a few IP offices provided a mixed picture. A few offices, such as China (+20.8 %) and France (+8.1 %) saw substantial growth in applications in 2009 compared to 2008. In contrast, Germany and Japan experienced, respectively, a 7.7 and 7.2 % drop in applications. For the US, data for the calendar year are not available, but fiscal year data show a drop (−11.7 %) in the number of applications from October 2008 to September 2009.

China accounted for around 90 % of the worldwide increase in trademark registrations. The total number of trademark registrations across the world grew by 7 % in 2008, which is slightly above the growth rate of the previous year. In 2008, approximately 2.37 million trademarks were registered across the world. A substantial increase in the numbers of registrations issued in China (+56.8 % growth) is the main source of this increase. The increase in trademark registrations in China is partly due to the 300 additional trademark examination assistants recruited to reduce the number of pending applications. The majority of the top 20 IP offices saw an increase in trademark registrations in 2008 compared to 2007. Registrations issued by the IP offices of the United Kingdom, the Russian Federation and the European Union's Office for Harmonization in the Internal Market (OHIM) grew by 23.6, 21.7 and 20.1 %, respectively, in 2008. Chile heads the trademark applications per GDP list. Chile is the only country with more than 100 resident trademark applications per billion GDP in 2008. The Republic of Korea (87), Bulgaria (82), and China (81) also exhibited a high resident applications to GDP ratio.

Overall, according to the ICC, many sectors that rely on IP protection showed disproportionate growth despite trends of declining prices, and are strategically important in the economy. It called attention to the economic benefits generated by sectors reliant on IPR such as information and communication technology (ICT) which are even higher when adjusted to constant dollars, given that the prices for such IPR-based goods and services tend to decline over time. ICC cited a US study which has explained:

> For example, the overall price index for the US GDP rose from 100.000 in 2000 to 108.237 [+ 8.2 per cent] in 2004. By contrast, the price index for the ICT industry component of

[48] WIPO 2010, 8–9.

> the convergence industries fell from 100.000 in 2000 to 79.752 [−20.2 per cent] in 2004. If price levels consistently fall and real quantities remain unchanged, the real value added by the producers of those goods consistently increases. Since the IP industries have reduced real prices over time, their real output—net of intermediate purchases or, in other words, value added, has correspondingly increased over the same period.[49]

The ICC noted that "many IP-based sectors not only make substantial economic contributions but are important as a strategic matter to their economies." Drawing attention to a study by Professor Raymond in 1996, the ICC quoted his conclusion that: "… of all traditional manufacturing industries, the [IP] intensive ones are those upon which Britain's industrial future depends. They have been the ones that continued to grow and prosper in times of adversely changing industrial structure."[50]

1.2 Utilitarian v. Natural Rights Approaches to IPRs

The statistics as outlined above are reflective of the predominant economic rationale or utilitarian approach for the protection of IPRs as opposed to a 'natural rights' approach that privileges the protection of the personality of creators or the idea that a creator has a natural property right in the fruits of his or her labor.[51] The predominant utilitarian rationale focuses on economic incentives for creators.[52] The central idea is that the public interest would be advanced through the accumulation of inventions and other creative endeavors, which are thus incentivized. As market mechanisms may not be sufficient to induce firms to make "socially optimal" levels of investment in the production of knowledge and to prevent "under-investing" in knowledge production, non-market institutional arrangements, such as patents and subsidies are deemed necessary. While creating such incentives it was also important not to leave room for anti-competitive practices.[53] This rationale was emphasized as a justification for the inclusion of IPR protection in the US Constitution in a case of *Mazer v. Stein* (1954), in which the Supreme Court noted that the economic rationale behind the clause empowering Congress to grant patents and copyrights "is the conviction that the encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts'."[54]

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[49] ICC 2011, 4.

[50] Id., 4.

[51] Wong notes that civil law systems protect the natural rights of authors while common law systems emphasize economic reward and incentives for innovation. Wong 2010, 12. Bentley and Sherman note several justifications for intellectual property protection: utilitarian (incentive), natural rights, reward (of the creator) and rule of law. Bentley and Sherman 2009.

[52] See Landes and Posner 2003. See also seminal works by Nelson 1959 and Arrow 1962.

[53] Coriat et al. 2006, 1035.

[54] Wong 2010, 2. See *Mazer v. Stein—347 U.S. 201 (1954)*, available at Cornell Law, http://www.law.cornell.edu/copyright/cases/347_US_201.htm. Accessed 28 May 2012.

It has been suggested that there is a public good aspect to IP, which prevents "free riding" by third parties who would not incur the same costs as those who developed the invention first. For example, copyright protection trades off the cost of limiting access to the work against the benefit of providing incentives to create the work in the first place. IP protection is necessary to prevent such market failures as free riding would take away incentives for creators. This would diminish works available to the public and consequently their utility. Such is the case for copyright, in order to make works available to the public, for patents, to encourage technological innovation.

The same argument can be made for trademarks, which help reduce the risk and uncertainty of making a purchase. The prevention of misrepresentation of the origin of a good is the purpose of the law. Society needs to provide enough incentives to cover the fixed costs of creation but incentives should not work to stifle the very creativity that is encouraged. For example, an overly broad patent claim may stifle innovation and competition. Moreover, there are things that it would be unethical to grant patents for, which are needed by some stakeholders, such as innovations in health. Predominant policy concerns underlying the area of intellectual property are to ensure a diverse and competitive market place: the system must provide incentives to create, it must promote competition and it must resolve potential conflicts over access to creations. Campbell and Picciotto, in a critical review of seminal literature by William Landes and Richard Posner defending intervention by the state in favor of intellectual property protection (despite Landes and Posner's ideological bent towards non-state intervention in markets generally), point out that 'Posnerian' economics has defended such intervention despite the lack of significant knowledge regarding the welfare maximization role of such intervention on behalf of IP.[55]

Balancing the protection of creators' innovations and the needs of society, a theme running through this work and discussed in subsequent chapters, has become increasingly difficult, according to Wong, because of the harmonization of IP-related laws and trade laws at the regional and international levels. For example, Wong noted that "Legal traditions and provisions on IP within member states of the EU are continually being reshaped by regional regulations and decisions, and a mixture of common law and civil law concepts may coexist in a country through this confluence."[56] Internationally, "the linkage of IP to trade (and thus trade sanctions) has been deepened through other multilateral instruments and bilateral or regional free trade arrangements (FTAs) including those with so-called TRIPS-plus provisions."[57]

It is well known that powerful industrialized countries that seek enhanced IP protection globally, have in the past adopted IP laws that allowed them to advance

[55] Campbell and Picciotto 2003.

[56] Wong 2011, 17.

[57] Id., 17.

their trade interests and industrial policy interests. A UNDP Human Development Report of 2001 concluded that many advanced economies had found "legal and illegal" ways of circumventing them. Many European countries for example, once they shifted from being "net users" to "net producers" of IP had moved to "standard IP protection" in the 1960 and 1970s.[58] The US, notes Wong, had pursued IP policies "quite flexibly in the nineteenth century".[59] With knowledge products becoming important worldwide, IP protection had become a prerequisite for foreign investment and technology transfer. The standardization of IP rules will impact developed and developing countries and developing and least developed countries (LDCs) differently. While seemingly creating a level playing field, as the UNDP 2001 report noted, "the game is hardly fair when the players are of such unequal strength, economically and institutionally."[60] While LDCs must spend scarce resources and administrative skills on implementing the regime, they thereby place themselves at a disadvantage. LDCs and other developing countries are not necessarily tailoring IP laws to their needs and contexts. Many developing countries have expressed these concerns and the need for better calibrated IP laws to suit local circumstances and towards a more just IP system. This led Brazil, in particular, to push for a 'Development Agenda' within the WIPO.

1.3 Calls for a More Equitable and Modernized Regime of International Intellectual Property Law

There have been increasing calls for a 'kinder and gentler' international intellectual property regime. These have been heard loud and clear in the WIPO General Assembly. During the 49th Assembly in 2011,[61] for example, developing countries acknowledged that intellectual property protection was important for innovation, for technological growth and for cultural enrichment. In summary, the African Group, represented by the Delegation of South Africa, "noted that science, innovation and technology were key to improving Africa's competitiveness and economic growth, and WIPO had a major role to play in those areas."[62] The Latin American Group (GRULAC), represented by Panama, noted that "It was only through sufficient development of the intellectual property system, by rewarding creativity and innovation, that greater economic and social development could be achieved."[63] ASEAN, represented by Singapore, noted "the shared belief in the importance of IP for social, economic and cultural development." The Development Agenda Group (DAG),

[58] UNDP 2001, 102.

[59] Wong 2010, 20.

[60] UNDP Human Development Report 2005, 105.

[61] WIPO 2011a., A/49/18 Prov.

[62] Id., para 23.

[63] Id., para 26.

represented by India, "believed that intellectual property (IP) was an important contributor to socio-economic growth and development everywhere and that it was increasingly becoming a practical asset in a growing global knowledge economy."[64]

The Least Developed Countries (LDCs), represented by Nepal, were

> encouraged to see IP emerging as an integral part of the development process but noted that the domain of IP had not been immune from the ongoing impacts of the financial and other emerging crises. … IP had been quick to respond to the signs of recovery in 2010. The early review of the international patent system published by WIPO indicated that in 2010 the world would see an almost six per cent increase in patent filings as an indicator of the creation of new goods and services. The Delegation stated that the biggest growth had occurred in the emerging markets but that growth had not been equitable. In fact, the top three subregions had accounted for over 80 per cent of patent filings and in the race to foster creativity and knowledge LDCs did not feature. The crucial importance of IP in an economy could not be overemphasized at the current time with looming crises of all kinds. Indeed, IP had the potential to contribute to resolving the most challenging problems in generating jobs and economic growth. Innovation was needed in order to discover new climate serving technologies, generate noble life saving medicines, introduce new technologies in agriculture and bring the marginalized into the mainstream for creativity and knowledge. At a time when the world was undergoing social and economic pressure, the role of IP remained pivotal in promoting decent jobs, thereby generating sustainable lifestyles, addressing the crisis and contributing to a fair, inclusive, stable and secure situation.[65]

The LDCs argued, however, that "The realization of the Development Agenda was indispensable if a sustainable IP system were to be created."[66] They noted that

> technology had made breakthroughs to transform the world and had brought prosperity to the lives of human beings. There was a need to address the technology gap and knowledge and digital divide between the LDCs and other countries. The divide in intellectual property and its ills was indeed going to perpetuate the divides in income, living standards and every attribute of life, and the creation of a favorable IP environment was essential for economic development. Advances in technological capability, production investment, and innovation were key to knowledge and wealth creation. The Delegation felt that a new set of tools was needed to address emerging problems that had never been foreseen and called for the transfer of appropriate and productive technology and the dissemination of information for creating a sound and viable technological foundation to promote knowledge, creativity and innovation for the benefit of the economy and society.[67]

The African Group reiterated four substantive proposals it had previously made, in the seventh session of the Committee on Development and Intellectual Property (CDIP), including a proposal for a project on enhancing cooperation amongst developing countries and least developed countries. It called for WIPO to take a leadership position on IP issues globally and to continue to integrate developing country priorities in its program and budget and to re-launch discussions within the Committee on IP and Development, which had stalled earlier on.

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64 Id., para 31.

65 Id., para 32.

66 Id., para 32.

67 Ibid.

The Arab Group, represented by Egypt, noted the importance of enhancing capacities of developing countries and LDCs to integrate and benefit from the knowledge-based economy. It argued that,

> There was a need to go beyond traditional technical assistance activities and embark on value-added projects that took into consideration varying development levels and specific economic and social conditions. Such projects should help developing countries to establish National IP Strategies based on available flexibilities, exceptions and limitations. Projects should respond to specific needs and priorities of Member States, contribute to the promotion of local creativity, foster development efforts and reinforce science and technology infrastructure." The Arab Group stressed that integrating the global IP system should not run contrary to national public policy objectives. For the IP system to fulfill its role as a tool for wealth creation, progress and development, it should be recognized that countries needed IP legislation and public policies which were in line with their respective conditions. The IP system should reinforce rather than reduce public policy space, including food security, public health, environment and climate change.[68]

The Asian Group, through the delegation of Pakistan, submitted that,

> irrespective of their differing levels of development, most countries in the Asian region were faced with a diverse range of challenges in building and supporting their national IP protection regimes. The nature and magnitude of those challenges were indicative of the absence of a "one-size fits all" approach in that context. The situation on the ground reaffirmed the need for customized IP strategies for those countries at different levels of development. However, translating that recognition into reality remained a far greater challenge. The Delegation encouraged WIPO to intensify its efforts in working with members to develop national IP strategies that reflected a country's level of development and thereby established the relevance of IP protection in enhancing its economic and technological capacity.[69]

It considered that "a calibrated, country-specific IP system was essential in today's world." More importantly, "the global IP system should evolve in a balanced way to support the developing and least developed countries in achieving their development objectives." It noted that "The evolution of the IP system should also encourage innovation and creativity, and keep pace with the rapidly evolving global technological, geo-economic, social, and cultural environment. The Delegation stressed that WIPO should focus more on improving global IP Services while keeping in view the Development Agenda Recommendations and their implementation. The Development Agenda should not be reduced to an array of activities centering on technical assistance and merely duplicating what was already being done, albeit on a larger scale."

The ASEAN States, represented by Singapore, noted that "The implementation of the WIPO Development Agenda and the work of the CDIP continued to be central to ASEAN's interests. ASEAN's development experience epitomized the conviction that IP protection was not an end in itself but a means to promote public interest, technological progress and development."[70] ASEAN was "committed to

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[68] Id., para 29.

[69] Id., para 24.

[70] Id., para 30.

improving access to copyright-protected works for the visually impaired and persons with disabilities and would request the inclusion of copyright exceptions and limitations as an area of cooperation between ASEAN and WIPO in the coming year."[71]

The DAG, represented by India, argued that it was even more necessary than ever to contextualize IP rights within the wider framework of development, both in order to ensure that IP regimes were appropriately tailored in different countries, and to foster socioeconomic growth and development.[72] The DAG highlighted "the importance of employing IP for the betterment of mankind everywhere through calibrated norm-setting, protection, enforcement and technical assistance."[73] It estimated that "vital work was being undertaken by WIPO on health, food security and climate change and the Group looked forward to being regularly apprised of the work being done by the Global Challenges Division in those areas in an appropriate intergovernmental forum, such as the CDIP or the SCP, as well as through routine PBC updates.

The DAG added that South–South cooperation in the area of intellectual property was critical. South–South trade and cooperation in areas such as health, environment, labor and agriculture were actively promoted by the United Nations (UN) and its specialized agencies. The Group hoped that the proposed project on South–South cooperation would be adopted by the Member States within the resumed CDIP, thus enabling WIPO to join other UN organizations in fostering South–South cooperation alongside North–South and triangular cooperation.[74] On patents and health the DAG "welcomed in particular the agenda item on patents and public health" in the Standing Committee on Patents and looked forward to progress being made regarding the joint proposal presented by the DAG and the African Group.[75]

The EU and its 27 Member States, represented by the Delegation of Poland, "stressed the importance it attached to creating and maintaining a balanced and effective international IP system, and stated that it shared the common view that IP was an important tool for sustainable growth and wealth creation."[76]

China reported that the environment for IP protection had been under constant improvement in China and that "the rapid increase of investment in China by global enterprises, as well as its ever rising number of patent and trademark applications, demonstrated China's firm commitment to and confidence in IP protection."[77] It continued that "in the new era of globalization, and with the new advances in science and technology, innovation policies were considered as

[71] Id., para 30.

[72] Id., para 31.

[73] Ibid.

[74] Id., para 31.

[75] Id., para 31.

[76] Id., para 53.

[77] Id., para 28.

national strategies in more and more countries, and global issues such as climate change, food security, public health and energy crisis had brought both new challenges and fresh opportunities to the international IP system."[78]

The Delegation of India, speaking on its own behalf, shared its country's realization of "the importance of nurturing innovation to achieve a higher growth path and improve India's competitiveness in the world markets and provide access to essential services," which had prompted the President of India to declare 2010/20 as the 'decade of innovation'. Consequently, the National Innovation Council had been established in India.

> Sector innovation councils on intellectual property rights had been established with an objective to formulate India's national Intellectual property rights (IPR) strategy for encouraging innovation with a view to adequately addressing the consequences of sustainable development including growth and food security. The Council would also formulate the medium-term policy objectives that could be the building blocks of India's IPR strategy. The IPR framework was arguably one of the important aspects of the innovation ecosystem since there were policy makers and economists who felt that the legal rights provided by IPRs drove technical innovation. That system of legal rights created an incentive to innovate but could also create monopoly situations and hinder competition and even access to technology for further adaptation and use in unrelated sectors. In that sense it affected growth. Technology transfer provided the mechanism by which technological innovations could be shared while protecting the interests of the innovator. The issue of technology transfer needed to be addressed adequately by Member States and policies that facilitated it were to be encouraged.[79]

It continued that India was at a critical phase in developing intellectual property rights. On the one hand, there was a move to form groupings to strengthen the existing regime and enforce stiffer norms, while on the other hand there was also a growing sensitivity among others to ensure that the regime was equitable to facilitate the fulfillment of the aspirations of the majority of humanity while ensuring that the innovative processes remained unhampered. There was a need to balance the rights of the innovators against the cost imposed on society due to the protection provided. Innovation lay at the heart of long-term economic growth and international competitiveness. India had experienced consistent growth rates in the past and needed to continue along a high growth path to ensure that the huge backlog of unmet demands, whether in education, health, water or energy provision, were addressed. India continued to need innovation to make growth more inclusive as well as environmentally sustainable.

India was happy at the progress being made in implementing the Development Agenda recommendations through relevant projects in the CDIP. The Development Agenda was an encouraging framework that called for a conceptual paradigm shift by placing IP in the larger context of socioeconomic development, instead of seeing IP as an end in itself. It replaced the one-sided simplistic notion: IP was good, more IP was even better; with a more advanced and calibrated view that IP was

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[78] Id., para 37.

[79] Ibid.

good when it served as a tool to enhance economic growth and social development and was tailored to suit a country's needs and situation. India was also happy to note the new focus on exploring how IP could contribute to finding solutions for pressing global challenges in the areas of health, food security and climate change. WIPO's approach to such important issues was viewed as very encouraging.[80]

Delegations generally called for the continuation of substantive work aimed at maximizing the flexibilities allowed under various IP systems, in particular limitations and exceptions in copyright law, patents and health and work towards facilitating access to information and cultural life for visually impaired persons. They also called for continued work in the Intergovernmental Committee (IGC) on Genetic Resources, Traditional Knowledge and Folklore, among other areas, aimed at concluding a treaty in the near future.

On traditional knowledge and genetic resources, the GRULAC "restated its interest in achieving agreement on all issues being dealt with by the Committee, so as to establish and ensure the effective protection of the genetic resources, traditional knowledge and folklore of GRULAC member countries."[81] The ASEAN, while recognizing that the IGC had a lot of work ahead, "welcomed the considerable progress already made to develop texts on the issues under consideration. It underscored its support for the renewal of the IGC's mandate along the terms agreed at IGC 19 and an acceleration of its work to develop international legal instruments for the effective protection of GRTKF."[82]

The LDCs welcomed the progress made by the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, in the ongoing text-based negotiations on the normative standards that were aimed at ensuring their protection and was of the view that the Committee should be allowed to continue its work until a clear and acceptable legal instrument had been finalized and put in place. The LDCs noted that "Traditional knowledge, genetic resources, traditional cultural expressions and folklore needed to be seen from the overall perspective of socio-economic development, while formulation of national legislation to protect them from misappropriation was necessary, since protection measures at the national level alone were not enough."[83] The Delegation stated that serious efforts were needed "to develop comprehensive strategies to protect the rich cultural heritage and use the precious indigenous resources for wealth creation and employment innovation." While India welcomed the proposed renewal of the mandate of the IGC for the 2012/13 biennium to exercise the negotiations based on a clearly defined work program it hoped "that there would be a closure on GRTKF issues in this biennium with a text or texts of an international legal instrument or instruments being submitted to the General

[80] Id., para 37.

[81] Id., para 26.

[82] Id., para 30.

[83] Id., para 32.

Assembly for convening a diplomatic conference. India felt that "As one of the countries which continued to be most affected by misappropriation and bio-piracy, India attached great importance to the early finalization of international legal instruments on all three issues and the convening of a diplomatic conference within the next biennium."[84]

Regarding visually impaired persons, GRULAC's was of the view that "progress should be made towards adopting a treaty for visually impaired persons and other people who had difficulty accessing the printed word."[85] For the countries of their region,

> the issue was of major importance, because it would provide access to knowledge for vulnerable groups that had been previously marginalized and that should be given priority in society, by promoting, protecting and ensuring full enjoyment, in conditions of equality, of the human rights and fundamental freedoms for disabled people, as laid down in the principles and objectives of the United Nations Convention on the Rights of Persons with Disabilities.[86]

The statements on behalf of Group B countries by the USA and on behalf of the CEBS by Slovenia are produced in their entirety as they underscored the differing challenges and priorities of different countries and parts of the world. They are reproduced in their entirety as they also point to the breadth of the work agenda before the WIPO.

The delegation of the United States of America, speaking on behalf of Group B, expressed satisfaction with WIPO's efforts to maintain the Organization's place as the global IP authority, to encourage innovation and creativity worldwide and to promote an effective intellectual property system.[87] Those efforts would continue to foster economic, social, and cultural development of all countries. Group B was convinced that, regardless of regional group affiliation, Member States should continue to foster mutual understanding in order to make progress. Group B also attached great importance to the long-standing practice of making all decisions in the Organization by consensus. One of the Organization's recent successes had occurred in the SCCR, where positive engagement had led to the SCCR's recommendation to resume the 2000 Diplomatic Conference on a treaty for the protection of audiovisual performances, with an agreement on the one outstanding article and a precise plan for the completion of the treaty. Although work on addressing the needs of the visually impaired and persons with print disabilities had not been completed, Group B was firmly committed to working with other delegations to achieve a positive result. Group B was similarly committed to advancing a treaty for the protection of broadcasting organizations. During the fifteenth and sixteenth sessions of the SCP, Member States had agreed on a balanced work plan, and Group B would help to lead those projects to a positive conclusion. The SCT had started work in the area

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[84] Id., para 37.

[85] Id., para 26.

[86] Ibid.

[87] Id., para 25.

of designs, and a diplomatic conference might be convened as a result. Group B noted the significant progress made in the IGC over the past 12 months. Finally, Group B was pleased to see a proposal from the IGC for a renewal of its mandate. Such rich progress in the various fields was proof that WIPO would remain the global IP authority. Group B welcomed the progress made with the Strategic Realignment Program (SRP). Group B was confident that the reforms being implemented through the 19 initiatives,[88] comprising the four core values, would enable WIPO to be a more responsive, efficient organization providing global IP leadership and achieving its Strategic Goals. Group B welcomed the Director General's continuing efforts to establish a values-based integrity and ethics system and looked forward to the development of an ethics training program for management and staff.

The Delegation of Slovenia, speaking on behalf of the Central European and Baltic States (CEBS) said that the agreement reached during the Fifteenth Session of the Standing Committee on the Law of Patents (SCP) would allow for further constructive discussions and should lead to the harmonization of patent law at the international level. The Group acknowledged the success of the Twenty-Second Session of the Standing Committee on Copyright and Related Rights (SCCR), in particular in the field of the protection of audiovisual performances, and hoped that a new international instrument would be forthcoming. More needed to be done to offer broadcasting organizations adequate protection at the international level. Access to copyright protected works for persons suffering from a print disability had been improved significantly, yet further effort was required in order to reach an agreement acceptable to all stakeholders. The work of the Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications (SCT) was extremely important. The Group welcomed the progress that had been made with respect to the draft provisions of the industrial designs law. The possibility of convening a Diplomatic Conference in the next biennium with a view to adopting a design law treaty could be discussed with the other Member States. Such an instrument would serve as a useful tool for promoting innovation and creativity. The Group supported the adoption of the recommendation relating to the mandate for the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC). Finally, the Group recognizes the importance of the work of the CDIP. It was unfortunate that a single issue had caused the suspension of talks. If all Member States cooperated and worked constructively, then that issue would be resolved at the next Session of the CDIP. Furthermore, efforts should continue to implement the Development Agenda (DA) recommendations, launch other pending projects and find viable solutions for modalities for a coordination mechanism for the DA at the next session.[89]

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[88] In its Strategic Realignment Program, WIPO adopted 19 initiatives, aimed at bringing "new focus to the Organization's culture and values, greater efficiency in our business processes and better alignment of our programs, structure and resources to our nine Strategic Goals." The 19 initiatives are available at: http://www.wipo.int/export/sites/www/about-wipo/en/strategic_realignment/pdf/srp_corevalues.pdf. Accessed on May 28, 2012.

[89] Id., para 11.

1.4 IPRs and Humanity Security

As noted above, a central theme running through the entire field of intellectual property is the necessity of striking a balance between the interests of right owners on the one hand and those of users and the general public on the other. The increasing recognition of legal and moral superiority of the rights of humanity, and the basic human security that these rights seek to protect, has militated in favor of the pursuit of a more balanced intellectual property regime that recognizes basic rights to life, health, and food security.

The various calls for a more equitable intellectual property regime by states are rooted in the desire for a more just IP system. This is the theme of a recent work on *Intellectual Property and Theories of JusticeJustice*[90] which discusses general approaches to justice and specific issues treated from the angle of justice. Chapters include Lockean justifications of intellectual property, the work of Rawls, intellectual property and efficiency, intellectual property and social justice, the incentives argument for intellectual property protection, approaching intellectual property through the lens of regulatory justice, and the concept of liberty and rejection of strong intellectual property rights. Specific issues explored include copyright and freedom of expression, free software, the efficiency of the patent system, patents on drugs, and whether it is ethical to patent human genes. The chapters stand largely on their own and the book as a whole does not endeavor to offer a theory of justice for intellectual property regimes. Important questions are raised for reflection, for example, is the exclusion of the poor from access to patented drugs not in clear violation of basic human rights. The issue is posed but not examined in depth.

Daniel Attas examined Lockean justifications of intellectual property and the possibility of extending Locke's theory with respect to tangible property so that it might offer a feasible theoretical basis for intellectual property too. The author concluded that such an attempt must fail since Lockean theory of property is founded on natural rights approach rather than an 'inventive' approach.[91] Speranta Dumitru asks whether monopoly rights for talented people are justified by Rawls' criteria of justice and answers that Rawls' theory is ill equipped to answer this question.[92]

Professor Shubba Ghosh approached intellectual property through the lens of 'regulatory justice'.[93] He noted that while everyone agrees that the subject of intellectual property is copyrights, patents, trade mark and related legal concepts such as trade secrets, there is increasing doubt that this subject can or should be described as "property". He argued that intellectual property can best be understood as a system of laws meant to define and regulate creative activity. Put succinctly, intellectual property establishes a system of rights and obligations that

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[90] Gosseries et al. 2008.

[91] Attas, "Lockean Justifications of Intellectual Property," Id.

[92] Dumitru, "Are Rawlsians Entitled to Monopoly Rights?", Id.

[93] Ghosh, "When Property is Something Else: Understanding Intellectual Property Through the Lens of Regulatory Justice," Id.

order the processes of creating novel products and services that are valuable to society.[94] He discusses four notions of regulatory justice gleaned from the scholarly literature on regulation: expertise, civic participation, market failure and management. He argues that each has an application to understanding intellectual property with civic participation and market failure having the greatest relevance. He contends that considering intellectual property as regulation is to espouse a normative position about intellectual property law that is in opposition to the normative implications of conceiving intellectual property as property.

Prof. Ghosh posits four normative models which he thinks help in expanding one's perspective beyond the narrow paradigm of property. The model of expertise emphasizes that the grant of a patent, for example, reflects the judgment of the Patent Office on the novelty, usefulness and non-obviousness of the invention. There is the administrative judgment on the effects of the patent on market competition. Therefore, it is within the jurisdiction and obligation of agencies whose expertise is in competition policy to police the anti-competitive use of patents. The rights granted by patent law are subject to these limitations from competition law. Furthermore, the model of civic participation would recognize the grant of a patent as requiring public scrutiny both of the innovativeness of the invention and of potential misuses of the patent. The model of market failure recognizes the use of patents to create markets and the need to limit the patent right if the market is being harmed or compromised. Finally, the model of management suggests that inventions are public resources that should be managed in a way that benefits the public. Therefore, the model of management would call for limitations on the private right to exclude granted by the patent.[95]

Approaching intellectual property from the angle of regulatory justice is attractive when considering international intellectual property laws through the lens of human security. For it brings in the element of public policy, namely, that the international intellectual property regime should be regulated and managed in such a way as to advance human security worldwide. As Professor Ghosh put it, "inventions are public resources that should be managed in a way that benefits the public."[96] It may be added that in the era of global harmonization of IP law, the notion of the 'public' encompasses not only the national public but the global public.

The emphasis on justice naturally leads to a consideration of the human rights dimension to IP, which is critical to the larger developmental imperatives of a vast majority of humanity and indeed the international human rights regime has inspired calls for a 'right to development.' The IP and human rights regimes have developed independently of each other and each was based on different rationales, one following utilitarian, economic rationale, the other following considerations of humanity. It was only after the TRIPS Agreement that sustained consideration of the linkages between the two took place as attention was focused on the

[94] Id., 106.

[95] Ibid, 119.

[96] Ibid.

consequences of TRIPS for the enjoyment of fundamental human rights. Authoritative statements on human rights and intellectual property have come mainly through human rights institutions, whereas intellectual property institutions have been less inclined to integrate a human rights perspective to IPRs.[97] The UN Sub-Commission on Human Rights and the Committee on Economic Social and Cultural Rights (CESCR), as well as some regional human rights bodies, have considered over time the status of IP as a 'fundamental' human right and/or issued statements on the same. The CESCR has issued an authoritative general comment on IP and human rights (Chap. 3), which, though not unproblematic, has provided a sound basis on which to engage with a consideration of IP in a human rights framework.

1.5 Outline of the Book

In the work that follows, the discussion of IP and human security has been divided into three parts. In Part I (Intellectual Property and Human Security), Chap. 2 sets out the interrelationship between the regime of intellectual property law and considerations of human security. The basic message here is that, as in other areas of international law and policy, everything must be done to advance the dignity, welfare, and security of human beings everywhere. Chapter 3 sets out the fundamentals of the international intellectual property regime. Chapter 4 examines the relationship between specific IPRS and human security, such as education, health, and food. The presentation of the regime will have in view the perspectives of advancing human security worldwide in the future. In Part II (Intellectual Property, Development and Human Rights), Chap. 5 presents the essence of the United Nations Declaration on the Right to Development, which, it is argued, should guide the modernization of the international intellectual property regime. The UN General Assembly in 2011 commemorated the 25th anniversary of this important declaration. Chapter 6 outlines the emerging dialog between human rights and intellectual property rights and the attempts to bridge the two regimes. Chapter 7 examines the roles of international business organizations (IBOs) such as the ICC. Business confederations in the major developed countries and organizations such as the International Chamber of Commerce have played a pivotal role in the thrust of the international intellectual property regime, notably the TRIPS. It is argued that not only business considerations but a regard for human security worldwide should be integrated into account in the core strategies of such international business organizations. Chapter 8 analyzes the international community's efforts to accommodate the demands of indigenous peoples for the protection of their genetic resources, folklore and traditional knowledge, with emphasis on the latter. In Part III (WIPO and Human Security), Chap. 9 looks at the role of the

[97] WIPO 1998.

World Intellectual Property Organization (WIPO) in enhancing human security through its Development Agenda, which seeks to integrate developmental concerns in all of its policies. Recent policy planning and decisions within WIPO give cause for optimism and the current Director General of the WIPO has been playing an important role in shaping the future contributions of the organization. Chapter 10 makes a concrete proposal for an International Equity Panel at WIPO, which can help make the regime of international intellectual property law more attuned to considerations of human security and submits that such a panel within WIPO can help attenuate some of the rigidities of the TRIPS Agreement.

Part I
IP and Human Security

Chapter 2
Intellectual Property and Human Security

This chapter takes an in-depth look at the relationship between IPRs and human security. It examines the nature of security and the contemporary understanding of the term "security", which now encompasses "human security". Whereas the term security had been applied to states traditionally it now encompasses the individual as an object of security. IPRs are discussed in the framework of human security, which has placed emphasis on fundamental human rights and the right to development.

2.1 The Nature of "Security": Individual, National and International

This chapter discusses the interrelatedness between intellectual property and human security. There are two sides of this interrelationship. In the first place, IP issues are closely related to the hard security of nations. In the second place, the application of the regime of international intellectual property laws can help promote economic and social development and, at the same time, can result in major hardships when it comes to protection of the right to life and realization of the rights to health, food, and education. In the pages that follow, different aspects of these issues are explored.

The term "security" is widely accepted as encompassing three levels: individual or human, national and international.[1] The nature of threats have moved well beyond Cold War era geo-political concerns of Soviet-USA balance of power and

[1] See Buzan 1983 and Ramcharan 2002.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9_2,

classic foreign military adventurism, as was the case with Iraq's invasion of Kuwait. Balance of power issues still do matter, for example, in the current context of American predominance over the global military landscape, debate surrounds the use of its overwhelming power and its strategic rivalry with competitors like China and other powers like Brazil, the EU, India and Russia. Added to these concerns is the threat of weapons of mass destruction (WMD), which may be chemical, biological, or nuclear (CBN).[2]

The security studies agenda now include issues that transcend national boundaries, such as environmental degradation,[3] terrorism, transnational crime, destruction of the ozone layer, and the easy migration health hazards such as the HIV/AIDS virus.[4] These concerns have led to a concern with "international" security issues, which affect the international community of sovereign nation-states.

Accordingly, the referent object, which needs to be secured, has evolved from an exclusive discussion of "State" or national security to human/individual and common global security concerns—i.e., "human security". Worldwide concerns, such as human rights abuses, have led to an expansion of the referent unit in need of security to the individual human being.[5] As Paris has acknowledged, human security "is the latest in a long line of neologisms—including common security, global security, cooperative security, and comprehensive security—that encourage policy makers and scholars to think about international security as something more than the military defense of State interests and territory."[6] The term gained greater currency in the 1990s. The 1994 *Human Development Report* of the United Nations Development Programme noted that a concern for State security (security of territory from external aggression) had clouded other concerns so that "forgotten were the legitimate concerns of ordinary people who sought security in their daily lives."[7] Sadako Ogata, former United Nations High Commissioner for Refugees and Johan Cels, has argued that while State security is essential, it "does not necessarily ensure the safety of individuals and communities." Moreover:

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[2] See Stern 2002–2003, pp. 89–123.

[3] The WIPO acknowledged that it "recognizes that intellectual property rights may be of relevance in the field of trade as well as environmental policy." WIPO 2001b WT/CTE/W/182; IPC/C/242.

[4] For a comprehensive overview of the changing nature of security studies see Steven Miller, 2001, 5–39.

[5] See Paris 2001, 87–102.

[6] Id., 87. Paris addresses the difficulties of the expansive scope of the concept. For policy makers, "the challenge is to move beyond all-encompassing exhortations and to focus on specific solutions to specific political issues." Id. 92. For academics, "the task of transforming the idea of human security into a useful analytical tool for scholarly research is also problematic" as it is "far from clear what academics should even be studying". Id., 93. Some scholars have attempted to identify key indicators, such as poverty, health, education, political freedom, and democracy.

[7] UNDP 1994, 22–23.

> No longer can State security be limited to protecting borders, institutions, values, and people from external aggressive or adversarial designs. The spread of deadly infectious diseases, massive forced population movements, human rights violations, famine, political oppression and chronic conditions of deprivation threaten human security and, in turn, State security.[8]

A debate has been raging on the confines of the human security concept, since its popularization by the UNDP's *Human Development Report* of 1994, about the utility of an expansive definition of human security for theorizing about security. One the one hand, an expansive definition has seen the human security paradigm being applied to a wide range of contemporary problems affecting individuals, communities, states, and global society. These include environmental problems, humanitarian intervention, underdevelopment, small arms proliferation, and so on. On the other hand, theory-inclined scholars have questioned the utility of an expansive definition for the purposes of theorizing about security. Some scholars have warned against "overstretch". From a policy perspective, Taylor Owen, has warned that this was corroding the impact of human security on the UN landscape.[9]

Three approaches to human security have emerged since 1994: (1) a rights-based approach anchored in the rule of law and treaty-based solutions to human security, that believes that new human rights norms and convergent national standards can be developed by international institutions; (2) a humanitarian conception of human security, according to which the safety of peoples is the paramount objective, and links human security to preventive and post-conflict peace building; and (3) a sustainable human development conception, which draws on the UNDP's 1994 report.[10] Kaldor has distinguished between the Canadian Government's approach, namely "security of the individual as opposed to the states'" but with primary emphasis on security in the face of political violence[11] and the UNDP approach. The latter has emphasized the importance of development as a security strategy.[12] A Japanese Commission on human security (CHS) initiated discussions on the "responsibility for development"—freedom from want and human security as development became a topic of the reform agendas at the UN and in regional organizations (EU).[13]

Owen has warned that there has been a failure to distinguish clearly between human development and human security and that there is a lack of distinction

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[8] Ogata and Cels 2003, 275.

[9] Owen 2009, 3.

[10] Benedeck 2009, 8.

[11] Kaldor 2007, 2. See Canadian Government's, Human Security Report (http://www.hsrgroup.org/) and Canadian Intl Commission on Intervention and State Sovereignty (ICISS), Responsibility to Protect, http://responsibilitytoprotect.org/ICISS%20Report.pdf.

[12] See High level panel on Threats, Challenges and Change + UNSG response "IN Larger Freedom". For this and related see http://www.responsibilitytoprotect.org.

[13] Tadjbakhsh and Chenoy 2007.

between human rights and human security, both of which are detrimental on the UN landscape.[14] Sorpong Peou has warned that we must not make the human security concept too elastic and amorphous. From a political science theory perspective, he has cautioned that scholars must not carelessly combine competing insights from different theoretical perspectives, rendering our arguments unintelligible. "There are limits to eclecticism or pluralism. If possible, clear theoretical statements should be made to allow us to test our theoretical insights against empirical evidence or to keep critically evaluating our normative commitment to human security."[15]

In order for human security to be more useful, Mary Kaldor has argued for a "global conversation" about human security, "the transformation of the social relations of warfare and the character of threats we face."[16] The key to dealing with "new wars is the reconstruction of political legitimacy around the ideas about human rights and global civil society that were reinvented in the last decades of the Cold War."[17] Kaldor noted that millions of people live in daily fear of violence and new wars were increasingly intertwined with global risks—disease, natural disasters, poverty, and homelessness. Her work sought to develop new proposals to address gaps in understanding of "war", which is still influenced by the example of World War I and World War II. For Kaldor, human security is about the security of individuals and communities rather than the security of states, and it combines both human rights and human development.[18]

McFarlane and Khong agree with the notion that the individual's security is not subordinate to that of the state and that this pre-dates the 1994 UNDP report. Indeed, they have shown that it is pervasive throughout the international human rights instruments that were drafted during the Cold War.[19] However, they limit their definition of human security to protection from violence. This reflects a concern among scholars and policymakers that human security remain relevant and useful for policy making, just as the concept of "national security" has been. "This concern is reflected in Glasius and Kaldor's attempt to reconcile internal and external security", now held to be inseparable. They sought to define a global security agenda for Europe, NATO, and the US.[20] They drew upon Amartya Sen's work on development as freedom and focus on the "downside risks", that is "the insecurities that threaten human survival or the safety of daily life, or imperil the natural dignity of men and women, or expose human beings to the uncertainty disease and pestilence, or subject vulnerable people to abrupt penury."[21] They have contrasted these to an expansive view of human security as human rights as

14 Owen 2009, 3.

15 Peou 2009, 7.

16 Kaldor 2007, 2.

17 Id., 10.

18 Id., 182.

19 MacFarlane and Khong 2006, 10.

20 Glasius and Kaldor 2006, 3–4.

21 Id., 7.

suggested by Bertrand Ramcharan, who served as UN High Commissioner for Human Rights, and note that violations of the right to food, health and housing, even grave and massive ones, are not commonly recognized as belonging to the category of *jus cogens* norms like genocide, large-scale torture, inhuman and degrading treatment, disappearances, slavery, crimes against humanity, and war crimes as defined by ICC.[22] The moral case for Europe's interest in human security outside its borders was founded simply on 'our common humanity', which posits that human beings have a right to live with dignity and security, and a concomitant obligation to help each other when that security is threatened. It was also founded on the legal consideration that Articles 55 and 56 of the UN Charter enjoin states to promote universal respect for, and observance of human rights. The development and human rights perspectives were two sides of the same coin: both were rooted in the philosophical approach that privileges the search for substantive equality and justice. These stood at the heart of the human rights movement and the attendant international legal regime that guarantee such rights.

The Commission on Human Security, in 2003, defined human security as the protection of the vital core of all human lives in ways that enhance human freedoms and human fulfillment. Human security meant protecting fundamental freedoms—freedoms that were the essence of life. It meant protecting people from critical (severe) and pervasive (widespread) threats and situations. It meant using processes that build on people's strengths and aspirations. It meant creating political, social, environmental, economic, military and cultural systems that together give people the building blocks of survival, livelihood, and dignity. Human security reinforced human dignity. Human security complemented state security in four respects: Its concern was the individual and the community rather than the state. Menaces to people's security included threats and conditions that had not always been classified as threats to state security. The range of actors was expanded beyond the state alone. Achieving human security included not just protecting people but also empowering people to fend for themselves.[23]

The Commission on Human Security proposed a new framework—a human security framework—to address the conditions and threats people face at the start of the twenty-first century. Human security was 'people-centred', focusing the attention of institutions on human beings and communities elsewhere. By placing people at the center, the human security approach called for enhancing and redirecting policies and institutions. Human rights and human development had reoriented legal, economic and social actions to consider their objectives from the perspective of their effect of people. Recognizing the interdependence and interlinkages among the world's people, the human security approach built on these efforts, seeking to forge alliances that could wield much greater force together than alone.

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[22] Ibid.

[23] Commission on Human Security 2003, 4.

Human security, the Commission added, was also concerned with deprivation: from extreme impoverishment, pollution, ill health, illiteracy, and other maladies. Catastrophic accident and illness ranked among the primary worries of the poor—and understandably, because of their toll on human lives—causing more than 22 million preventable deaths in 2001. Educational deprivations were particularly serious for human security. Without education, men and especially women were disadvantaged as productive workers, as fathers and mothers, as citizens capable of social change. Without social protection, personal injury or economic collapse could catapult families into penury and desperation. All such losses affected people's power to fend for themselves. Each menace, terrible on its own, justified attention. Yet to address this range of insecurities effectively demanded an integrated approach.[24]

Human security, in the view of the Commission, was deliberately protective. It recognized that people and communities are deeply threatened by events largely beyond their control: a financial crisis, a violent conflict, chronic destitution, a terrorist attack, HIV/AIDS, underinvestment in health care, water shortages, and pollution from a distant land. To protect people—the first key to human security—their basic rights and freedoms must be upheld. To do so, required concerted efforts to develop national and international norms, processes and institutions, which must address insecurities in ways that are systematic not makeshift, comprehensive not compartmentalized, and preventive not reactive. Human security helped identify gaps in the infrastructure of protection as well as ways to strengthen or improve it.[25]

As many as 800 million people in the developing world and at least 24 million people in developed and transition countries lived without enough food. These people suffered daily hunger, malnutrition, and food insecurity even though most national food supplies are adequate. The problem was lack of entitlement to food and access to adequate food supply. Food insecurity and hunger undermined a person's dignity and well-being.[26]

Human security, the Commission urged, should be mainstreamed in the agendas of international, regional, and national security organizations.[27] The growing inequity between and within countries affected displacement patterns. As long as inequity and imbalances between labor demand and supply were growing among countries, people would continue to seek every opportunity to better their livelihoods.[28] Measures to ensure that there was adequate social protection for all, including the working poor and those not in paid work are critical.[29] Disease and poverty went hand in hand. So, too, do disease and conflict.[30] Good health was both essential and instrumental to achieving human security. It was essential

[24] Id., 6.

[25] Id., 11.

[26] Id., 14.

[27] Id., 33.

[28] Id., 44.

[29] Id., 85.

[30] Id., 95.

because the very heart of security was protecting human lives. Health security was at the vital core of human security—and illness, disability and avoidable death are critical pervasive threats to human security. Health included not just the absence of disease, but also a state of complete physical, mental, and social well-being. Health was both objective physical wellness and subjective psychosocial well-being and confidence about the future.[31]

One may ask: why 'securitise' intellectual property? This is a logical and natural consequence of the human security agenda of the international community that places individuals at the center of security. Objections may come from academics who long for a concept of security that allows for the development of neat theories of national and international security. But the complexity of security studies no longer allows for this, a point made amply clear by the field of critical security studies.[32] The term 'security' injects a sense of urgency into the inquiry and securitization may also perhaps serve as a guide to policy making and allocation of resources. Jonathan Ban has suggested two analytical tools for thinking about national (threats to the state, national interests, and state power), international (interconnectivity of states' security), and global security (social development, public health, environmental protection human rights, and other such global issues).[33] First, threats can be characterized as either direct or indirect to determine the immediacy or tangential concern for security planners. Second, a risk-based approach could provide a framework to characterize the degree to which problems like health concerns represent threats to security. Securitization also serves to bring intellectual property into the mainstream of the field of International Relations, which is increasingly characterized by feuds over knowledge.

In an increasingly globalized world, spearheaded by revolutions in communications technology as exemplified by global Internet communication, geo-economic competition between nation-States have become as important or perhaps even more important as trade relations between nations deepen.[34] Paradoxically, while freer trade between nations is touted as a means of ensuring that wars become a phenomenon of the past, the deepening of trade relations between nations often leads to ferocious competition between economies as each seeks to preserve its competitive advantage or to protect particular industries. Moreover, in the so-called knowledge economy, where information is a prized asset, nations seek to maintain a stranglehold on information, which they perceive as vital to their economic well-being. The protection of intellectual property thus takes on a different dimension when viewed in this light, as it is not only an asset in and of itself, but the protection of State and privately owned intellectual property assets may provide significant competitive advantages to nations. Where the well being of one

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[31] Id., 96.

[32] See Peoples and Vaughan–Williams 2010 and Baylis et al. 2010 for an overview of the field of security studies.

[33] Ban 2003, 19–20.

[34] Sorensen 1990, Bergsten 1990.

nation depends on access to technology in another, IP is of vital importance. Sadako and Cels have noted the fact that many of the poorest countries and people are excluded from technological and knowledge-based advances. In order to meet "the challenges that the current intellectual property rights regime poses to health security requires new thinking about the ownership of knowledge, health as a human right, and effective market and institutional structures to protect incentives as well as lives."[35] Clearly, the concept of security has 'broadened' (to include non-military threats) and has 'deepened' (to include security of individuals and groups).

The study of security, therefore, encompasses many aspects of human activity. The founding editors of the journal *International Security (IS)* noted in the first issue in 1976 that the view of international security taken then was one which embraced "all of those factors which have a direct bearing on the structure of the nation state system and the sovereignty of its members, with particular emphasis on the use, threat and control of force."[36] Steven Miller, Editor in Chief of *IS,* noted that he and his predecessors had aspired "to reflect the inherently multidisciplinary character of the field."[37]

What then, is the relationship between IP and the security of the individual, the state, and the international community?

2.2 Major Intellectual Property Treaties and Security

The concern with national and human security is apparent in some intellectual property treaties. Article 27 (1) of the TRIPS Agreement stipulates that "patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application." According to para 2:

> Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect *ordre public* or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment, provided that such exclusion is not made merely because the exploitation is prohibited by their law.

Carvalho has noted that the rationale for exclusion of patentability on grounds of *ordre public* or morality is often misunderstood to mean "that patentability should be excluded whenever the technology puts health at risk or offends public morality."[38] Following this logic, it would appear that there is a line beyond which research should not cross. The fallacy of this line of reasoning is exposed when

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[35] Ogata and Cels 2003, 279.

[36] "Foreword," *International Security* 1976, 2.

[37] Miller 2001, 5–39.

[38] Pires de Carvalho 2002, 170.

one considers that "patents alone are not sufficient to promote technology". Indeed, technology will evolve with our without patents. The term "order public or morality" was borrowed from Article 53(a) of the European Patent Convention (EPC).[39] The European Board of Appeals has understood the term to mean "not whether certain living organisms are excluded [from patentability] as such but rather whether or not the publication or exploitation of an invention relating to a particular organism is to be considered contrary to "ordre public" or morality".[40] Rather, the Board defined the concept of *ordre public* "as covering the protection of public security and integrity of individuals as part of society. It also encompassed the protection of the environment". Accordingly inventions, that would likely seriously prejudice the environment were to be excluded from patentability as being contrary to *ordre public*.[41] The latter term "is linked to a notion of security, both collective and individual". Carvalho has noted that TRIPS Article 73, titled "Security Exceptions", has acknowledged the same concept of security in the light of which "exclusions from patentability do not require any sort of justification or objective test (such as the necessity to prevent the invention's commercial exploitation)".[42] Article 73 states that nothing in the TRIPS Agreement shall be construed:

(a) To require a Member to furnish any information, the disclosure of which it considers contrary to its essential security interests; or
(b) To prevent a Member from taking any action which it considers necessary for the protection of its essential security interests;

(i) relating to fissionable materials or the materials from which they are derived;
(ii) relating to the traffic in arms, ammunition and implements of war and to such traffic in other goods and materials as is carried on directly or indirectly for the purpose of supplying a military establishment;
(iii) taken in time of war or other emergency in international relations; or

(c) To prevent a Member from taking any action in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security.

In the same context, a "security exception" is mentioned in Article 4 of the Patent Law Treaty (PLT) of June 2000, which stipulates that "[n]othing in this Treaty and the Regulations shall limit the freedom of a Contracting Party to take any action it deems necessary for the preservation of essential security interests".

In the context of the wider scope of national and international security concerns, Article 8 of the TRIPS Agreement is noteworthy in that it takes into account public health concerns. It stipulates that:

1. Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in

[39] Ibid.

[40] Case Law of the Boards of Appeal, Quoted in Pires de Carvalho 2002, pp. 170–171.

[41] Ibid., 171.

[42] Ibid.

> sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement.

However, Article 8 (2) calls for "appropriate measures" consistent with TRIPS, to be taken to "prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology". A significant aspect of transfer of technology is the publication of technical details of an invention. Article 29 (1) of the TRIPS Agreement set forth that:

> Members shall require that an applicant for a patent shall disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the art and may require the applicant to indicate the best mode for carrying out the invention known to the inventor at the filing date or, where priority is claimed, at the priority date of the application.

2.3 Balancing Public and Private Rights: Intellectual Property and Human Security

Among the genuine and urgent security concerns in recent times is the threat of AIDS (Acquired Immune Deficiency Syndrome). Persons afflicted by this and other deadly viruses cannot wait for compulsory licensing schemes or for contracts to be negotiated on favorable pricing schemes as their lives hang in the balance.

The Commission on Human Security recognized that the burden of HIV/AIDS is overwhelmingly concentrated among the poorest people in the poorest regions. HIV/AIDS decreases the ability of affected individuals to work and increases their health care costs, resulting in greater financial strain on their households.[43]

National disease surveillance and control systems should be strengthened and then networked into a global system. Health empowerment and protection depend on reliable and up-to-date data and analysis and a capacity to act in response to information. Central to health and human security, therefore, are systems to collect and deploy information for detecting disease threats, monitoring their changes, and guiding control efforts. All surveillance and control activities ultimately depend on people and local communities, but national and international systems are needed to empower people and communities.[44]

Health and human security are central matters of human survival in the twenty-first century. Knowledge and technology can make a difference. The challenges are to make tools and knowledge accessible while promoting incentives and

[43] Commission on Human Security 2003, 99.

[44] Id., 104.

structures for the production of new knowledge. Social action was needed to deploy that knowledge for health and human security.[45]

Education and knowledge may enable groups to identify common problems and act in solidarity with others. Four priorities for action are promoting a global commitment to basic education; protecting students' human security at and through school; equipping people for action and democratic engagement; teaching mutual respect.[46] Access to information and skills allowed people to learn how to address concerns that directly affect their security. Knowledge, education, and democratic engagement were inseparable—and essential. Free and diverse information media can provide individuals with the knowledge required to exercise their rights and to influence—or challenge—the policies of the state and other actors.[47]

There is an urgent need for institutional arrangements to make inexpensive and affordable generic drugs available to the developing countries that need them most. Community-based health initiatives, community-based health care, and self-insurance schemes are fundamental to this progress. The world urgently needs primary health services and national disease surveillance systems. It is important to develop an efficient and equitable system for patent rights. Global flows of knowledge and technology are increasing under the WTO. In November 2001, the WTO's Doha Ministerial Declaration recognized the challenges facing developing countries. A number of important drugs do not have patent limitations. But for those that do, current international rules governing intellectual property leave many of the poorest people in the world unable to use the drugs. Because so many lives were at stake there was an urgent need for institutional arrangements to make inexpensive and affordable generic drugs available to the developing countries that need them most.

Developing countries that currently export generic medicines—such as Brazil, China, and India—were obliged to comply by January 2005 with the WTO requirements that generic medicines be used domestically only. They cannot be exported, even to other countries with similar emergencies that may not be able to produce medicines on their own. If a country has insufficient manufacturing capacity to produce medicines domestically, it will have to rely on expensive patented medicines for health needs—unless the rules are changed.

On the positive side, the WTO has recognized public health emergencies as requiring special provisions. The Doha Round affirmed the rights of governments to grant 'compulsory licenses' allowing the domestic production of essential medicines, when they are covered by patent, and to purchase 'parallel imports' from legitimate international sources during national emergencies, including the HIV/AIDS pandemic. Further the ministers at Doha agreed that the least developed countries would not be required to offer patent protection on pharmaceutical products

[45] Id., 109.

[46] Id., 116.

[47] Id., 120.

until 2016. Because many poor countries did not have sufficient manufacturing capacity, their exercise of compulsory licensing and parallel imports depends on international sources. If other developing countries cannot export essential emergency medicines and vaccines under the WTO, the exercise of emergency measures will be nominal, not real. The Doha Round of trade talks is not yet completed 10 years on. Moreover, Matthew Kennedy noted the slow pace of acceptance of the Protocol Amending the TRIPS Agreement (2005) that would allow the Doha Agreements to come into effect.[48]

According to the Commission on Human Security, three challenging issues that needed to be resolved were the following: clarifying the definition of "insufficient manufacturing capacity"; allowing companies in one country to export inexpensive generic drugs still under patent to other countries; and deciding on the measures necessary to prevent the re-export of drugs manufactured under compulsory licenses back to the developed world. A major objective was to have intellectual property rights systems that advance human security through the efficient development of appropriate drugs and the facilitation of their extensive use. Any resolution of the current impasse should involve favoring flexibility and overcoming import and export controls on the drugs and vaccines needed for emergencies. A balance was required in order to provide incentives for research and development for both profitable products and technologies to fight diseases of the poor. That balance should also provide equitable access to life saving essential drugs and vaccines for people unable to purchase technologies from the global marketplace. The balance should recognize the very large public investments in basic research that underlie product development by all manufacturers, including private ones.[49]

In the context of such concerns, it is not surprise that some developing countries have enacted laws to deal partly with such situations. In Egypt, Article 25 of the Patent Law stipulates that the State may expropriate a patent for national security reasons and in cases of extreme urgency.[50] In Tunisia, its Patent Law of August 2000 has provided in Article 78, para 5, that the State may avail itself of an *ex-officio* license for defense and national security reasons for the exploitation of an invention.[51] Such exploitation may be undertaken by a third party on behalf of the State. In Morocco, a law on the protection of industrial property sets forth in Article 75, that the State may be granted an *ex-officio* license for the exploitation of an invention for national defense and that third parties may undertake such exploitation for the State.[52]

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[48] Kennedy 2010.

[49] Commission on Human Security 2003, 139–140.

[50] Republic of Egypt, Law No. 82 of 2002.

[51] Republic of Tunisia, Law No.2000-84 of August 2000.

[52] Republic of Morocco, Law No.1-00-91 of 15 February 2000.

2.4 IP Linkages with National and Global Security

Given the expansive definition of human security that is found in the literature and recognition that national and human security are interconnected, one may take note of the direct or indirect linkages between intellectual property and national and global security, which have been explored by this author in an earlier work.[53] For example, in an age when weapons of mass destruction and their potential use by non-state actors has become a major concern, we argued that careful attention must be paid to the patent regime and the information that is available through the same. Information contained in a patent application enters the public domain once the patent is granted, and thus becomes an invaluable source of information on the state-of-the-art in any given field. These documents are easily searchable by any government, corporate entity, or individual and they constitute an important means/source of transfer of technology. Transfer of Technology is defined as a "matter of how items used in one area of activity or in one place, can be applied and used in others".[54] Such a transfer refers to products but also includes, according to Molas-Gallart, "a broader concept encompassing the social relations and the "mode of production" in which the development and production of artifacts occur". Information can be retrieved through the International Patent Classification (IPC) system, which is based on the Strasbourg Agreement Concerning the International Patent Classification, a WIPO-administered international treaty concluded in 1971, that entered into force in 1975. The IPC is a hierarchical classification system covering all fields of technology that is indispensable for efficient retrieval of patent information. WIPO has promoted the use of the IPC since:

> The amount of information contained in patent documents is immense. They contain practically everything that represents an advance in the knowledge of mankind in the field of technology. It is therefore extremely important that this information be accessible to anyone who needs it. Such accessibility exists in theory because the patent documents are published, that is, are made available to any member of the public.[55]

In relation to trade secrets, it was argued that in light of concern over the national and international security implications of trade secrets (confidential information which is the object of economic espionage) a balance must be struck between the legitimate public concern for security and the legitimate rights of the inventor. This calls for an honest distinction between genuine security concerns and non-genuine security concerns. In a climate of concern for terrorism and the threat of WMD, excessive controls on the publication of information may inadvertently serve the cause of terrorists who seek to disrupt normal commercial, economic, social, and political intercourse in society.

Other global security vulnerabilities may be added to this discussion, including social development (poverty and its impact on state security), human rights and

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[53] Ramcharan 2005.

[54] Molas-Gallart 1998.

[55] WIPO 2000.

environmental challenges, and transborder public health issues. These are addressed briefly in Chap. 4 and elsewhere in this work. Climate change scientists have called attention to a fast-approaching point of no return that would herald catastrophic consequences for the Earth's climate, and thus human life in the next 50–100 years. In terms of 'immediacy' one may highlight the global nature of the security challenges posed by health. The UN Secretary General's *Agenda for Peace,* which took stock of "new risks for stability", had explained that "drought and disease can decimate no less mercilessly than the weapons of war".[56]

Jonathan Ban has argued that the question is not whether some health challenges generate risks that have implications for security but, rather, to what degree do the various health challenges pose risks and have security implications. Using the 'direct' versus 'indirect' categorization scheme, he has noted that direct security involves risks that relate more to traditional aspects of security, such as biological attacks, attacks on medical personnel facilities and supplies by combatants in a conflict, and threats to the health of military personnel, peacekeepers or deployed contingents because of infectious diseases. Indirect threats, such as HIV/AIDS and SARS (Severe Acute Respiratory Syndrome, which led to international crisis response in 2001 and 2002, may carry less risk than direct threats). They nevertheless "have the potential to impact national and international security and should not be excluded from traditional national security considerations".[57] The UN Security Council convened a meeting in January 2000 to discuss AIDs. The US National Intelligence Council produced a report on "*The Global Infectious Disease Threat and Its Implications for the United States*" in January 2000. In April 2000, the Clinton Administration announced that it formally recognized AIDS as a threat to US national security. This was later enshrined in the US National Security Strategy of 2007.[58]

Security is as much real as it is about perceived threats. The nature of the threats faced by individuals, nations and the international community, has changed dramatically. The end of the bipolar Cold war superpower rivalry has seen greater economic interdependence as more parts of the world are effectively integrated into the world economy. In an increasingly technologically and economically interconnected world, interdependence causes occurrences in one part to impact directly upon individuals and nations in another, and sometimes the impact is immediate and devastating. The national security of a State exists symbiotically with its economic well-being. Nations seek to protect scarce resources of which intellectual property assets are a key component.

For technologically advanced States it is the specter of lost capital, jobs, and especially military advantage, which are worrisome. In the post-Cold War era, the quest for technological and economic supremacy is raging among China, the EU,

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[56] Boutros-Ghali 1993.

[57] Ban 2003, 23.

[58] See National Intelligence Council, The Next Wave of HIV/AIDS: Nigeria, Ethiopia, Russia, India and China. ICA 2002-04 D, September 2002, footnote 14, Ban 2003, 28.

India, Japan, and the USA while Russia was trying to regain its Soviet-era grandeur. A larger strategic competition between big powers is evidenced, for example, in the close monitoring by the US of transfers of sensitive technologies. Of special concern to the US is China.[59]

For the less technologically advanced States and especially the world's least developed countries the success of their quest to acquire knowledge and new technologies that they can absorb into their economies may make the difference between life and death.

2.5 Conclusion

In this chapter, we have reviewed the literature on human security and noted instances in which there is a direct relationship with international intellectual property laws. We would conclude this chapter with a simple point: it must be right to argue that international intellectual property laws should seek to protect human security and advance human welfare across the globe. This is the basic thrust of this book that we take forward next by looking at the fundamentals of the international intellectual property law regime.

[59] GAO, Export Controls: Issues Related to the export of Communications Satellites, Statement for the Record by Katherine Schinasi, Associte Director, Defense Acquisitions Issues, National Security and International Affairs Division. GAO/T-NSIAD-98-211; GAO, Export Controls: some Controls Over-Missile-Related Technology Exports to China Are Weak, GAO/NSIAD-95-82; and US Department of Commerce (Bureau of Industry and Security), US Commercial Technology Transfers to The People's Republic of China. http://www.bxa.doc.gov. More generally, see Kalpana Chittaranjan, "Leakage of US Nuclear Secrets," Strategic Analysis, Vol. XXIII No.4, (New Delhi: IDSA, July 1999), http://www.ciao.net.org/olj/sa/sa_99chk04.html; and Savita Pande, "The Challenge of Nuclear Exports Control," Strategic Analysis, Vol. XXIII, No.4. (http://www.ciao.net.org/olj/sa/sa_99pns.02.html).

Chapter 3
The International Intellectual Property Regime

This chapter provides a brief overview of the international intellectual property regime. This regime encompasses, copyright and related rights, patents, utility models, trade secrets (confidential information), trademarks, geographical indications, industrial designs, and sui generis systems, such as integrated computer circuits, plant varieties, databases and traditional knowledge, and traditional cultural expressions. Their essential characteristics are outlined below.

3.1 The International IPR Regime

This chapter examines briefly the core international intellectual property laws that are the subject of this book and pays particular attention to how they measure up from the perspectives of human security. We shall briefly outline, in turn, copyright, related rights, patents, utility models, trademarks, industrial designs, and trade secrets. *Sui generis* systems for plant varieties and traditional knowledge are treated thereafter.

Generally speaking, IP refers to creations of the mind.[1] The Convention Establishing the WIPO, concluded in Stockholm on 14 July 1967 (Article 2(viii)) provides that

[1] Significant use is made here of various publications of the WIPO and the WIPO Website http://www.wipo.int. See Abott et al. 2007; Bentley and Sherman 2009; Correa 2010; Dutfield and Suthersanen 2010; Pugatch 2006 and WIPO 2004.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9_3,

> intellectual property shall include rights relating to: literary, artistic and scientific works, performances of performing artists, phonograms and broadcasts, inventions in all fields of human endeavor, scientific discoveries, industrial designs, trademarks, service marks and commercial names and designations, protection against unfair competition, and all other rights resulting from intellectual activity in the industrial, scientific, literary, or artistic fields.[2]

It is a form of property—intangible—in addition to movable and immovable property. It is divided into two broad categories Copyright and Related Rights, and Industrial Property, which includes patents and utility models, trademarks, industrial designs, and geographical indications. Trade secrets or confidential information is also considered as intellectual property. There are also *sui generis* systems for the protection of plant varieties and traditional knowledge and folklore of indigenous communities. An overview of definition of each of these is readily available on the web site of the WIPO.[3]

3.2 Copyright

Copyright protection covers forms of creativity that are concerned primarily with mass communication and with all methods of public communication, from printed publications to sound and television broadcasting, films for public exhibition in cinemas, and even computerized programs for the storage and retrieval of information.[4] Copyright protection seeks to ensure that the authors, singers, performers, television stations, and cable operators obtain their just reward. At the same time it seeks to ensure that the public goods produced by these professions are capable of enjoyment and consumption by the public.

Each country addresses these issues through national copyright laws, in conformity with minimum standards recognized in various international conventions governing copyright matters. These include the Berne Convention for the Protection of Literary and Artistic Works of 1886,[5] the Rome Convention for the Protection of Performers, Producers of Phonograms, and Broadcasting Organizations of 1961, the Geneva Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of Their Phonograms of 1971, the Brussels Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite of 1974,

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[2] Convention Establishing the World Intellectual Property Organization, Signed at Stockholm on 14 July 1967 and as amended on September 28, 1979.

[3] See the WIPO (http://www.wipo.int) and IPOS (http://www.ipo.sg) websites for further information.

[4] WIPO 2004, 40.

[5] Hereafter Berne Convention. It was concluded in 1886, revised in Berlin in 1908, completed at Berne in 1914, revised at Rome in 1928, at Brussels in 1948, at Stockholm in 1967, at Paris in 1971 and amended in 1979. For a history of the evolution of The Berne Convention see WIPO (1986).

the WIPO Copyright Treaty (WCT) of 1996[6] and the WIPO Performances and Phonograms Treaty (WPPT) of 1996.[7] Both of the latter two came into force in 2002. Last but not least, as noted earlier the TRIPS Agreement of 1994 reiterated the basic principles and rights of the Berne Convention and added an 'enforcement' dimension to the protection of intellectual property in general. TRIPS stipulated that members must comply with Articles 1–21 of the 1971 Paris Act of the Berne Convention.[8]

The Berne Convention, which created a Union of contracting states, is the 'mother of all copyright treaties', which seeks to protect the literary and artistic works of authors. Copyright protected works are defined in Article 2 (1) as constituting:

> Every production in the literary, scientific, and artistic domain, whatever may be the mode or form of its expression, such as books, pamphlets, and other writings; lectures, addresses, sermons, and other works of the same nature; dramatic or dramatico-musical works; choreographic works, and entertainment in dumb show; musical compositions with or without words; cinematographic works which are assimilated works expressed by a process of analogs cinematography; works of drawing, painting, architecture, sculpture, engraving, and lithography; photographic works to which are assimilated works expressed by a process analogs to photography; works of applied art; illustrations, maps, plans, sketches, and three-dimensional works relative to geography, topography, architecture, or science.

Copyright does not protect ideas but rather the expressions of ideas in some form. The element of fixation is provided for in Article 2(2) of the Convention which stipulates that it is a matter for each legislation "to prescribe that works in general or any specified categories of works shall not be protected unless they have been fixed in some material form." The expression must pass a test of originality, which is interpreted differently in different jurisdictions.

The protection of the Convention applies also, as stipulated in Article 4, to (a) authors of cinematographic works the maker of which has his headquarters or habitual residence in one of the countries of the Union; (b) authors of works of architecture erected in a country of the Union or of other artistic works incorporated in a building or other structure located in a country of the Union.

Unlike for patents and trademarks, the enjoyment and exercise of the rights granted is subject to no formality (Article 5(2)). Determining what passes for infringement becomes complicated. National statutes have laid down lists of acts that would constitute infringement of copyright as well as provisions on defences to charges of infringement.

There are two categories of rights: economic rights and moral rights. Economic rights refer to those which are intended for the author of a work to obtain

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[6] Contracting states numbered a total of 89 as of May 2012. For information on the latest contracting members see the following http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=16. Accessed on 29 May 2012.

[7] Contracting states numbered a total of 89 as of May 2012. For information on the latest contracting members see the following http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=20. Accessed on 29 May 2012.

[8] TRIPS Agreement, Article 9.

remuneration for his endeavor. Article 9 grants authors a right of reproduction. It stipulates that authors of literary or artistic works protected by the Convention shall have the exclusive right of authorizing the reproduction of these works, in any manner or form. As a result of the development of new audio-visual technologies in recent times, it also stipulates that any sound or visual recording shall be considered as a reproduction.

A right of "making and authorizing translations of their works" (Article 8) and a right of "authorizing adaptations, arrangements and other alternations" (Article 12) are granted to authors. Authors of dramatico-musical and musical works have the right of distribution. Article 11 gives them the right to authorize (i) the public performance of their works and (ii) any communication to the public of the performance of their works. They also enjoy the same rights for translations thereof (Article 11(2)). Authors also enjoy the right to authorize the broadcasting (Article 11 bis) of their works or the communication thereof to the public by any other means of wireless diffusion of signs, sounds, or images and, according to Article 14, the right to authorize (i) the cinematographic adaptation and reproduction of these works, and the distribution of the works thus adapted or reproduced, (ii) the public performance and communication to the public by wire of the works thus adapted or reproduced; and (iii) the adaptation into any other form of cinematographic production derived from literary or artistic works.

In addition to these economic rights, the author enjoys moral rights, which seek to secure proper recognition of an author's original work and to protect its integrity from mutilation. Article 6 in particular, stipulates that an author has the right to "claim authorship" and "to object to any distortion, mutilation or other modification of, or other derogatory action in relation to the said work, which would be prejudicial to his honor." Indeed, the right to authorize translations and adaptations also serve this purpose.

To enforce these rights the author is entitled under Article 15 to "institute infringement proceedings in the countries of the Union." Infringing copies of the work are liable to seizure in any country of the Union according to the laws of each country (Article 16).

The beneficiary authors are those who are nationals of one of the countries of the Union and authors who are not nationals of one of the countries of the Union for (i) their works first published in one of those countries or (ii) simultaneously in a country outside the Union and in a country inside the Union (Article 3(1)). Authors who are not nationals of one of the countries of the Union but who have their habitual residence in one of them shall be assimilated to nationals of that country (Article 3(2)).

An important principle is that of national treatment. Article 5(3) stipulates that authors will enjoy "in countries of the Union other than the country of origin, the rights which their respective laws do now or may hereafter grant to their nationals, as well as the rights specially granted by this Convention" Where the author is not a national of the country of origin of the work for which he is protected "he shall enjoy in that country the same rights as national authors."[9]

[9] Article 5, Berne Convention. See TRIPS Agreement, Article 3.

The Berne Convention provides a term of protection from the moment of first publication, for the duration of the life of the author, and for 50 years after his/her death. (Article 7 (1)) In the case of cinematographic works, Article 7 (2) stipulates that countries may provide that the term of protection shall expire 50 years after the work has been made available to the public with the consent of the author, or "failing such an event within 50 years from the making of such a work."[10] Members of the Berne Union may provide "may grant a term of protection in excess of those provided by the preceding paragraphs" (Article 7 (6)).

The rapid and dramatic changes in audio-visual and communications technology have led to a constant and on-going process of updating of the Berne Convention. The purpose of the WCT and the WPPT was to "update and supplement the major existing WIPO Treaties on copyright and related rights, namely the Berne Convention…and the International Convention for the Protection of Performers, Procedures and Phonograms and Broadcasting Organizations (Rome Convention)."[11] These treaties sought to complement the provisions of the Berne Convention and to progressively adapt copyright laws to contemporary circumstances. The WCT deals with protection for authors of literary and artistic works, and the WPPT protects certain related rights. Both have sought better definition of international copyright norms and rules to suit contemporary technological changes, recognizing the profound impact of the development and convergence of information and communication technologies on the creation and use of literary and artistic works, in the case of the WCT and on the production and use of performances and phonograms in the case of the WPPT. The two are collectively referred to as the "Internet Treaties" as both seek to address the challenges posed by today's digital technologies, "in particular the dissemination of protected material over digital networks such as the Internet."[12]

Under the WCT, for example, computer programs, whatever may be the mode or form of their expression, are protected as literary works within the meaning of Article 2 of the Berne Convention (Article 5). A right of rental is granted under Article 7 of the WCT to authors of computer programs (except where the program itself is not the essential object of the rental), cinematographic works and works embodied in phonograms.[13] Contracting Parties are obliged, under Article 11 of the WCT, "to provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights."[14] The TRIPS Agreement also affords computer programs copyright protection under Article 10(1), whether in source or object code.

The WPPT, pursuant to the Rome Convention of 1961, clarified the rights of artists in the digital era.[15] Article 2 (b) of the WPPT amplifies the definition of

[10] Article 7 (2), Berne Convention.

[11] WIPO 2002.

[12] Ibid.

[13] See TRIPS Agreement, Article 11.

[14] WCT, Article 11.

[15] See also TRIPS Agreement Article 14.

phonograms in Article 2 (b) of the Rome Convention as follows: "'phonogram' means the fixation of the sounds of a performance or other sounds, or of a representation of sounds, other than in the form of a fixation incorporated in a cinematographic or other audiovisual work."[16] Article 2 (c) adds a definition of "fixation" to mean "the embodiment of sounds, or of the representations thereof, from which they can be perceived, reproduced or communicated through a device." Article 2 (d) of the WPPT expands on the meaning of "producer of a phonogram" to mean "the person, or legal entity, who or which takes the first initiative and has the responsibility for the first fixation" of the sounds of a performance or other sounds, or "the representations of sounds."[17] Article 2 (e) amplifies the definition of "publication" of a fixed performance to mean "the offering of copies of the fixed performance or the phonogram to the public, with the consent of the rightholder, and provided that copies are offered to the public in reasonable quantity."[18] Article 2 (f) expanded the definition of "broadcasting" to mean "the transmission by wireless means for public reception of sounds or of images and sounds or of the representations thereof; such transmission by satellite is also "broadcasting"; transmission by encrypted signals is "broadcasting" where the means of decrypting are provided to the public by the broadcasting organization or with its consent."[19] Article 2 (g) of the WPPT provides a definition of "communication to the public" meaning "the transmission to the public by any medium, otherwise than by broadcasting, of sounds of a performance or the representations of sounds in a phonogram… [It] includes making the sounds or representations of sounds fixed in a monogram audible to the public."

The WCT and the WPPT were adopted by more than 100 countries the majority of whom were developing countries. The treaties should help to foster greater protection of rights holders, to promote the development of electronic commerce and to contribute to the national economy. Regarding the first of these, WIPO has noted that due to current Internet technology,

> the need for protection in the digital environment is greatest in the areas of recorded music, text, computer programs, photos, and graphic art. Unauthorized use, however, rapidly extend to other types of works and subject matter, for instance audio-visual works, as bandwidth and the quality of telecommunications systems improve. Unless legislators take action against it soon, the latter categories of copyright industries would face, in the near future, problems as serious as those already faced nowadays by the music and information industries.[20]

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[16] Rome Convention Article 3 (b) states that "phonogram" means "any exclusive aural fixation of sounds of a performance or other sounds".

[17] Rome Convention Article 3 (c) defined "producer of phonograms" as meaning "the person who, or the legal entity which, first fixes the sounds of a performance or other sounds".

[18] Rome Convention Article 2 (d) defined it as "the offering of copies of a phonogram to the public in a reasonable quantity".

[19] Rome Convention Article 3 (f) of the Rome Convention defined it as "the transmission by wireless means for public reception of sounds or of images and sounds".

[20] PCIPD/3/9, 3.

As if to underscore the challenge of digital technologies, from a broadcasting perspective, Lord Puttnam has argued that since audiences wish to consume more of moving images and other online content and at a faster rate, the preservation of existing strengths in the area of copyright will matter little "if we do not actively embrace the evolution of the media, and seize every possible advantage it offers."[21] Achieving a balance between rights and access will be difficult. He suggests that "we dare to take a fresh look at the possibility of an environment in which "rights owners, when faced with difficult issues or choices, look at each issue from the perspective of "Why not?" rather than "I own it, therefore why on earth should I—after all, what's in it for me?"[22]

With regard to the second point, the trade in copyrighted works, performances, and phonograms can become a major element of global commerce, which will grow and thrive along with the value of the material that is traded. The transmission of text, sound images, and computer programs over the Internet is already commonplace and will soon be true for transmission of audiovisual works (feature films). Protected copyright and related materials already constitute a great amount of the subject matter of electronic commerce. The latter will have a great impact on the system of copyright and related rights, which in turn will also exert a great influence on the evolution of how electronic commerce evolves.[23]

The crucial importance of copyright-based industries in information societies was emphasized by the Commission on Intellectual Property Rights (CIPR) of the UK, which noted that copyright-related industries supply the intellectual raw material for science and innovation, as well as for educational and instruction in general, and "they have helped bring about dramatic increases in productivity through aiding the creation of information-based products like desk-top publishing software, electronic mail or sophisticated scientific computer databases."[24] The CIPR concluded: "We believe that copyright-related issues have become increasingly relevant and important for developing countries as they enter the information age and struggle to participate in the knowledge-based global economy."[25]

3.3 Related Rights

Such rights, sometimes referred to as 'neighbouring rights', protect the legal interests of persons or legal entities who contribute to making works available to the public, or who produce such matter. There are three kinds of related rights: rights of performing artists in their performances, the rights of producers of phonograms

[21] Lord Puttnam, 3.

[22] Id., 3.

[23] PCIPD/3/9, 4. See also WIPO's Primer on Electronic Commerce, http://www.wipo.int.

[24] CIPR 2002.

[25] Ibid., 96.

in their phonograms, and the rights of broadcast organizations in their radio and television programs. Related rights, which form the subject matter of the Rome Convention of 1961, seek to assist those who assist intellectual creators to communicate their message and to disseminate their works to the public. The subject matter produced by such persons and legal entities, though not qualifying as "works" under all copyright jurisdictions, are deemed to contain sufficient creativity or technical and organizational skill to justify copyright-like property right.

3.4 Patents

The significance of patents for economic growth and development was noted earlier. A 'patent' is a right granted by government, upon application to the competent authority, to an inventor who is thereby given the right to exploit an invention for a limited period of time. An invention means a technical solution to a specific problem in the field of technology.[26] An invention may be related to a process or product. The Paris Convention for the Protection of Industrial Property of 1883 and the TRIPS Agreement of 1994, among others, regulate the substantive aspects of the international patent regime.[27] The Patent Cooperation Treaty of 1970 and the Patent Law Treaty of 2000 regulate procedural aspects of the regime.

The grant of a patent must meet the following conditions according to Article 27 of the TRIPS Agreement: the invention must consist of patentable subject matter, the invention must be industrially applicable (useful) and it must be new (novel). It must exhibit a sufficient "inventive step" (non-obvious). Upon filing an application there is an examination as to form, followed by an examination as to substance. Under TRIPS, "patents shall be available for any inventions, whether products or processes, in all fields of technology."[28]

A patent grants exclusive rights to the owner to prevent others from making, using, offering for sale, selling or importing for these purposes, the product under patent without the owner's consent.[29] A process patent extends such controls to the use, offer for sale, sale or importation of the products directly obtained by that process.[30] The right holder also has the right to assign or transfer by succession the patent and to conclude licensing contracts.

The term of protection of a patent is now 20 years from the filing of the application as per Article 33 of the TRIPS Agreement, on condition of payment of periodic renewal fees in some cases. In return, society requires that the

[26] WIPO Handbook 2004, 17.

[27] See Articles 27–34, TRIPS Agreement.

[28] Article 27, TRIPS Agreement.

[29] Article 28(1)(a), TRIPS Agreement.

[30] Article 28(1)(b), TRIPS Agreement.

patent application disclose the invention in a way that allows others to put it into practice.

The scope of protection of patents has expanded over the last century. While there are fields of technology that are excluded from patentability[31] in *Diamond v. Chakrabarty* the US Supreme Court held that the scope of patentable subject matter includes 'anything under the sun that is made by man', which included even bacterium that presumably could be made by man. Moreover, the requirement of novelty for obtaining a patent is stretched to include patents granted for secondary uses of existing drugs, for example.[32]

3.5 Utility Models

Utility models (aka 'petty patents', innovation patents or utility innovations) are also available to protect inventions under Article 11 of the Paris Convention. They are similar to patents but have a less stringent set of substantive requirements for their grant.[33] Essentially they are granted for inventions in the mechanical field.[34] The novelty requirement remains, but "inventive step" and "non-obviousness" requirements are less stringent and may be absent altogether. They confer rights of shorter duration to certain kinds of small or incremental innovations that have a short commercial life. The procedure for obtaining protection for UMs is usually shorter and simpler than for patents.

3.6 Trade Secrets (Confidential Information)

Trade secrets or confidential information can be technical information, plans or a device (industrial secrets).[35] They can also be related to the business operation of a company, such as confidential customer lists or marketing plans. The United States' Uniform Trade Secret Act (USTA) defines a trade secret as follows:

> (4) "Trade secret" means information, including a formula, pattern, compilation, program device, method, technique, or process, that: (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use,

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[31] Article 27 (2), TRIPS Agreement.

[32] Wong (2011), 9. See *Diamond v. Chakrabarty, 447 U.S. 303 (1980)*. Case available on FindLaw at http://caselaw.lp.findlaw.com/cgi-bin/getcase.pl?court=us&vol=447&invol=303. Accessed on 29 May 2012.

[33] WIPO 2004, 17.

[34] In 1985, a total of 279,055 utility model applications were filed worldwide. After a drop in the late 1990s, the figure rose to 495, 810 in 2010. WIPO 2011c.

[35] In some jurisdictions, such as the UK, the term confidential information is used. See generally Aplin et al. 2012, Ben-Attar 2004, Gurry 1984 and Shan 2008.

and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.[36]

A useful way of understanding the field of trade secrets is to compare it with patents. A patent is a right granted by a government, which confers a monopoly on the exploitation of an invention in exchange for disclosure of how to make and use an invention. Once a patent is published all information contained therein is made public and any information that constituted a trade secret during the confidential application process is thereby lost. In contrast to a patent, a trade secret is something that confers "a business advantage, is generally not known, and the owner of the trade secret takes steps to maintain it secret."[37] In deciding whether to opt for patents or trade secrets the following pros and cons of each must be weighed. A decision in favor of the patent route is the fact that a trade secret is of no use to protect a product, which can be reverse engineered. Patents have a firm duration whereas trade secret protection can be lost overnight if the secret is publicly disclosed. The disclosure of information in a patent is not detrimental to proprietary rights and perhaps a licensee may be more willing to pay for technology which is patented which would enable a clearer delimitation of the licensee's rights. Moreover, the act of filing for a patent does not result in loss of trade secret rights. Only when the patent is granted there is disclosure through publication.

In other words, unlike patents, there is no novelty requirement; it is neither generally known in the trade nor publicly available. It has some independent economic value so as to give some competitive advantage to its owner and it must not have been publicly disclosed by its owner. However, the law does not protect against independent invention or discovery of the secret. Secrecy is of paramount importance and takes precedence over all other conditions of protection for it is this aspect which gives the protected information its economic value.

It is not proper for someone to appropriate information that is generally known in an industry and claim it as his or her trade secret. No trade secret protection exists for matters that are completely disclosed by products sold to the public.

Trade Secret protection is an increasingly important matter of public policy in many countries today as the world economy moves toward a knowledge-based one. Justification for their protection is found in three main theories—contractual obligation, fiduciary relationship, and unjust enrichment or misappropriation. A duty not to disclose confidential information may stem from a contractual relationship (such as an employment contract, contract for works, joint-ventures, partnerships, and so on) between the owner of the trade secret and the persons to whom it is communicated. Problems arise when third parties not party to the contract may benefit from the confidential information, such as a competitor who takes on an employee who possesses knowledge from his previous employer. A

[36] USTA, Section 1(4).

[37] Howard Eisenberg, "Patents vs. Trade Secrets," Patent Law You Can Use. http://www.chernofflaw.com.

fiduciary relationship implies a duty of secrecy, sometimes even where no contract or agreement is proven. For example, the Swiss Code of Obligations (Article 418 (d) (1)) specifies that employees have to keep the trade secrets of their employers.[38] Francois Dessemontet has noted that common law jurisdictions base the protection of trade secrets on a fiduciary relationship. Misappropriation and unjust enrichment, favored by Dessemontet as a theoretical premise, are also bases for a cause of action. He has noted that "that theory has the advantage to be universally acceptable, since misappropriation is prohibited as unjust enrichment in the US and as an act contrary to "honest commercial practices" in the wording of Continental European unfair competition laws."[39] Moreover, the theory "rightly emphasizes the fact that trade secrets are assets of business, "property interests" and it so conforms with the notions of "theft or embezzlement" of trade secrets that are common ground through most of the US State. The notion of a property interest in the trade secret makes understandable why there can be a license of know-how, or a sale as the parties wish to agree, or a transfer to the heirs of a deceased owner."[40]

The 1883 Paris convention stipulates in Article 10bis that any act of competition contrary to the honest practices in industrial or commercial matters constitutes an act of unfair competition and that the countries of the Union are bound to assure to nationals of such countries effective protection against unfair competition. Thus protection against unfair competition is mandatory for Member States of the Paris Union.

Article 10bis was incorporated into the TRIPS Agreement in the form of Article 39, which is "the first multilateral acknowledgment of the essential role that Trade Secrets play in industry. It is the embodiment in the world's law of the American and European notion of protecting confidential information as a means of fully protecting intellectual property rights, even where no disclosure to society has taken place."[41] Article 39 deals with the protection of undisclosed information (i.e. trade secrets), and stipulates that:

1. In the course of ensuring effective protection against unfair competition as provided in Article 10*bis* of the Paris Convention (1967), Members shall protect undisclosed information in accordance with paragraph 2 and data submitted to governments or governmental agencies in accordance with paragraph 3.
2. Natural and legal persons shall have the possibility of preventing information lawfully within their control from being disclosed to, acquired by, or used by others without their consent in a manner contrary to honest commercial practices so long as such information:

(a) is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question;
(b) has commercial value because it is secret; and
(c) has been subject to reasonable steps under the circumstances, by the person lawfully in control of the information, to keep it secret.

[38] Dessemontet 1998–1999, 5.

[39] Id., 6.

[40] Ibid.

[41] Id., 3.

Data submitted to governments as a condition to the marketing approval of products must be protected.

Subsequent to TRIPS Article 39, WIPO published the *Model Provisions on the Protection Against Unfair Competition*.[42] Article 6(1) stipulates that:

> Any act or practice, in the course of industrial or commercial activities, that results in the disclosure, acquisition, or use by others of secret information without the consent of the persons lawfully in control of that information (hereinafter referred to as the "rightful holder") and in a manner contrary to honest commercial practices shall constitute an act of unfair competition.[43]

Article 6(2) lists the following ways in which trade secrets can be disclosed: (i) industrial or commercial espionage, (ii) breach of contract, and (iii) breach of confidence. With regard to the disclosure of information in particular, WIPO's commentary on Article 6(2)(i) states that, industrial or commercial espionage is typically a deliberate attempt to appropriate another's secret information. Espionage may be carried out by forming a relationship with the rightful holder with the fraudulent intention of inducing the latter to communicate the secret information, for example by obtaining employment or having an associate hired as employee or the rightful holder. It may also be carried out by means of listening devices, by gaining access to a plant with a view to discovering the secret information and taking photographs and by other means. It may occur through unlawfully remote access to computer files and databases.[44]

3.7 Trademarks

Trademarks have existed since antiquity. Some three thousand years ago, Indian craftsmen engraved their signatures on their artistic creations before sending them to Iran.[45] They became especially important with the advent of industrialization and the emergence or an international, and now global, market-place. It became necessary to guide consumers on the choice of products and services. As WIPO has noted, here, intellectual creativity, though it exists, is less prominent. Rather, what matters here is "that the object of industrial property typically consists of signs transmitting information to consumers" especially as regards products and services offered on the market, and that "the protection is directed against unauthorized use of such signs which is likely to mislead consumers, and misleading practices in general."[46]

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[42] WIPO 1996, 52.

[43] Ibid.

[44] Ibid.

[45] WIPO 2004, 67. See generally Dinwoodie 2008 and Jehoram et al. 2010.

[46] Ibid.

A trademark is any sign (words, letters and numerals, devices, colored marks, 3-dimensional signs, audible signs, olfactory marks) that individualizes the goods of a given enterprise and distinguishes them from the goods of its competitors. Two functions are interdependent. "Individualization" is through indication of the source of the product (e.g., the enterprise that made the product or service). Indicating the source presupposes that the trademark "distinguishes" the goods of a given enterprise from those of other enterprises. Trademarks include service marks (insurance companies, car rental firms, airlines) and collective marks (such as associations) and certification marks (used by anybody who complies with defined standards).

Trademarks can be protected on the basis of use or registration. The Paris Convention obliges contracting states to provide for a trademark register.[47] The term of protection is potentially unlimited, subject to payment of fees at regular intervals.

3.8 Industrial Design

This refers to the ornamental or aesthetic aspect of a useful article.[48] This may depend on the shape, pattern, or color of the article. The subject matter of protection is not the articles or products but rather the design which is applied to or embodied in such articles or products (such as the classic shape of the coca cola bottle). The design must be capable of being used in industry. The designs must be novel or original. Upon registration of the design, the proprietor gains the exclusive right to prevent the unauthorized exploitation of the design in industrial articles. Rights owners usually gain the right to make, import, sell, hire, or offer the sale of articles to which the design is applied or in which the design is embodied. At the international level, industrial designs are to be protected in all members of the Paris Convention Union.[49] The registration of industrial designs is regulated by the Hague Agreement concerning the Registration of Industrial Designs.[50]

3.9 Geographical Indications

Geographical Indications (GIs) of international repute include names like "Champagne", "Tequila", "Porto", and "Darjeeling", all of which are names of products associated with products of a certain nature and quality.[51] They all indicate a

[47] Articles 6–10, Paris Convention.

[48] See Fryer 2005, Gray and Bouzalas 2001.

[49] Article 5 quinquies, Paris Convention.

[50] See WIPO's website for detailed information: http://www.wipo.int/treaties/en/registration/hague/. Accessed on 29 May 2012.

[51] See generally Gangjee 2012.

geographical space, a town, a region, or a country. Geographical indications can acquire a high reputation and thus may be valuable commercial assets.

Protection for GIs is not found specifically in the Paris Convention, Article 1 of which refers to indications of source and appellations of origin. The term GI was chosen by WIPO to describe the subject matter of a new treaty for the international protection of names and symbols which indicate a certain geographical origin of a given product. The term is intended to be used in its widest possible meaning.[52] It was also used in EC Council Regulation No. 2081/92 of 14 July 1992 on the Protection of Geographical Indications and Designations of Origin for Agricultural Products and Foodstuffs and in the TRIPS Agreement.

The Term GI is applied to products whose quality and characteristics are attributable to their geographical origin. This is different from "appellation of origin", which requires a quality linkage between the product and its area of production, and "indication of source", which requires merely a linkage between product and place, or a trademark, which identifies the enterprise that offers products or services on the market.[53] There is no "owner" of a GI in the sense that one person or enterprise can exclude other persons or enterprises from the use of the GI. Each and every enterprise located in the area to which the GI refers has the right to use the said indication for the products originating in the said area.

At the international level, GIs are protected by provisions in the Paris Convention, the Madrid Agreement on the Repression of False or Deceptive Indications of Source on Goods (1891), the Protocol Relating to the Madrid Agreement (1989), the Lisbon Agreement for the Protection of Appellations of Origin and their International Registration (1958) and the Trademark Law Treaty (1994).[54] Part II, Section 3, Articles 22–23 of the TRIPS Agreement is dedicated to the GIs.

3.10 *Sui Generis* Systems

3.10.1 Integrated Computer Circuits

The Layout designs (topographies) of integrated circuits also form another field in the protection of intellectual property. They are considered as creations of the human mind, involving great investment in time and capital whereas the cost of imitation is minimal. The Treaty on Intellectual Property in Respect of Integrated Circuits (IPIC Treaty) was adopted in Washington in 1989. Integrated-circuit and layout designs are defined in Article 2 of IPIC:

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[52] WIPO 2004, 121.

[53] Id., 121.

[54] WIPO 2004, 124–129. See WIPO's website related to trademark registration for further information: http://www.wipo.int/madrid/en/. Accessed on 29 May 2012.

> (i) 'Integrated circuit' means a product, in its final form or an intermediate form, in which elements, at least one of which is an active element, and some or all of the inter-connections are integrally formed in and/or on a piece of material and which is intended to perform an electronic function.
>
> (ii) 'layout design (topography' means the three-dimensional disposition, however, expressed, of the elements, **at least one of which is an active, and of some or all of the interconnections of an integrated circuit**, or such a three-dimensions disposition prepared for an integrated circuit intended for manufacture.

Under the IPIC, Contracting parties are obliged to secure the protection of lay-out designs and integrated circuits throughout their territories. This obligation applies to articles that are "original" in that they are the product of the creator's own intellectual effort and are not common-place among those skilled in this art.

IPIC was integrated into TRIPS, with some modifications.[55] The term of protection was increased to 10 years (as opposed to eight) from the date of filing an application or of the first commercial exploitation, though Member States were free to provide up to 15 years from the creation of the lay-out design. The exclusive right of the right-holder extended to articles incorporating integrated circuits in which a layout-design is incorporated, insofar as it continued to contain an unlawfully reproduced layout-design. The circumstances in which layout designs could be used without consent of the right holders was further restricted. Certain acts engaged in unknowingly would not constitute infringement.

Some acts may be performed for private purposes or for the sole purpose of evaluation, analysis, research, or teaching. The "WIPO Handbook on Intellectual Property" has noted that it was considered desirable to permit "reverse engineering", that is the use of an existing layout-design in order to improve on it, "even if it involves the copying of an existing layout-design, provided that an improved layout-design is thereby created—an advance of technology which is the general public interest."[56]

3.10.2 Plant Variety Protection (PVP)

PVP, also referred to as plant breeder's rights, is granted to breeders of new, 'distinct', 'uniform', and 'stable' plant varieties.[57] WIPO has noted that the availability of improved, new plant varieties to growers "is critically important to agricultural and horticultural industries of all countries."[58] Improved disease

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[55] TRIPS Agreement, Article 35.

[56] WIPO 2004, 119–120.

[57] Article 6, 1978 Act of the International Convention for the Protection of New Varieties of Plants. See generally.

[58] WIPO 2004, 331.

resistance and higher yields are vital since they "dramatically affect the economics of production of a crop and its acceptability to its final consumers."[59] Food security for a growing world population, sustainable agricultural production, the need to raise incomes and to enhance economic development all call for sustained efforts in breeding new varieties.

Following calls by the US as early as the 1930s, and subsequent action by European states in 1961, this area was subsequently regulated by the International Convention for the Protection of New Varieties of Plants ('the UPOV Convention') of 1961, which has 70 contracting parties.[60] States undertook to create a system for the grant of plant-breeders' rights within their domestic laws. Each UPOV member state must entrust the granting of breeder's rights to a competent administrative unit. UPOV is an independent, international, intergovernmental organization, with an international legal personality. It cooperates very closely with WIPO. The Secretary General of UPOV is the Director General of WIPO and UPOV headquarters is in the same building as WIPO.

PVP generally offers protection for at least 15–20 years from the granting of such protection, although the term can be longer for vines and trees (18–25 years) than for annual food crops and ornamental plants. The increase from 18 to 20 years ensures that the period of protection available for the majority of applicants in the plant breeders' rights system will be the same as that available in the patent system. Exclusive rights enjoyed by the owner are weaker than for patents. The breeder's right is limited to the exclusive production for commercial marketing, for the offering of sale, for marketing, of reproductive or vegetative propagating material, as such of the variety.[61] Under the 1978 Act the breeder's exclusive right relates only to production for the purposes of commercial marketing. Thus, "a farmer…who produces seed on his own farm for the purposes of re-sowing on his own farm can do so freely without obligation to the breeder."[62] This is known as the "farmer's privilege". The right owner may exploit his right by producing or licensing to others.

Protection is granted under Article 27(3)(b) of the TRIPS Agreement, which stipulates that this must be accomplished either through patents or through a sui generis system or a combination thereof. Countries are therefore free to design their own *sui generis* protection for plant varieties. Exceptions are provided by most countries, including freedom to use protected material for further breeding, and the 'privilege' for farmers to save and replant seeds, though not all of them. Replanting may require remuneration to the right owner.

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[59] Ibid.

[60] The Convention was revised in 1972, 1978, and 1991. It established the UPOV, derived from French words for the Union. See the UPOV website at http://www.upov.int/overview/en/variety.html. Accessed on 29 May 2012.

[61] Article 5, 1978 Act.

[62] WIPO 2004, 333.

3.10.3 Database Protection

Article 10(2) of the TRIPS agreement provides for protection of compilations of data or other material, whether in machine readable or other form. These are considered as intellectual creations by reason of the selection of arrangement of their contents and thus are afforded protection as such. Protection does not extend to, but is without prejudice to any copyright subsisting in, the data or material itself.

A sui generis protection for databases has become part of the landscape of IP protection in the EU. This is in addition to copyright protection for databases which meet the requirement of 'originality' in a country. Council Directive 96/9/EC of March 1996 provided that databases referred to "a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means".[63] The *sui generis* protection is given to the maker of a database, which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents.[64] The Directive grants the right "to prevent extraction and/or realization of the whole or of a substantial part, evaluated qualitatively or quantitatively, of the contents of that database." There are restrictions on "the repeated and systematic extraction and/or re-utilization of insubstantial parts of the contents of the database."[65]

3.10.4 Traditional Knowledge (TK) and Traditional Cultural Expressions (TCE)

The economic value of indigenous peoples' knowledge for sustainable development has gained currency. At the Global Knowledge conference in Toronto in 1997, government leaders urged the World Bank and other donors to learn from local communities. In this vein, Nicolas Gorjestani of the World Bank's Indigenous Knowledge (IK) for Development Program argued in an independent paper that IK is "a key element of the social capital of the poor and constitutes their main asset in their efforts to gain control over their lives. For these reasons, the potential contribution of IK to locally managed, sustainable and cost-effective survival strategies should be promoted in the development process."[66] Efforts were being made in the following areas: encouragement of countries to formulate

[63] Council Directive 96/9/EC, Article 1(2). The Directive is available on the Eurolex website at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31996L0009:EN:HTML. Accessed on 29 May 2012.

[64] Article 7(1), Id.

[65] Article 7(5), Id.

[66] Gorjestani 2000.

national strategies on traditional knowledge, integration and enhancement of the capacity of national and regional TK networks, the promotion of local exchange and adaptation, and identification of innovative mechanisms to protect traditional knowledge in a way that fosters further development, promotion and validation, and exchange of traditional knowledge.

The protection of the TK and TCEs of indigenous peoples, discussed more amply in Chap. 8, has gained currency at the international level. While there is no single treaty on the protection of indigenous knowledge and TCEs, we may note a range of instruments at the international level that involve the protection of indigenous peoples' intellectual property. These include ILO Convention R104 on Indigenous and Tribal Populations of 1957[67]; ILO convention C 169 (1989) on Indigenous and Tribal Peoples[68]; the Rio Convention on Biological Diversity (1992); the UN Declaration on the Rights of Indigenous Peoples (2006)[69]; and draft treaties that have been elaborated over the past decade by WIPO Member states dealing with genetic resources, traditional knowledge, and TCEs of indigenous peoples. As seen in Chap. 1, delegations at the 49th WIPO General Assembly of WIPO supported the continuation of the mandate of the Inter-Governmental Committee dealing with TK and TCE and many hoped that its work would come to a speedy conclusion.

While many countries seek to protect TK and TCEs through existing IP laws, the latter have varying degrees of relevance and limitations for the defensive or affirmative protection of such knowledge and cultural heritage. At the national level some countries have *sui generis* laws protecting particular aspects of TK, such as for medicinal knowledge. In other countries TK protection is bound up with *sui generis* laws to promote bio-diversity (Peru), recognizing that such knowledge is often embodied in the plant genetic resources managed by TK custodians.[70]

3.11 Conclusion

With the above brief overview of the fundamentals of the international intellectual property law regime we can now undertake a closer look at the human security aspects of this regime.

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[67] The text of the recommendations is available on ILO website at http://www.ilo.org/ilolex/cgi-lex/convde.pl?R104. Accessed on 29 May 2012.

[68] The text of the Convention is available on the ILO website at http://www.ilo.org/ilolex/cgi-lex/convde.pl?C169. Accessed on 29 May 2012.

[69] UN General Assembly Resolution 61/295, 2007. The Declaration was adopted by a majority of 144 states in favor, 4 votes against (Australia, Canada, New Zealand and the United States) and 11 abstentions (Azerbaijan, Bangladesh, Bhutan, Burundi, Colombia, Georgia, Kenya, Nigeria, Russian Federation, Samoa, and Ukraine).

[70] For a comparative study of sui generis laws on traditional knowledge see WIPO document WIPO/GRTKF/IC/5/INF/4. Available at http://www.wipo.int/tk/en//laws/pdf/grtkf_ic_5_inf_4_annex.pdf. Accessed on 29 May 2012.

Chapter 4
Human Security Aspects of the Intellectual Property Regime

This chapter identifies and discusses the relationship between various intellectual property rights and key aspects of human security such as education, technology transfer, the environment, health, food security and the survival of indigenous peoples.

4.1 IP, Human Security and Development

There are a number of key issues which are of relevance from a human security angle in the area of copyright and related rights and industrial property. They center on the need to balance private rights versus public rights so as to ensure that basic human security—life, food, and heath—are not negatively impacted. Issues of concern include, for example, the terms of protection of patents and copyright which have expanded over the centuries as well as the overall subject matter covered by Intellectual Property Regimes (IPRs). These have an impact on what is often called the "public domain", a space where people can draw from for free expression and creativity. Some authors see an enclosure of the "intangible commons of the mind" taking root through the expanding scope of IPRs.[1]

IP has always been cited as a key element, thought not the only element, for socio-economic development. As seen in Chap. 1, a developmental perspective has been called for and a Development Agenda is guiding the work of the World Intellectual Property Organization (WIPO). Developmental concerns, considered further in Chap. 5, have perhaps been discussed from within the confines of the IPR as opposed to a more comprehensive discussion of development in a wider context that encompasses the right to development and development as freedom from want.

[1] Wong 2010, 10.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9_4,

4.2 Copyright and Development

Copyright, notes WIPO, is a means of promoting, enriching, and disseminating cultural heritage. It constitutes an "essential element in the developmental process" for "encouragement of intellectual creation" is one of the basic prerequisites of all social economic and cultural development.[2] The emphasis on creative industries in Chap. 2 underscored this point. Moreover, while patents are usually associated with health and welfare, Chon points to the literature linking education and public health measures such as fertility, infant and adult mortality, and adult morbidity and mortality.[3]

While focused on the strengthening of the Berne Convention, the Paris Act of the Berne Convention (1971) sought to address the concerns of developing countries. For example, it became possible for such countries to protect their folklore abroad by providing that where the identity of the author is unknown, but where there is ground to presume that he is a national of a country of the Union, the rights in such a work are to be acknowledged in all countries of the Union. An Appendix to the Paris Act provided special provisions for developing countries.[4]

The recognition of the linkages between culture and development has gained greater currency in recent times. In a document entitled "Culture and Sustainable Development: A Framework for Action" (1998), James Wolfensohn, then President of the World Bank, argued that we are at a "crossroads in our understanding of development" for "[W]e simply cannot conceive of development without cultural continuity. It must be acknowledged and must form the basis of the future."[5] Indeed, sustainable development must be built on "local forms of social interchange, values, traditions, and knowledge" to reinforce the social fabric. The Bank defined culture as:

> [T]he whole complex of distinctive spiritual, material, intellectual, and emotional features that characterize a society or social group. It includes creative expressions (e.g., oral traditions, language, literature, performing arts, fine arts, and crafts), community practices (e.g., traditional healing methods, traditional natural resource management, celebrations, and patterns of social interaction that contribute to group and individual welfare and identity), and material or building forms such as sites, buildings historic centers, landscapes, art and objects.[6]

The World Bank has sought to target its programs to "help the poor communities identify their own strengths and open opportunities for them to revive, use, and adapt their own heritage and identity."[7]

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[2] WIPO 2004, 41.

[3] Chon 2011, 5.

[4] WIPO 2004, 267.

[5] Wolfensohn 1998, iii.

[6] Id., 12.

[7] Id., 13.

It was mentioned above that an equitable balance must be sought between the author's economic rights and the rights of the general public. Public interest limitations on the rights of authors are thus required. For this reason, the Berne Convention Article 2 bis leaves it open to national legislations to determine, for example, whether political speeches and speeches delivered in the course of legal proceedings are excluded from the exclusive rights of the authors. The same applies to lectures, addresses, and other works of a similar nature. It is permitted to make quotations from a work, provided that these are compatible with fair practice and that their extent is not excessive (Article 10(1)). It is permitted to use literary and artistic works for illustrations in publications, broadcasts or sound or visual recordings for teaching, provided such use is compatible with fair practice (Article 10(2)). The reproduction by the press, broadcasting or communication to the public by wire of articles published in newspapers or periodicals is permitted, subject to national legislation. However, "the source must always be clearly indicated" (Article 10 bis (1)).

4.3 Copyright and Education

Article 19 of the Universal Declaration of Human Rights guarantees the right to education. Access to information that is vital for education, such as textbooks crucial for academic achievement of a nation's schoolchildren has become more difficult as a result of heightened copyright protection. Reprography, which, from a developmental perspective, could facilitate access is often seen from the perspective of "piracy" and is highly regulated. While developed countries recognize the necessity of dissemination of knowledge they seek harmonized and heightened copyright protection that are not necessarily in the interest of developing countries.

Striking a balance, both domestically and internationally, between the protection of the author's exclusive rights over his work and the need for access to information is now more difficult. In a 2009 report to the Standing Committee on Copyright and Related Rights of WIPO, which dealt with an African-Arab Regional Seminar on Copyright Limitations and Exceptions, it was noted that participants "agreed on the need to achieve a balance whereby copyright and related rights should not hamper public policy and development priorities, including the rights of users of protected rights."[8] Historically, each country adapted its laws to suit their vital concerns and levels of development. Prior to the Berne Convention, there was no constraint on the ability of countries to do this. The US, for example, restricted copyright protection to US citizens until 1891.[9] The Berne convention had left enough flexibility to countries to adapt their laws. Article 9(2) of the Berne Convention states:

[8] WIPO 2009, para 5.

[9] CIPR 2002, 18.

> It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interest of the author.

Special provisions for developing countries were provided in an Appendix to the Berne Convention during the 1971 revision conference for the Berne Convention. The provisions in the Appendix have proven unworkable. They have been far too complex and have presented structural impediments to the creation of local publishing industries. The net effect of this and the TRIPS Agreement was, according to scholars, that rents flow toward developed countries, with little rewards to the developing world. Most of the textbook industry was located in the developed world. Moreover, local conditions in developing countries may not be amenable to the exceptions and limitations provided for in treaties.[10]

An equitable solution may lie in the maximization of exceptions and limitations under Articles 9(2) and (10)(2) of the Berne Convention. These give expression to the concept of "fair use" (US) or "fair dealing"(UK) which allows for exceptions and limitations to copyright for personal use, educational purposes, research, archival copying, library use, and news reporting.[11] The fair use doctrine of the US Copyright Act recognizes the priority of dissemination of knowledge, although compensation is not provided for in certain cases.[12] Article 52 of India's Copyright Act of 1957, states that charges of infringement will not arise under "fair dealing" provisions, which have emerged as an equitable doctrine that allowed for certain uses of works that copyright law would normally have prohibited, if prohibiting such use would stifle the very creativity that it is intended to foster.[13] The defense of fair dealing includes the use of a literary, dramatic, musical, or artistic work for: (1) the purpose of private use (such as research), criticism, or review; (2) reporting current events in a newspaper, magazine, or similar periodical, or by broadcast or in a cinematograph film or by means of photographs; (3) the reading or recitation in public of any reasonable extract from a published literary or dramatic work; (4) the publication in a collection, *bona fide* intended for the use of educational institutions, and so described in the title, and (5) any advertisement issued by or on behalf of the publisher, of short passages from published literary or dramatic works, not themselves published for the use of educational institutions, in which copyright subsists, provided that not more than two such passages from works by the same author are published by the same publisher during any period of 5 years. "Fair dealing" provisions do not confer a right to the works being used, rather they simply state that infringement does not occur whilst availing of the limited exceptions provided.

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[10] Chon 2011, 9.

[11] For a related discussion see, Torremans 2004.

[12] Sections 107 to 118, title 17, US Code. See the consolidated US copyright laws at http://www.copyright.gov/title17/. Accessed 29 may 2012.

[13] Copyright Act of 1957, Indian Copyright Office.

The advent of TRIPs raised concerns that flexibilities would be constrained. Limitations or exceptions to exclusive rights under copyright under the TRIPS Agreement were confined to cases which did not conflict with normal exploitation of the work and did not unreasonably prejudice the legitimate interests of the right holder (Article 13). Yet, the CIPR has noted that:

> The general lesson history shows us that countries have been able to adapt IPR regimes to facilitate technological learning and promote their own industrial policy objectives. Because policies in one country impinge on the interests of others, there has always been an international dimension to debates on IP. …[T]he Berne Convention recognized this dimension, and the desirability of reciprocity, but allowed considerable flexibility in the design of IP regimes. With the advent of TRIPS, a large part of this flexibility has been removed.[14]

Following TRIPS, a three-step test rule of interpretation has been developed, following from Article 9(2) of the Berne Convention. In his analysis of the test, Roger Knights has outlined the steps as follows: The first step requires that exceptions should be confined to "certain special cases." The second requires that exceptions "do not conflict with a normal exploitation of a work" or of a performance or a phonogram, when, as in the WIPO Performances and Phonograms Treaty (WPPT), the test is applied to these things rather than copyright works. The third step of the test requires that exceptions "do not unreasonably prejudice the legitimate interests of the author," or, correspondingly, of the performer or phonogram producer.[15] Kur and Rise-Khan have noted the absence of any substantive guide as to which exceptions may qualify to meet the conditions set out in the various versions of the test.[16] Moreover, ambiguities and restrictiveness of the approach to exceptions under TRIPS have had a deterring effect on those developing countries aiming to devise new exceptions corresponding to their individual socio-economic, cultural, and technological levels of development.[17] An equitable approach to the same and one that aims at "substantive equality" requires that "interpretation of these norms should be generously construed in favour of development," which is consistent with the drafting history of the Berne Convention.[18] Such an interpretation might hold that the operation of the educational exception provisions within their specific sphere was unaffected by the more general provision in Article 9(2) and that the uses allowed under them are therefore excluded from its scope.[19]

A related issue is access to information vital to the transfer of technology. A majority of the world's information carrying or knowledge-based products are produced in the developed world. It is common knowledge that the development of

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[14] Ibid., 20.

[15] Knights 2001, para 7. See also Senftleben 2004.

[16] Kur and Ruse-Khan 2008, 8.

[17] Id., 8.

[18] Chon, 13.

[19] WIPO 2003.

domestic technological capacity has been a key determinant of economic growth and poverty reduction. Moreover, the CIPR has noted that the "early emergence of an indigenous technology capacity" is of vital importance. Many of the factors conducive to effective transfer of technology, such as education, research, and development, are underdeveloped in many developing countries and LDCs in particular. Access to the scientific knowledge and knowledge of technological advances is therefore of vital importance. For example, Africa has been at a disadvantage given its lagging Internet connectivity. Nevertheless, while the Internet bears enormous and revolutionary potential to transfer this knowledge to those who need it the most, this may be rendered more difficult by developments in international copyright law and its extension to the digital environment. "Copyright regulates the flow of ideas and knowledge-based products."[20]

Of particular concern are (1) the extension of the term of protection and (2) the extension of the scope of protection. The term of protection has expanded from a historical low of 14 years under the Statute of Anne of 1710 in the UK to the author's life plus 50 years beyond the death of the author of the work under Article 7 of the Berne Convention. This has increased and is now up to 70 years in many developed countries. In the United States, the second session of the 105th Congress, decided to amend Section 302 of Title 17 (dealing with the duration of copyright), United States Code, so that, protection was extended to 70 years beyond the life of the author generally. The US also provides for a term of protection of 95 years from first publication for works made for hire. The European Union, in its Directive 93/98/EEC of 29 October 1993 provided as follows:

> (11) Whereas in order to establish a high level of protection which at the same time meets the requirements of the internal market and the need to establish a legal environment conducive to the harmonious development of literary and artistic creation in the Community, the term of protection for copyright should be harmonized at 70 years after the death of the author or 70 years after the work is lawfully made available to the public, and for related rights at 50 years after the event which sets the term running.[21]

Consequently, Article 1 (1) of the Directive stipulated that.

> The rights of an author of a literary or artistic work within the meaning of Article 2 of the Berne Convention shall run for the life of the author and for 70 years after his death, irrespective of the date when the work is lawfully made available to the public.

The CIPR has noted that such extensions are in defiance of economic rationale as "the rate of technical change has led in several industries to a shorter effective product life (for example, successive editions of software programs), which point to longer copyright protection being redundant."[22]

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[20] Ibid., 95.

[21] Council Directive 93/98/EEC, of 29 October 1993, harmonized the term of protection of copyright and certain related rights.

[22] Ibid., 20.

The scope of protection in the digital environment has been extended to computer software and to databases. For parts of the world that are lagging drastically behind in terms of Internet connectivity, the protection of badly needed software is an important issue. Databases are the subject of intense discussions at the international level. In the meantime, the European Union's Directive on database protection in its Member States signaled a restrictive attitude to the sharing of information. These two problems are compounded by a provision in the WIPO Copyright Treaty (WCT) and also in the WPPT aimed at preventing the circumvention of technological protection measures (TPMs), that is, encryption technology. TPM legal regimes may serve to override existing national copyright law exceptions and limitations and may hamper a country's ability to create new exceptions and limitations to meet their domestic needs.[23]

Information communication technologies (ICTs) bore great potential to overcome access to education constraints. Pro-access to education technologies, essentially the Internet,[24] have led to changing power structures among creators, producers, and distributors of educational products. Changes have been taken place in production, modes of access, and in distribution that have seemingly favored the consumer of such products. Open access and peer-to-peer technology have expanded the arsenal of access to knowledge tools.[25] These are, however, impacted by the relentless drive for greater IP protection and through treaty making, technical assistance aimed at imparting the "highest standards", the enhancement by the developed countries of infringement detection methods to developing countries, and the criminalization of not only infringements for 'commercial gain' or on a 'commercial scale' but also for personal use of copyright-protected material.[26] The latter in particular heralds dramatically a loss of balance in the copyright regime as there is no moral consensus on the same. In a discussion of criminal penalties under the US Digital Millennium Copyright Act of 1998, one commentator, Moohr, has noted that "Criminal use suggests it is appropriate to punish conduct that imposes a community harm or that breaches a moral standard [however] consensus that would condemn personal use is far from robust and the harm rationale provides an equivocal basis for criminalization."[27] Others question whether there is a consensus across societies, with different cultural attitudes toward IP, that commercial copying and handling of copyright works without authorization from the creator should be treated as criminal offences. The harmonization of criminal infringement of IIP rights in relation to counterfeiting and piracy in Europe has demonstrated that not all countries accept criminalization of copyright infringements.[28] It has been suggested that digital specific exceptions

[23] Shabalala 2011, 11.

[24] Id.

[25] On Peer-to-Peer file sharing see Tanaka 2001, 37–84.

[26] Ibid., 13.

[27] Moohr 2003, 733.

[28] Id.

could be enacted where these are relevant and appropriate to their educational use. Again the three-step test might be interpreted in favor of developing nations.

Libraries have a key role to play in terms of access to knowledge in the digital environment but they face tough restrictions that do not facilitate access to educational materials. Denise Nicholson, a Copyright Services Librarian at the University of Witwatersrand in Johannesburg, South Africa, while highlighting challenges posed by copyright to educators, librarians, and students in her country, has pointed to some challenges facing libraries. For example, a librarian was restricted from digitizing a valuable collection, which is fast deteriorating in condition, as copyright clearance was necessary for each item. Some rights owners were untraceable, some refused permission and some charged high fees or set too strict conditions. Libraries, from want of resources, could only purchase one or two copies of well-used books meaning that such limited resources will be damaged by thousands of students using them, as the latter cannot afford to buy them. In addition, copyright laws prohibited a library from preserving the original by reproducing extracts or a section of a book for users to copy from (even if the material was for a short-term assignment).[29] Lamenting the lack of balance in copyright law, she has called for greater concern for the public interest following the "Adelphi Public Interest Test" of the Royal Society for the Encouragement of the Arts, Manufacturers and Commerce, which has stated that "There must be a presumption against extending copyright; Change should be allowed only if it is shown to bring economic and social benefits; The burden of proof must lie with the advocates of change; and there must be wide public consultation and a comprehensive, objective and transparent assessment of the costs and benefits."[30] Libraries can benefit from carefully maximized exceptions and limitations that cater to the development objective of promoting access to education, a basic human right.[31] The WCT of WIPO has recognized the need to maintain a balance between the rights of authors and the larger public interest, especially education, research, and access to information.[32]

This public interest is further impacted by TRIPS Plus agreements that are being pursued through treaties and, in particular, free trade agreements, notably by the USA, which have "the effect of reducing the ability of developing countries to protect the public interest."[33] Practically speaking, such treaties are aimed at reducing the scope or effectiveness of limitations on rights and exceptions. It has been argued by some that TRIPS Plus exceeds levels of protection in TRIPS, beyond the level of economic development of countries. Kur and Ruse-Khan have

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29 Nicholson 2006. IFLA is the International Federation of Library Associations and Institutions.

30 Ibid., 313.

31 See WIPO 2011, Draft treaty on Exceptions and Limitations for the Persons with Disabilities, Educational and Research Institutions, Libraries and Archives, SCCR/22/12. Available at http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=169397. Accessed on 29 May 2012.

32 Preamble of WCT.

33 Musungu and Dutfield 2003, 3.

stated "enough is enough", for "the general perception so far has been that above the prescribed minimum standards there is no ceiling or limit other than the sky…"[34] Such a construction has resulted "in a spiral movement—driven by bilateral agreements—towards ever-increasing levels of protection and reducing flexibilities and policy space left open under the TRIPS Agreement"[35] TRIPS-plus arguably included new standards that purportedly limit the ability of countries to promote technological innovation and to facilitate the transfer of technology and dissemination of technology, take necessary measures to protect public health and nutrition and to promote the public interest in sectors of vital socio-economic and technological development, and to take appropriate measures to prevent abuse of intellectual property rights by holders or the resort by rights holders to practices which unreasonably restrain trade or adversely affect the international transfer of technology.[36] Kur and Ruse-Khan have advanced the notion of "ceiling rules" or "substantive maxima" to address the appropriateness and possible scope of mandatory limitations to the level of protection for IP and in so doing to "give effect to interests distinct from those of IP right holders and their exploitation of protected subject matter" such as, *inter alia*, access to information, public health, protection of the environment, cultural self-determination and dissemination of technology.[37]

4.4 Patents and Technology Transfer

The Agreement between the UN and WIPO of 1975, recognized the latter as a specialized agency of the UN and, as per Article 1, responsible for "taking appropriate action in accordance with its basic instrument, treaties and agreements administered by it, *inter alia*, for…facilitating the transfer of technology related to industrial property to the developing countries in order to accelerate economic, social and cultural development…"[38] Article 10 stipulates that WIPO must cooperate with other UN bodies in "promoting and facilitating the transfer of technology to developing countries in such a manner as to assist these countries in attaining their objectives in the fields of science and technology and trade and development."[39]

Technology transfer can take place through a variety of ways including selling technology, licensing technology, through mergers, and acquisitions and through foreign direct investment. Technology licensing takes several legal forms: patent assignment (transfer of ownership), patent licensing (licensor retains ownership),

[34] Kur and Ruse-Khan 2008, 1.

[35] Ibid.

[36] Id., 3.

[37] Id., 5.

[38] WIPO 1975, 3.

[39] Ibid., 7.

and know-how licensing agreements (provision of knowledge related to patented or non-patented information through a separate or distinct writing or document accompanying a license contract). Additional forms include the sale and import of capital goods involving commercial transfer and acquisition of technology, franchising a distributorship (involving the transfer of technical information), consultancy arrangements (to facilitate advice by individual consultants of firms), turnkey projects (whereby one party supplies to a client the design for an industrial plant and the technical information), and joint venture arrangements.[40]

An examination by Dinopoulos and Kottaridi of the growth effects of National Patent Policies led them to the conclusion that harmonization resulting in stronger Southern protection of patents rights has "an ambiguous effect on the rate of international technology transfer," and this is an "optimistic assessment of the TRIPS agreement…"[41] Moreover, it has been suggested that technology transfer is rendered increasingly difficult. For example, the UNDP has pointed out that in some instances, such as in the plant variety regime, contrary to arguments that TRIPS-plus regulations in bilateral investment treaties may increase FDI and technology transfer, there is some likelihood that investment treaties do not translate into affordable technology transfer for developing countries.[42] Khandeparkar has noted that the linkage between patent regimes and technology transfer is not easy to test. Weak capacity of the buyer in a developing country to absorb technology can supersede the availability of strong patent protection. He points to the increasing costs of technology transfer with the advent of strong patent regimes "as they have tended to lead to excessive direct and indirect costs due to restrictive clauses and a decrease in the bargaining power of the technology buyer."[43]

Another factor affecting transfer of know-how is the 'working' of patents. Upon being granted a patent, beyond a grace period, the right-owner must 'work' the patent, that is, making of the product or using a process. An invention must be exploited following the grant of the patent as per Article 5A(2) of the Paris Convention. The principal goal here is the transfer of technology, "the actual working

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[40] For a brief explanation of each of these please see Chap. 3, "The Role of Intellectual Property in Development and WIPO's Development Cooperation Program," in WIPO Handbook on Intellectual Property, WIPO 2004, 172–178.

[41] Dinopoulos and Kottaridi 2004, 500. Their arguments conform with prior work undertaken that showed that "patent policy harmonization is not a welfare—(as opposed to growth)—maximizing policy."(Id., 510). See Grossman and Lai 2004, pp. 1635–53.

[42] UNDP 2008.

[43] Khaneparkar 2006. He points to two studies on the costs of technology transfer: Branstetter et al. "Do Stronger Intellectual Property Rights Increase Technology Transfer? Empirical Evidence from US Firm-Level Panel Data," Columbia Business School |Finance and Economics Division, The Chazen Institute, and the NBER Research Draft Paper, December 2002, http://www.econ.yale.edu/seminars/trade/tdw03/branstetter-030505.pdf; Bascavusoglu and Zuniga, "Foreign Patents Rights, Technology & Disembodied Knowledge Transfer Cross Broders: An Empirical Application," 2001, http://www.econ.kuleugen.ac.be/smye/abstracts/p.502.pdf. See footnotes 14 and 15 of Khaneparkar, Id.

of the patented inventions in a given country being seen as the most efficient way of accomplishing such a transfer to that country."[44] Failure to do so could lead to non-voluntary licenses or compulsory licenses. The operation of a compulsory license for non-working is subject to certain limitations under Article 5(4) of the Paris Convention that aim at preventing the compulsory licensee from gaining an unfair advantage in the market place. Where the provision of compulsory licenses for non-working is insufficient incentive for working a patent, Article 5A(3) envisages the revocation of a patent. Speaking along with the Delegation of China at the 2011 General Assembly of WIPO, the representative from the IP Department of China's Hong Kong Special Administrative Region claimed "that a large number of patents held by inventors had not been put to work for profits, and that many SMEs were unable to achieve transformation or upgrading due to the lack of R&D funds and time."[45]

Non-voluntary licenses (NVL) or compulsory licenses (CL) are provided for to cater to the public interest. They can be divided into those granted to private parties and those granted to the government itself. The latter type is of particular interest as it typically occurs in the fields of national defense, national economy, and public health. Procedural safeguards include using the patented information without the permission of the owner for as long as the conditions warrant it and by persons designated by the government.

4.5 Patents and the Environment

Following from the discussion on technology transfer, a related issue that has emerged recently is the linkage between intellectual property and the protection of the environment and in particular climate change. It is self-evident that a healthy environment is indispensable for every aspect of human security. The linkage between IP and the environment has been tackled from a number of angles. For example, recent research has examined whether the intellectual property system in anyway hinders the transfer of environmentally sound technologies (EST). The latter are sources and methods for producing energy that reduce the emission of greenhouse gasses. Their dissemination across all countries is deemed "integral to mitigating climate change".[46] ESTs are used in the following ways: the treatment of domestic water to improve water quality, computer software to create long-term future scenarios to examine policy choices and environmental consequences of such choices, the implementation of regional knowledge management systems for ESTs, and so on. New technologies are typically patented and ownership tends to

[44] WIPO 2004, 35.

[45] Ibid.

[46] Meir Perez Pugatch 2011, 1.

be concentrated in developed countries. Owners may not make the technology available in all countries. Research on the transfer of ESTs has suggested that adequate protection is necessary for investment in environmental technologies and that IP is not a barrier to the transfer of ESTs. IP is one of a number of factors affecting EST transfer, including infrastructure, effective government and the development of knowledge institutions, finance, human skills, and the appropriate regulatory environment.[47] Another angle concerns proprietary transgenic technology indispensable for improved qualities and yields of plants that are important for food security. Advances in biotechnology have produced claims that new plant varieties may lead to reduced use of pesticides and thus beneficial for the environment, though this claim has been contested as plants seem increasingly tolerant or resistant to herbicides.[48] A further concern is the risk that transgenic plants have begun to spread onto farmer's fields and into the wild, raising discussion over the 'farmer's privilege' (discussed below), property rights in seeds and the effects of genetic contamination or gene flows over legitimate farming practices.[49] Finally, in the face of climate change and its impact on food security, debates have emerged over the necessity of industrial scale GM crops that withstand climate change effects as opposed to the need for a diversity of farming models to ensure food security.[50]

4.6 Patents and Health

Health problems and concern for the same are both globalized phenomena. Transborder health is rendered more complex by ever greater degrees of interdependence. Some 2 million or more people were crossing borders every day from 2003.[51] Domestic and international health issues are increasingly hard to separate. They are compounded by poverty and underdevelopment, and related problems such as malnourishment. Poverty breeds disease and vice versa. The cumulative effects can impact the stability of a state that is unable to provide basic services. State failure can affect regional stability. As former Director General of the World Health Organization (WHO) Gro Harlem Bruntland, has noted, "Pandemics such as AIDS, can cut so deeply into the fabric of countries that their social, economic, and political repercussions destabilize whole regions."[52] The growth and prosperity of nations require healthy populations. In the words of Brundtland, there is "no

[47] Ibid.

[48] Hans Haugen et al. 2011, 10.

[49] Id., 11.

[50] Ibid.

[51] Brundtland 2003, 8.

[52] Ibid., 9.

hope for the spread of freedom and democracy unless we treat health as a basic human right."[53]

Patent regimes can play their part indirectly in providing health security in terms of incentivizing research and development on needed medicines. Pharmaceutical companies argue that they need to recover massive research costs involved through the temporary monopolies granted by IP rights.[54] A number of critical issues have arisen in relation to the patent regime. In situations of public health emergencies can the needed medicines be accessed rapidly? Does heightened patent protection impact negatively on the basic right to health, which is a fundamental right guaranteed under international human rights conventions? The Director General of WIPO, in a speech on "Health and Innovation" in Canberra, Australia on 2 March 2011, evoked St. Thomas More's recognition in *Utopia*, that "health is a precondition for the enjoyment of all other things".[55] While innovation is essential for new treatments and cures for health, "there is no point having new medicines unless they can benefit those who need them. And so there is the question of balance, which …lies at the heart of all intellectual property."[56] The Director General recognized that:

> health is emblematic of the disparities in wealth and resources that exist between countries… Where the necessary wealth to purchase medicines does not exist amongst a category of consumers or patients, there is no economic or market incentive to invest in innovation in respect of diseases that affect those consumers or patients. Market failure has led to the so-called 10/90 gap, whereby 10 % of the world's diseases attract 90 % of the world's R&D…. While 500,000 people die each year form neglected tropical diseases [NTDs]…, it is estimated that only $1 out of every $100,000 invested in biomedical R&D is spent on NTDs.[57]

One may begin by noting exclusions from patentability in the public interest. On the grounds of "o*rdre public*" TRIPS has provided that subject matter that may be excluded includes discoveries of materials or substances existing in the nature, scientific theories or mathematical models, plants and animals other than microorganisms and essentially biological processes for the production of plants and animals, schemes, rules or methods for doing business; methods of treatment for humans or animals, or diagnostic methods practiced on humans or animals (but

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[53] Ibid., 11.

[54] Carlos Correa has refuted their claims, arguing that "though the pharmaceutical industry undertakes some basic research… in most cases, the discovery of important new drugs is made by public institutions, which later license their development and exploitation to private firms. Some 70 % of drugs with therapeutic gain were produced with government involvement…. Basic research that led to the discovery of potential 'drug leads' has almost always been publicly funded at universities, in-house government facilities, or research institutes in Europe, North America, and Japan." Correa 2002, 264.

[55] Gurry 2011.

[56] Ibid.

[57] Ibid.

not products for use in such methods). TRIPS Article 27 specified that Member States may exclude from patent certain kinds of inventions, such as the inventions the commercial exploitation of which would contravene public order or morality.

The harmonization of patent laws globally under the TRIPS Agreement has potentially dramatic consequences for access to health in developing countries as flexibilities in the traditional IP regime are under constant threat from demands for ever higher levels of IP protection, for example through TRIPS-plus measures.[58] Tshimanga Kongolo argued a decade ago that African countries would face great difficulties implementing TRIPS Agreement especially in a context in which "African countries disbelieve the positive implications of TRIPS' rules if implemented as such without adequate adjustment."[59]

The case of India has shed some light on the complexities involved. In a discussion of Indian patent law, Menon has argued that there is "no doubt of the possible conflict of private rights and public interests when it comes to patenting of food, drugs and pharmaceuticals as it concerns the basic necessities of a large number of people living below the poverty line."[60] Keayla has contrasted the un-amended Indian Patents Act 1970 with the 2005 amendment of the Act to make it-TRIPS complaint.[61] Whereas the un-amended act "was a balanced Act" which helped the growth of a pharmaceuticals industry in India that satisfied domestic demand and created a surplus for export, an "ill-considered" Patents (Amendment) Act of 2005, brought in features that do not necessarily serve the interests of India. The key features of the un-amended patents Act 1970 and the requirements of the TRIPS, brought in by the amended Act of 2005, were summarized by Keayla in tabular form (see Table 4.1).

One of the issues raised by this Indian case concerns prices of drugs, over which TRIPS is silent, and which were arguably kept lower by the un-amended Patent Act 1970. The second issue concerns the proscribing of India's pharmaceutical industry from manufacturing generics. The third issue was that with the ushering in of an era of more stringent criteria for patentability, studies point to a "wide range of questionable inventions being granted patents in the USA."[62] Kealya pointed to a number of legal issues in need of review, including the scope of patentability, so as to maximize the use of flexibilities provided for by TRIPS.

Of particular concern in the IP regime are situations of national emergency. Compulsory licenses may be granted where it is deemed necessary in the public interest. Such licenses are granted to private parties or to the government itself.

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58 See Collins-Chase 2008.

59 Kongolo 2002, 185.

60 Menon 2009, 11.

61 Keayla 2009, pp. 25–39.

62 Id., 32.

Table 4.1 Amendment to Indian patents act in light of TRIPS agreement

Un-amended patents Act 1970	TRIPS patent system
There was no product patent system for pharmaceuticals, food, and chemical-based products. These industrial sectors were covered by only process patent. (Section 5)	TRIPS provides for patent protection for any inventions whether products or processes in all fields of technology provided that they are new, involve an inventive step and are capable of industrial application. (Article 27)
The term of protection of the process patent was 7 year from the date of application or 5 years from the date of sealing of patent whichever period was shorter. (Section 53)	The term of all product or process patents will be 20 years from the date of application. (Article 33)
In order to ensure the effective role of the domestic enterprise in the patented product, a system of 'licensing of right' was also provided for the sectors covered by the process patent. (Sections 87 & 88)	There is no 'licensing of right' provision. The compulsory licenses are having tight conditions for meeting domestic demands
There was no constraint on exports of pharmaceuticals and other products (Section 90(a)(iii)	Exports will also have practical difficulties, as only those enterprises that are already producing the concerned patented product will be able to meet the export demands. (Article 31)
The patent holder was under an obligation to work the patent in the country. There was also provision for revocation of patent for non-working. (Section 83)	The Foreign patent holders have been absolved of working of their patents. The imports by them are to enjoy the same patent rights without discrimination as to the pace of invention, field of technology and whether the products are imported or locally produced. (Article 27)
For 'licenses of right', the royalty ceiling was stipulated at 4 % of the net ex-factory sale price in bulk of the patented article. (Section 88(5))	There is no royalty ceiling for compulsory licenses. The royalty payment will have to be based taking into account the economic valuation of the authorization (Article 31)

Source Kealya 2009, 29–30

Two issues are of relevant here. First, States may avail themselves of Article 31 of TRIPS, "the heart and soul of the TRIPS Agreement for developing countries."[63] In situations of national emergencies, states are allowed to issue compulsory licenses for patented products deemed necessary to address public emergencies. Coriat, Orsi and d'Almeida have noted the Brazilian Governments' tactic, in a concerted effort to address the HIV/AIDS crisis, of threatening to use compulsory licenses in negotiating price reductions of patented anti-retroviral (ARVs) drugs necessary to fight AIDS.[64] Article 31, which deals with use without authorization of the right holder (compulsory licenses), stipulates that:

[63] Id., 37.

[64] Coriat et al. 2006, 1053.

i. Where the law of a Member allows for other use of the subject matter of a patent without the authorization of the right holder, including use by the government or third parties authorized by the government, the following provisions shall be respected:

(a) authorization of such use shall be considered on its individual merits;
(b) such use may only be permitted if, prior to such use, the proposed user has made efforts to obtain authorization from the right holder on reasonable commercial terms and conditions and that such efforts have not been successful within a reasonable period of time. This requirement may be waived by a Member in the case of national emergency or other circumstances of extreme urgency or in cases of public non-commercial use. In situations of national emergency or other circumstances of extreme urgency, the right holder shall, nevertheless, be notified as soon as reasonably practicable. In the case of public non-commercial use, where the government or contractor, without making a patent search, knows or has demonstrable grounds to know that a valid patent is or will be used by or for the government, the right holder shall be informed promptly;
(c) the scope and duration of such use shall be limited to the purpose for which it was authorized, and in the case of semi-conductor technology shall only be for public non-commercial use or to remedy a practice determined after judicial or administrative process to be anti-competitive;
(d) such use shall be non-exclusive;
(e) such use shall be non-assignable, except with that part of the enterprise or goodwill which enjoys such use;
(f) any such use shall be authorized predominantly for the supply of the domestic market of the Member authorizing such use;
(g) authorization for such use shall be liable, subject to adequate protection of the legitimate interests of the persons so authorized, to be terminated if and when the circumstances which led to it cease to exist and are unlikely to recur. The competent authority shall have the authority to review, upon motivated request, the continued existence of these circumstances;
(h) the right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization…[emphasis added].

Second, Article 39(3) of the TRIPS Agreement has called for the protection of "test or other data" in the pharmaceutical and agricultural chemical products, as well as 'other data' from unfair commercial use, except where necessary to protect the public or unless steps are taken to ensure the data are protected against unfair commercial use. Fortunately, for developing and least developed members of the WTO, most of its members had limited the protection of test data relating to pharmaceuticals and agricultural chemical products to a term of 5–10 years, "taking into account considerations of public interest in the health sector."[65] As Pires de Carvalho has argued, "for many illnesses there is only one known active component available, and thus it is in the interest of society that more than one competing product using the same component be developed."[66] One must question whether extensions of deadlines for the implementation of the TRIPS provisions,

[65] Pires de Carvalho 2002, 269.
[66] Id., 269.

which were granted to developing and least developed countries, were sufficient for accomplishing the above-mentioned measures.[67]

One can therefore take some comfort that "mechanisms put in place by WTO Members to implement Article 39 (3) do not necessarily apply to all data submitted to governments…."[68] The Doha Declaration on the TRIPS Agreement and Public Health recognized the major problem of countries faced by emergencies such as HIV/AIDS but which have no domestic capacity to produce life-prolonging drugs.[69] However, the general dilemma remained and was exposed in a communication from the European Communities to the TRIPS Council:

> First, even when manufactured under a compulsory license, medicines may still be unaffordable for certain segments of the population in poor countries. After all, production of medicines, even by a manufacturer other than the patent holder, always has a cost and manufacturers have to make a reasonable return on investment if they are to stay in business…It is widely agreed that improving…access [to drugs] requires a mix of complementary measures in different areas. These measures include: public financing of drugs purchases; strengthened health care systems, including the infrastructure for distributing drugs and monitoring their usage; improved information and education; and increased research and development.[70]

The need for carefully crafted TRIPS compliance so as to maximize flexibilities is underscored by Brazil's experience with fighting HIV/AIDS. Coriat et al., argue that Brazil's early adoption of TRIPS provisions 1997 and failure to take advantage of the 10-year transition period ultimately presented difficulties in meeting the AIDS challenge. The only ARVs produced subsequently were the oldest ones (those commercialized before the 1997 Brazilian Industrial Property Law. A lack of capabilities for synthesizing molecules required importing the same from China and India. The TRIPS compliance of the latter may jeopardize procurement policy and the whole architecture of the Brazilian program. Most of the second generation ARVs have to be imported. More generally, they concluded that evidence pointed to the patent system being in a "state of tense imbalance between incentives to innovate and access to treatment."[71] While 'advanced' developing countries like Brazil, India, and South Africa, with domestic pharmaceutical industries, may be also poised to take the 'shock' of higher patent protection regimes and to exploit opportunities in the global market

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[67] Some developing countries have opted for additional transition period under Article 65.4 of the TRIPS Agreement, allowing them until 1 January 2006 (Cuba, Egypt, India, Madagascar, Pakistan, Qatar, United Arab Emirates). For LDC Members the TRIPS Agreement provides a transition period until 1 January 1996. Under para 7 of the Doha Declaration that LDC country Members will not have to implement or apply the TRIPS Agreement's provisions concerning patents and data protection for drugs before 1 January 2016.

[68] Ibid., 268.

[69] Pires de Carvalho 2002.

[70] European Community 2002.

[71] Coriat et al. 2006, 1059.

place, the situation is not so rosy for many other developing and least developed countries.

Kongolo has noted that the Doha Declaration acknowledged the use of flexibilities and he called upon African countries to pursue the following courses of action: (1) In accordance with Articles 7 and 8 of the TRIPS Agreement "to implement these provisions anytime there is a conflict between private interest and public interest"; (2) to apply Article 17(2) for the possibility given to them to exclude from scope of patents, inventions that conflict with public interest and that are prejudicial to human health; (3) To fully implement Articles 30 and 31 to limit the exclusive rights of the patentee for public health purposes; and (4) Implement all provisions of the Dispute Settlement Unit that were provided for the interests of developing countries and least developed countries.[72] Kongolo called attention to the HIV/AIDS "calamity for African countries" and advised that African countries should take advantage of the compulsory licensing provisions of the TRIPS Agreement.

It is noteworthy that as the South African Medicines Amendment Act 90 of 1997 worked its way through parliament to address the HIV/AIDS crisis afflicting 3.5 million people in the country by then through parallel imports and compulsory licensing, powerful pharmaceutical companies fought this move on the grounds that it conflicted with the South African Patent Act of 1978 and with South Africa's international obligations. Moreover, as noted by Kongolo, "South Africa" was threatened with sanctions by the United States and was placed on the US Trade Representative's "Watch List".[73] Eric Noehrenberg, representative of the Washington-based International Federation of Pharmaceutical Manufacturers Association, noted at the time, that "the Doha Declaration…did not add anything new; it did not weaken TRIPS… it did not change any of its obligations… Ministers realize they can achieve their public health aims within the TRIPS Agreement, without needing to change it and without needing to weaken it."[74] In relation to para 6 of the Doha Declaration, he noted, "when a country needs the drugs and engages in god faith negotiations, appropriate deals can be reached. That is our business… deals are made to expand access."[75] Matthew Kennedy has noted the slow pace of acceptance of the Protocol Amending the TRIPS Agreement (December 2005) that would allow the Doha Agreements to come into effect.[76]

[72] Kongolo 2002, 206.

[73] Kongolo 2005, 609.

[74] Noehrenberg 2000, 379.

[75] Ibid., 381.

[76] Kennedy 2010, 473.

4.7 Patents, Plant Varieties and Food Security

Food security is an extremely complex cross-disciplinary issue that encompasses different areas of public policy, different fields of technology, and different normative and legal frameworks.[77] Public policy issues include sustainable agriculture, the protection of indigenous communities, the preservation of biodiversity, and the need to incentivize R&D on technology that caters to the needs of developing country agriculture. How can science and technology be harnessed to help increase agricultural productivity? In addition, trade-related IPR policy has entered into the picture through the TRIPS Agreement. IPRs may affect the accessibility and availability of a large number of agricultural products. In this vein, Boyd, Kerr and Perkikis asked whether developing countries are at the mercy of multinationals.[78]

Food security, which can be understood from the household to the international level, was defined by Heads of State at the 1996 World Food Summit as existing "when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."[79] The Rome Declaration on World Food Security recognized the right of everyone to have "access to safe and nutritious food, consistent with the right to food and the fundamental right of everyone to be free from hunger."[80] The UN Millennium Declaration of 2000 resolved to halve the proportion of the world's people who suffer from hunger.[81]

This task is extremely daunting considering the dramatic increase in world population in the last couple of centuries. The global population is expected to reach 9 billion in the next three decades and average per capita food consumption is expected to rise above 3,100 kcal per day, including increased consumption of livestock. This will require a 70 % increase in agricultural productivity.[82] Leidwein of the Austrian Agency for Health and Food Safety has noted that some 1,600 million hectares are under cultivation globally. This is expected to rise by just 5 % (70 million hectares) with the bulk of the expansion likely to happen in sub-Saharan Africa and Latin America. Such change in land use is already fraught with

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[77] Cullet 2003.

[78] Boyd et al. 2003. They argue that the real question is, given the potential benefits of biotechnology for developing countries, "whether developing countries can change their focus from concerns with monopoly exploitation to the dangers of forgoing opportunities" and "how to induce multinational firms to exploit developing countries." The suggested subsidization of biotechnology research tailored to developing countries, failing which investments will simply not take place. Id., 230.

[79] Haugen 2011, 3. For critiques of this definition see Cullet 2003.

[80] Rome Declaration of 1996, World Food Summit, 13–17 November. Available at http://www.fao.org/docrep/003/w3613e/w3613e00.htm. Accessed on 1 June 2012.

[81] United Nations 2000.

[82] Leidwein 2011, 2.

dangers, including the collapse of ecological systems. "Some 90 % of the increase in global food production will need to come from intensified farming and higher yields."[83] He has noted that farmers will increase production if it pays and that some 70 % of the world's poor are farmers or farm workers. Tailored solutions to boost productivity are vital. One of the issues to be faced is that agriculture will have to produce its own energy given the finite nature of fossil fuels. Alternatives such as bio-fuels will have to be made more efficient. Innovations envisaged include greater efficiency in the application and use of nitrogen and phosphorous fertilizers, as well as the efficient recycling of wastes containing them.[84] Climate change will compound the challenges facing agriculture. In this context, "plant breeding will become increasingly important to ensure that crops are adapted to more challenging environmental conditions and greater efficiency will also be required in animal production for improved feed conversion rates, efficient use of sewage nutrients and lower methane emissions."[85]

The food security problem may be most acute in Africa, which comprises most of the world's LDCs. Alhaji Tejan-cole, legal counsel for the African Agricultural Technology Foundation (AATF) has highlighted the food security problem in Africa by calling attention to the fact that, though rich in natural and human resources, Africa contains some 239 million undernourished people with an estimated 33 million children going hungry every night.[86]

A key concern for a continent with largely smallholder-based farming that still uses inefficient practices that erode the soil is how to produce higher crop yields and more nutritious foods from poor soils, to make food more affordable for and accessible to Africa's expanding population. Drawing from Food and Agriculture Organization (FAO) analysis he has noted that every 10 % increase in smallholder agriculture productivity in Africa can lift almost 7 million people above the dollar-a-day poverty line. In developed countries proprietary technologies to improve the drought tolerance, pest and disease resistance, yield potential and nutrient content of food crops are already being exploited, with research companies coming up with better technologies constantly. Smallholders in Africa "seemed resigned to the hit-or-miss character of their livelihood, they are keen to adopt new proprietary technology options where the right incentives and market opportunities exist."[87] International companies, holding intellectual property rights to most of these proprietary technologies, have little commercial incentive to market them in Africa given high costs of production, development and testing, regulatory approval, liability, manufacture, and market development.

The right to food was recognized in the Universal Declaration of Human Rights (UDHR): "Everyone has the right to a standard of living adequate for health and

[83] Id., 2.

[84] Ibid.

[85] Id., 3.

[86] Tejan-Cole 2011, 4.

[87] Id., 4.

well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control."[88] While the UDHR was a non-binding instrument, it is arguable that its core provisions have become legally binding through the operation of customary rules of international law.[89]

The ICESCR, Article 11, recognized "the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing." Moreover, the States parties recognized "the fundamental right of everyone to be free from hunger" and "to take, individually and through international co-operation, the measures, including specific programmes," which were needed "to improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources." They also agreed to "to ensure an equitable distribution of world food supplies in relation to need."[90] The list of measures was not exhaustive and as per Article 2(1), each State Party undertook to take steps "with a view to achieving progressively the full realization of the rights recognized in the present Covenant *by all appropriate means*…"[91] Haugen et al., have noted that emphasis on "production, conservation and distribution of food" remain valid concerns today and that, understood as being interlinked, any strategy that impeded food distribution was to be avoided. An effective distribution strategy implied that food-producing resources, such as seeds, should be made adequately to farmers and that the state should facilitate the same.[92]

In its General Comment No. 3, the committee on Economic Social and Cultural Rights (CESCR) has noted that there are two obligations of "immediate effect": An obligation under Article 2(1) of the ICESCR to take measures or steps, both on national and international levels, and an obligation under Article 2(2) to guarantee that these rights will be exercised without discrimination of any kind.[93]

General Comment No. 12 of the CESCR stated that the "right to adequate food is indivisibly linked to the inherent dignity of the human person and is indispensable for the fulfillment of other human rights enshrined in the International Bill of

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[88] UDHR, 10 December 1948 General Assembly resolution 217 A (III).

[89] See generally Alfredsson and Eide 1999.

[90] ICESCR adopted and opened for signature, ratification, and accession by General Assembly resolution 2200A (XXI) of 16 December 1966.

[91] ICESCR, Ibid.

[92] Haugen et al. 2011, 5.

[93] CESCR, "The nature of States parties obligations (Art. 2, para. 1)," 12/14/1990. CESCR General comment 3.

Human Rights."[94] The CESCR commented on the right to adequate food, which would be realized "when every man, woman and child, alone or in community with others, have physical and economic access at all times to adequate food or means for its procurement." The core content of the right to food comprised:

> The availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture; The accessibility of such food in ways that are sustainable and that do not interfere with the enjoyment of other human rights.[95]

Availability of food referred to the "the possibilities either for feeding oneself directly from productive land or other natural resources, or for well-functioning distribution, processing and market systems". Accessibility referred to distribution and procurement of food and "physical accessibility" (adequate food must be accessible to everyone). Paragraph 11 commented that the available food must be culturally acceptable for "perceived non nutrient-based values" were attached to food and food consumption "and informed consumer concerns regarding the nature of accessible food supplies." Given the exclusive right of the rights holders under the IP regime to restrict access to products containing food-related technology there appeared to be a conflict between IPRs and the right to adequate food under the Covenant. That there is a need for balance between public and private rights is evident in relation to the right to food. General Comment No. 17 of the CESCR has addressed this issue by commenting that the IP regime should not in anyway, impede States' ability to comply with their core obligations in relation to the right to food.[96] General Comment 12, while not mentioning intellectual property, stipulated that "As part of their obligations to protect people's resource base for food, States parties should take appropriate steps to ensure that activities of the private business sector and civil society are in conformity with the right to food."[97]

FAO's Voluntary Guidelines on Realization of the Right to Adequate Food in the Context of National Food Security were developed as "a human rights-based practical tool addressed to all States."[98] Guideline 8.5 in particular, has stipulated that "States should, within the framework of relevant international agreements, including those on intellectual property, promote access by medium- and small scale farmers to research results enhancing food security." Guideline 8.12 provides that states should:

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[94] CESCR, "Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights: General Comment 12," E/C.12/1999/5,12 May 1999. Available at http://daccess-ods.un.org/TMP/1560313.html.

[95] Ibid.

[96] CESCR, General Comment No. 17, 2005, The right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which he or she is the author, E/C.12/GC/17,12/01/2006.

[97] CESCR, General Comment 12.

[98] FAO 2005. Adopted by the 127th Session of the FAO Council November 2004.

> consider specific national policies, legal instruments and supporting mechanisms to prevent the erosion of and ensure the conservation and sustainable use of genetic resources for food and agriculture, including, as appropriate, for the protection of relevant traditional knowledge and equitable participation in sharing benefits arising from the use of these resources, and by encouraging, as appropriate, the participation of local and indigenous communities and farmers in making national decisions on matters related to the conservation and sustainable use of genetic resources for food and agriculture.[99]

The Guidelines exhorted States to adopt a "holistic and comprehensive approach to hunger and poverty reduction" (Guideline 2.4) through, *inter alia*, adoption of measures to improve access affordable technologies (Guideline 2.6).

A UN General Assembly Resolution of 2008 on the right to adequate food requested "all States and private actors…to take fully into account the need to promote the effective realization of the right to food for all," and stressed that States parties to the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights "should consider implementing that agreement in a manner supportive of food security, while mindful of the obligation of Member States to promote and protect the right to food."[100] This echoes criticisms of the UN Special Rapporteur on the Right to Food who has argued that the "trade-centric" approach to food security of the WTO is outdated.[101] In the Special Rapporteur's report on food security to the General Assembly he referred to intellectual property requirements under the TRIPS Agreement in paras 25–28. Paragraph 25 stated as follows:

> The result of the strengthened protection of intellectual property rights at the global level, if it is indeed extended to plant varieties and seeds, would be to reinforce the control of corporations claiming such rights in the global food system and to increase the price of inputs for farmers using protected plant varieties. Extending patents to plant varieties in particular would accelerate the "verticalization" of the food production chain, as agricultural producers would become dependent on the prices set by companies for the seeds on which they have patents and would be denied the traditional right to sell and exchange

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[99] FAO 2005.

[100] United Nations 2008, The Right to Food, A/Res/63/187.

[101] In the context of the increasing foreign direct investment in agriculture, which reached some US$ 3 billion by 2005–2006, the UN Special Rapporteur on the Right to Food, Olivier de Schutter, has criticized the WTO's "trade centric" approach to human security, noting that "The impact of trade rules can no longer be seen at the level of States alone. It must be sensitive to what really determines food security: who produces for whom, at what price, under which conditions, and with what economic, social and environmental repercussions. The right to food is not a commodity, and we must stop treating it that way." He continued, "The policies currently shaped by the international trade regime are not supportive of these small-scale farmers. Instead, we impose a lose–lose upon them. They do not benefit from the opportunities that access to international markets represents for some. But it is they who are the victims of the pressure on land, water and natural resources on which they depend, for which they increasingly have to compete with the agro-export sector." Olivier de Schutter, "WTO defending an outdated vision of food security—UNfood expert," 16 December 2011. http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=11720&LangID=E. See the Special Rapporteur's report on "Agribusiness and the Right to Food," 22 December 2009, A/HRC/13/33.

> seeds among themselves, as well as to save part of their crops in order to retain seeds for the next planting season—either as a consequence of the protection of patents or by the use of "technology use agreements" by companies selling seeds. It would also lead to a decrease in biodiversity, since patents are granted on stable or fixed varieties, which, although they promise higher yields, encourage monocultural forms of agriculture.[102]

The Special Rapporteur emphasized that:

> Clearly, the privatization of genetic resources for agriculture resulting from the extension of intellectual property rights to plant varieties, plants, or seeds may put this balance in jeopardy. The Special Rapporteur intends to study in depth this issue and others where intellectual property relates to other parts of the food system, in order to assist States in ensuring that the implementation of the TRIPs Agreement, and the protection of intellectual property rights on plant varieties in general, remain fully compatible with their obligation to protect the right to food, including the right of farmers to produce food under conditions that ensure an adequate standard of living.[103]

IPR affects access to technology vital to agricultural productivity. The AATF has sought access to innovative technologies that can better secure food supplies. For example, in order to control *striga* in maize, a weed which sucks out most of the nutrients, it is promoting imazapy-resistant non-transgenic maize seed, which has been effective against the weed in East and Central Africa. Higher yields, between 38 and 82 %, result from improved maize technology. AATF is developing maruca-resistant copea varieties. The maruca-virata (pod borer) inflicts much damage on cowpea resulting in great losses and the high cost of insecticides renders the latter inaccessible to farmers. Therefore, transgenic cowpea varieties resistant to the maruca pest were needed. AATF has sought access, through a royalty free license, to a gene conferring resistance to the maruca pod borer in cowpea. Banana is an important food for over 100 million people in Sub-Saharan Africa. The region produces about one-fifth of the world's bananas. However, biotic and abiotic factors greatly reduce productivity. A banana bacterial wilt caused economic loss of some US$200 million in 2001.[104] Testing on improved rice varieties with US firms has also been underway. Thereafter, AATF field researches aimed to transfer and adapt the technology. Finally, maize, the most widely grown crop in Africa, with some 300 million people depending on it, was severely affected by drought. A drought-tolerant African maize has been sought after using various breeding technologies and bio-technology.

The challenges to the world's food supply require incentives for further research on innovative agricultural solutions. Particularly, relevant areas of intellectual property are patent law, plant variety protection or breeders' rights, and

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[102] Report of the Special Rapporteur on the right to food, A/63/278, 21 October 2008, para 25.

[103] Ibid., para 28.

[104] Tejan-Cole 2011, 6.

rights over genetic resources.[105] "Agricultural innovations need to be affordable and farmers need incentives to adopt them." Food insecurity has raised the possibility of heated debates on patenting of seeds and on the licensing provisions in relation to public health.

In contrast to the informal exchange of knowledge and farm-saved seeds traditionally in developing countries industrial farming companies have relied on monopolistic rights granted for the development of seeds and plant varieties, through modern forms of biotechnology and plant breeding.[106] Business models in industrial crop improvement have depended on patents and PVP.[107] In contrast, in many parts of the world, small farming linked to customary practices—ancestral culture and traditions—"local innovation systems exist which have continually evolved and adapted to new ecological conditions." Haugen et al. point to many dynamic examples of outputs by small farming communities, which are far detached from IPR incentives or other compensation mechanisms.[108] IPRs so critical to industrial breeders were "irrelevant to the work and ingenuity of farming communities whose practices are essential for the maintenance of biodiversity and ensuring food security for a broad population."[109] The extension of IPRs, patents in particular, toward rewarding innovation in the area of living organisms was only developed in the 1970s and has been pushed by commercial interests in biology and from developments in information science that facilitate the dissemination of information. A key question is the utility of the industrial farming model to the situation of poor farmers who need to improve their harvests but cannot afford huge investments.[110] Can transgenic crops negatively impact on the poor? Will asymmetrical power relationships in most developing countries imply that richer farmers will benefit at the expense of the poor?

Patents are relevant to food security. Article 27(3) of TRIPS provides for the exclusion of plants and animals from patentability but for the grant of patents on microorganisms and process for non-biologically or microbiologically developing plants and animals. Members may also grant protection towards plant varieties either through patents or a *sui generis* system of a combination of the two.[111] While Members States may exclude plants, including transgenic plants, plant varieties (hybrids included), plant cells, seeds and other plants, animals (including transgenic animals) and animal breeds, TRIPS operates on the principle of 'minimum' standards and all members must provide for the provisions in their national regimes in stipulated time periods with little regard for the levels of development of societies. Countries may also adopt higher standards. The US and Europe, note

105 Id., 3.

106 Cullet 2003, 4.

107 Haugen 2011, 8.

108 Id., 9.

109 Id., 9.

110 Ibid.

111 Id., 13.

Haugen et al. have adopted measures leading to: (1) limiting the list of non-patentable products; (2) Double protection—PVP and patents—for the same plant (EPO in 1999); and (3) The lowering of the threshold for inventiveness (EPO), "so that naturally occurring substances are patentable."[112] As noted earlier, investment treaties could reduce flexibilities under TRIPS and that the transfer of technology to developing countries may be negatively impacted. It has been pointed out that TRIPS-plus agreements through FTAs have been pushing developing countries to agree to providing patents on plants, accession to UPOV, the implementation of IPRS with the highest international standards or a combination of these.[113] Moreover, longer protection periods for data of the protected invention are provided for in such agreements. UNDP Guidelines have noted that FTAs could reduce or eliminate tariffs on certain imported technologies and facilitate an influx of monopolistically priced seeds and other faming products.

Debates on seeds have converged around the UPOV system and its flexibilities. The UN Special Rapporteur on the Right to Food, in a 2009 report on seed policy and the right to food, highlighted issues of concern. First, the emergence of a commercial seed system (with temporary monopoly privileges to plant breeders and patent holders) alongside the farmers' seed systems through which farmers traditionally save, exchange and sell seeds, often informally may work to the detriment of poor farmers. Private-led research to cater to demands of industrialized countries may not cater to those in developing countries. The Special Rapporteur noted that with higher IP standards, "The oligopolistic structure of the input providers' market may result in poor farmers being deprived of access to seeds, productive resources essential for their livelihoods, and it could raise the price of food, thus making food less affordable for the poorest."[114] Second, the extension of TRIPS minimum standards to plant and life forms raised fears about "appropriation of genetic resources without the consent of, or without adequate sharing of the benefits with, the farmers and communities which have developed those resources in the first place." In relation to this, he noted a third concern regarding the difficulties with preservation of biodiversity as provided for in the Convention on Biological Diversity. The Special Rapporteur noted that for the 1.5 billion people or so who depend on small-scale farming for their livelihoods:

> States therefore face two separate challenges. They must ensure that the commercial seed systems not only raise aggregate yields, but also that they work for the benefit of the farmers most in need to have their incomes raised—smallholders in developing countries. And they must support farmers' seed systems, on which not only these farmers depend, but the enhancement of which is vital, in addition, for our long-term food security.[115]

The fourth concern was that excessive protection of breeders' rights and patents might discourage innovation in the name of rewarding it. He noted that very little

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[112] Haugen 2011, 13.

[113] UNDP 2008, 25.

[114] UN Special Rapporteur on the Right to Food 2009, para 27.

[115] Id., para 25.

research has benefited crops such as tropical maize, sorghum, millet, banana, cassava, groundnut, oilseed, potato or sweet potato, for example. These are referred to as "orphan crops": public research centers have not made up for the lack of interest of the private sector in these crops. Commenting on the need to preserve farmer's seed systems and crop genetic diversity, the Special Rapporteur argued that the expansion of intellectual property rights could constitute an obstacle to the adoption of policies that encourage the maintenance of agrobiodiversity and reliance on farmers' varieties. In this regard, the TRIPS and the strengthening of the UPOV regime were also of concern.

TRIPS Article 27.3(c) has provided for the adoption by Member States of an effective *sui generis* form of protection for plant varieties. While many countries have adopted such a system, they have not been tailored to local needs.[116] Instead of availing of flexibilities, developing countries find themselves having to implement standards of protection according to UPOV standards, "which may not serve as the best available option where a significant proportion of the population depends on an informal seed supply system of agriculture for their daily subsistence needs and sustenance."[117]

Restrictions on plant breeders' right may take place only in the public interest in exchange for adequate remuneration. (Article 10, 1978 Act) The 1978 ACT of UPOV provides for the following exception to breeders' rights: The authorization of the breeder shall not be required for the utilization of the variety as an initial source of variation for the purpose of creating other varieties. This relates to the use of an inbred line in the commercial production of seed of a hybrid. The authors of the 1978 Act were aware of the nature of plant breeding and of the manner in which incremental progress was achieved by building upon the progress embodied in existing varieties. Article 15(1)(iii) of the 1991 Act provides that "acts done for the purpose of breeding other varieties" are compulsorily excepted from the breeders' right.[118]

We have noted the 'farmer's privilege' above. The scope of the breeder's rights was limited in the 1991 Act in that the 'farmer's privilege' was absent. Article 14(1) of the 1991 Act provided that in respect of propagating material of a protected variety, any production, reproduction (multiplication), conditioning for the purpose of propagation, offering for sale, selling of other marketing, exporting or importing, or stocking for any of these purposes, shall require the authorization of the breeder. The scope of protection was thus extended to all production or reproduction without a reference to its purpose and, unlike the 1978 Act, "does not have the effect of creating, by implication, a farmer's privilege".[119]

In relation to Article 15(2), which entitles states to exclude the planting of farm-saved seed from the requirement for breeder's authorization, the Diplomatic

116 UNDP Guidelines, 2008, 5–6.

117 UNDP 2008, 7.

118 WIPO 2004, 334.

119 Id., 340.

Conference leading to the 1991 Act had formally recommended that the provision of Article 15(2) "should not be read so as to be intended to open the possibility of extending the practice commonly called "farmer's privilege" to sections of agricultural or horticultural production in which such a privilege is not a common practice."[120] The 1978 Act provided that protection may be applied to all botanical genera and species, requiring protection of a minimum of five genera upon accession to the Convention. WIPO has noted that most Member States protect all species of economic importance in their countries, and "in an increasing number of cases, the entire plant kingdom".[121] The 1991 Act, however, required that Member States had to protect all genera and species 10 years after they became bound by the 1991 Act, "so that over time a worldwide UPOV system of plant variety protection will emerge which requires Member States to protect all plant genera and species."[122]

It has been noted that the farmer's privilege provision may be a double-edge sword. "While it sounds reasonable that a small farmer should be able to use seeds produced on his or her own farm without paying a license fee, excessive use of this exception can have a serious implications for plant breeders and their ability to develop locally adapted varieties."[123] Leidwein calls attention to the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR) which has a bearing on this issue. "These provisions have sought to balance access to biodiversity for incremental innovation and benefit sharing to reward farmers for on-farm conversation and management of such bio-diversity."[124] Those generating profits from creating commercial products that incorporate genetic resources must pay a percentage into a fund used to promote conservation and sustainable use of plant genetic resources except when such a product is available without restriction to others for further research and breeding. Voluntary payment is encouraged in the latter case. The intellectual property system seems to have an important role in providing sufficient and the right kinds of incentives in order to foster required innovation.

In order to maximize flexibilities Haugen et al. point to laws adopted by India, Malaysia and Thailand, which, by then were not members of UPOV, and thus not bound by this most "patent-like" of the versions of the UPOV Convention.[125] They were deemed to hold important lessons, for example, on how to redefine criteria for protection (novelty, distinctness, uniformity, and stability). Haugen et al. have drawn attention to the Malaysian Protection of New Plant Varieties Act 2004, which has inserted the term "identifiable" in place of the latter two terms for those varieties that are bred or discovered and developed by

120 Ibid.

121 Id., 334.

122 Id., 338.

123 Leidwein 2011, 4.

124 Id., 4.

125 Haugen 2011, 16.

a farmer, "local community or indigenous people."[126] They advise on the inclusion of an elaborate understanding of the term 'essentially derived varieties' (Article 14(15)) of UPOV 1991). The latter agreement extends rights to varieties which are essentially derived from the protected variety. Article 14(5) sought to ensure that patent rights and PVP operate in a harmonious fashion and to avoid a situation where plants and their parts, seeds and genes are patentable and access to these could be blocked by patent holders, thus undermining the ability of competitors from freely accessing breeding material. Controversy surrounds the Essentially Derived Varieties (EDVs) as there is little consensus over the genetic conformity threshold required for the identification of EDVs from initial crop varieties.

There has emerged great concern over private and sovereign claims over genetic resources that are critically important for food security. Both privatization of biological resources[127] and sovereign claims over such resources may lead to greater poverty, exploitation, and undermining "the biological commons".[128] Historically, conservation, use, and open access to plant genetic resources for food and agriculture (PGRFA) were freely exchanged based on understandings that they constituted a common heritage of human kind that were beyond strict sovereignty considerations. Accordingly appropriation by private entities was discouraged. The 1983 FAO International Undertaking for Plant Genetic Resources had guaranteed the same. This understanding proved unacceptable to developed countries which had major interests in genetic engineering. A broader consensus was reached by the FAO Conference of 1991. Resolutions there from acknowledged the need to balance the rights of formal innovators as breeders of commercial varieties with the rights of informal innovators.[129] The Convention on Biological Diversity of 1992 provided Member States with the opportunity to regulate by whom, and under what conditions resources could be used and how benefits would be shared, leading to access and benefit sharing (ABS) schemes and traditional knowledge protection laws. Developing countries were given a means to redress any imbalance of power with industrial and developed countries and this effort continues today. The International Undertaking was revised and became a binding treaty by November 2001. The FAO International Treaty for Plant Genetic Resources for Food and Agriculture (ITPGRFA) provided a legal framework for the conservation of

126 Id., 16.

127 See Byle and Fischer 2002.

128 Haugen 2011, 18.

129 Cullet 2003, 6–7.

PGRFA, their sustainable use and benefit sharing.[130] Under a Multilateral System, access to a series of crops listed in Annex 1, accounting for most (not all) human nutrition were covered by a provision under which "member states" agreed to provide facilitated access. As Haugen et al. note, this dos not cover PGRFA held by private owners.[131]

Discussions on IPRs proved particularly contentious resulting in a compromise solution that recipients of PGRFA could not claim IPRs that limit the facilitated access to the PGRFA or their genetic parts or components, in the form received under the Multilateral System. PGRFA accessed under the Multilateral System had also to be made available to other interested parties by the recipient under certain conditions, despite arguments that this would stifle innovation. On the other hand, when PGRFA were already protected by intellectual property or other property rights, access could only take place in conformity with the treaties regulating the particular kind of property rights.[132] No hierarchy of treaties is established by the ITPGRFA.

It also recognized Farmer's rights under Article 9, which acknowledged the contribution of local and indigenous communities and farmers of all regions of the world, as well as crop diversity have made to conservation and development of plant genetic resources that constitute the basis of food and agriculture production. Article 9 provides for the protection of TK relevant to PGRFA, for the equitable participation in sharing benefits arising from the utilization of such resources, and for participation in decision making at the national level on matters related to their conservation and sustainable use.[133]

Benefit sharing constituted another important area of discussion. The UN Rapporteur on the Right to food has stated that:

> The protection against the misappropriation of genetic resources should not result in new enclosures preventing access to genetic resources as a common heritage: the sharing of genetic resources not only promotes diversity, it also can contribute to food security by

[130] Id., 7. Pursuant to the adoption of the International Treaty on Plant Genetic Resources for Food and Agriculture some 11 International Agricultural Centres of the Consultative Group on International Agricultural Research (CGIAR) holding ex situ collections of Plant Genetic Resources for Food and Agriculture, as well as the *Centro Agronómico Tropical de Investigación y Enseñanza* and two of the four organizations hosting collections as part of the International Coconut Genetic Resources Network, have placed the collections they host under the framework of the Treaty, to be accessed according to the same rules. Using a Standard Material Transfer Agreement, recipients may use the materials for food and agriculture for free, or for the minimal costs involved. Report of the UN Special Rapporteur on the Right to Food, Seed policies and the right to food: enhancing agrobiodiversity and encouraging innovation. 23 July 2009, A/64/170, paras 21–23. The text of the ITPGRFA is available at http://www.fao.org/Ag/cgrfa/itpgr.htm. Accessed on 1 June 2012.

[131] Haugen 2011, 19.

[132] Cullet 2003, 7–8.

[133] Haugen 2011, 20.

> allowing research on new varieties to make progress, a process of sharing of, and improvement on, genetic resources in which farmers should be actively involved.[134]

As per Article 13(3) ITGRFA, benefits arising from the use of PGRFA that are shared under the Multi-lateral System should flow primarily to farmers in all countries, especially to those in developing countries and countries in transition who conserve and sustainably utilize PGRFA.[135]

Related concerns affecting the public domain include the potential for materials provided under the Standard Material Transfer Arrangements (SMTAs) used under the ITPGRFA multilateral system to find their way into patents in countries that allow the patenting of isolated and unmodified genetic sequences.[136] Another concern's provisions in Article 13(2) which provides for conditions under which a recipient that sells a PGRFA product incorporating material from the multilateral system *must* pay monetary benefits from the commercialization under certain circumstances.

One will have to wait and see whether the ITPGRFA will yield greater protection of the common heritage of humankind. Attention will have to be paid to maximizing flexibilities under TRIPS[137] and related IP treaties that would facilitate a number of policy priorities noted by Haugen, et al.: (1) research and development of national and community-based seed banks so as to support local farmers and communities confronted with climate change, (2) stimulate collective participatory breeding, protect, and promote the TK of indigenous peoples, (3) implement farmers' rights to support local availability of seeds and breeding materials, (4) explore open source of cross-licensing structures to enhance the technology commons,[138] and (5) design inclusive development strategies that effectively account for small farmers and poor farmers in particular.[139] Debates over these have raged on, for example in India, where a new Food Security bill going through Parliament in late 2011 was being widely criticized for sustaining efforts to incentivize privatize agro-related technologies.[140] The UN Special Rapporteur on the Right to Food has urged that States, in identifying the system of intellectual property rights best suited to their specific needs, could be supported by independent and participatory human rights impact assessments, in order to inform their choices. But the use by States of the flexibilities they are allowed should not be discouraged either by international agreements or by private initiatives.[141]

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134 UN Special Rapporteur on the Right to Food 2009, para 45.

135 Haugen 2011, 20.

136 Id., 20.

137 See Cullet 2003, 21–24.

138 See Graff et al. 2002.

139 Haugen et al. 2011, 22.

140 Ibid.

141 UN Special Rapporteur on the Right to Food 2009, para 41.

4.8 The IP Regime and the Survival of Indigenous Communities

The very survival of the ancestral way of life of indigenous communities is at stake and is one of the major concerns within the international community. The protection of indigenous communities' traditional knowledge, discussed in Chap. 8, is a complex issue that spans the IP, environment and human rights regimes. Suffice it for the moment to note international efforts to address the plight of indigenous communities.

Indigenous communities, comprising some 370 million people worldwide, whose existence has been threatened by misappropriation of land, pollution of the environment and misappropriation of their traditional knowledge, and folklore, have brought their plight to the international community's attention most spectacularly through the UN and through challenging the intellectual property regime as it currently exists. This struggle is more amply discussed in Chap. 8. It is increasingly accepted that traditional knowledge "is essential to the food security and health of millions of people in the developing world."[142] Moreover, traditional medicines provide "the only affordable treatment available to poor people. In developing countries, up to 80 per cent of the population depends on traditional medicines to help meet their healthcare needs."[143] Expressions of folklore, beyond their monetary value, serve to preserve and promote the identity of groups in a globalizing world.

Focus on the protection of traditional knowledge is a relatively recent phenomenon. WIPO's work on "expressions of folklore" began as early as 1978 in cooperation with the UN Educational, Scientific and Cultural Organization (UNESCO). It has thus progressed to a more advanced stage than the work on traditional knowledge in general. A concrete outcome of this work was the adoption in 1982 of the "Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions" (the Model Provisions). WIPO and UNESCO conducted four Regional Consultations on the Protection of Expressions of Folklore, each of which adopted resolutions or recommendations with proposals for future work. In addition, it is worth noting that the WPPT of 1996 already makes explicit reference to expressions of folklore. WIPO began its work on 'traditional knowledge, innovations and creativity' (traditional knowledge) in the 1998–1999 biennium. Two Roundtables were convened regarding the protection of traditional knowledge and a series of nine fact-finding missions (FFMs) on traditional knowledge, innovations and creativity were undertaken. The objective of the FFMs was to identify and explore the intellectual property needs and expectations of new beneficiaries, including the holders of indigenous knowledge and innovations. A draft Report on all the FFMs was made available for public comment in paper form and on the WIPO website. Comments

142 CIPR, 73.

143 Id., 73.

received were taken into account in producing a revised Report on the Intellectual Property Needs and Expectations of Traditional Knowledge Holders ("the FFM Report"), which was published in 2001. From 9 to 11 November 2000, WIPO organized an Inter-Regional Meeting in Chiang Rai, Thailand, which addressed intellectual property issues within all the three themes of genetic resources, traditional knowledge, and folklore. Twenty-eight Member States attended the Meeting and adopted 'A Policy and Action Agenda for the Future' which welcomed "the decision of the Member States of WIPO to establish … the Intergovernmental Committee" and recommended, among other things, that WIPO should "facilitate, support and contribute to the work of the Committee by continuing to conduct the exploratory activities and practical pilot projects and studies on these issues of the kind undertaken by WIPO thus far."

Following extensive discussions on intellectual property and genetic resources at WIPO between September 1999 and 2000, the General Assembly of the WIPO approved a proposal for the establishment of the Intergovernmental Committee and for a basic substantive framework. At the Twenty-Sixth (12th Extraordinary) Session of WIPO's General Assembly, held from 25 September to 3 October 2000, Member States decided to establish a special body to discuss intellectual property issues related to genetic resources, traditional knowledge, and folklore. The WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge, and Folklore is a forum where governments discuss matters relevant to three primary themes. These themes concern intellectual property issues that arise in the context of: (i) access to genetic resources and benefit sharing; (ii) the protection of traditional knowledge, innovations and creativity; and (iii) the protection of expressions of folklore. The Intergovernmental Committee was established by the WIPO General Assembly, at its Twenty-Sixth Session, held in Geneva from 25 September to 3 October 2000. The Intergovernmental Committee held its first session in Geneva, from 30 April to 3 May 2001 and has since held some 18 sessions, the substance of which is discussed in Chap. 8.

4.9 Conclusion

In the context of globalization, the need for a more equitable IP regime is indeed urgent. The traditional territorial scope of existing international IP regime is called into question as the world becomes increasingly interdependent. The IP regime is not simply one that is merely applied within a given jurisdiction. As Wong has noted, "the social impact of IP is global."[144] The concepts of public and public interest must be understood in the global order. The latter order encompasses powerful calls to respect the right to development and for fundamental human rights. We discuss the right to development in the next chapter.

[144] Wong 2011, 35.

Part II
IP, Development and Human Rights

Chapter 5
Imperatives of the Right to Development

This chapter highlights the fact that calls for a more development-oriented IP regime are not new and, as seen previously, only in recent years has a concerted effort been made for a development-friendly IP regime by the international community. This has occurred in the context of powerful arguments in favor of a right to development. The said right today stands on solid ground and embodies a comprehensive set of principles and rights, which are discussed in this chapter.

5.1 Calls for a Development-Oriented IP Regime

The introduction to this work set out the views of States from different parts of the world, which expressed in the General Assembly of the WIPO how the regime of international intellectual property laws should be infused with a development agenda. They expressed the view that IP laws should be more responsive to the needs and aspirations of people in different parts of the world. Academic commentators have reflected this powerful call for an equitable international IP system that is reflective of the developmental aspirations of nations globally. As the discussion on mainstreaming a development agenda within WIPO goes forward it is essential to take into account the landmark UN declaration on the right to development whose twenty-fifth anniversary was commemorated in 2011 (See Annex A). This chapter presents the essence of the right to development as it is contained in this declaration.

Development is promoted as a fundamental goal in a number of IP-related conventions. Development as a concern of the international community emerged amidst the Cold War competition between the US and the USSR, both of whom competed for the hearts and minds of peoples of the 'Third World'. The World

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9_5,

Bank, initially tasked with reconstructing war torn societies, was also entrusted with 'development' concerns from the 1960s onwards. The post-war de-colonization process thrust post-colonial states into an international economy that was highly unfavorable to them, heralding calls for a New International Economic Order (NIEO) that catered to their developmental priorities. The Preamble to the WIPO Convention of 1967 expresses the organization's desire to "contribute to better understanding and co-operation among States for their mutual benefit".[1] In the Agreement between the UN and the WIPO of 1974, the UN recognized the WIPO:

> as being responsible…, inter *alia,* for promoting creative intellectual activity and for facilitating the transfer of technology related to industrial property to the developing countries in order to accelerate economic, social and cultural development, subject to the competence and responsibilities of the United Nations and its organs, particularly the United Nations Conference on Trade and Development, the United Nations Development Programme and the United Nations Industrial Development Organization, as well as of the United Nations Educational, Scientific, and Cultural Organization and of other agencies within the United Nations system.[2]

The 1994 Marrakesh Agreement that established the WTO states that the Parties to the Agreement:

> Recognis[e] that their relations in the field of trade and economic endeavor should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of development.[3]

The TRIPS Agreement references development in its preamble and in Articles 7 and 8. The former provides that:

> The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.[4]

Article 8 provides that members may adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement. Such measures should be "consistent with the provisions of this Agreement" and "may be needed to prevent the abuse of intellectual property rights by right holders or the

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[1] Preamble, Convention Establishing the World Intellectual Property Organization, Stockholm on 14 July 1967, Available at http://www.wipo.int/treaties/en/convention/trtdocs_wo029.html.

[2] Article 1, Agreement between the United Nationsand the World Intellectual Property Organization, Entered into force on 17 December 1974. Available at http://www.wipo.int/export/sites/www/treaties/en/agreement/pdf/un_wipo_agreement.pdf.

[3] Marrakesh Agreement establishing the WTO.

[4] Article 7, TRIPS Agreement, http://www.wipo.int/treaties/en/agreement/trips.html#part2.7.

resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology".[5]

De Beer has noted that debates about IP and development are not new. In 1961, Brazil advanced a resolution to the UN on IP and development but WIPO's predecessors effectively stifled that resolution.[6] The mandate of WIPO, to spread IP protection, appeared to stand at odds with the requirements of development. The Development agenda espoused in the twentieth century seemed to be more of an 'underdevelopment agenda'.[7] While WIPO appeared to be fostering IP for development, the interests and views of developing countries appeared to be marginalized within the organization. The former Director General of WIPO had argued for IP as a tool for "economic growth".

In an edited work by Carsten Fink and Keith Maskus, the contributors, who are economists, have explored a key question: what were the implications of new IP laws, such as TRIPS, for international economics? They have noted that IP "can play an important part in efforts to foster development and reduce poverty".[8] They examined the trade-offs to IP protection in closed and open economies. They have argued that most positive and normative effects of IP reform were at best ambiguous and dependent on circumstances.[9] The chapters in the work investigated IPR and trade and suggested that stronger IPRs have had a positive effect on trade generally, but there was no necessary correlation in the case of high-end technology products. Analyzing these results and those of earlier works, the editors suggested that multinationals export decisions were not based on IPRs in poor countries. Patent rights mattered more in middle-income countries and larger developed countries. High-end technologies were hard to imitate and so trade was less responsive to IPRs. In the case of FDI, Maskus noted in Chap. 2 of the work that IPR protection was one of many factors influencing FDI decisions of multinationals overall, though the importance increases in the case of middle-income countries. In Chaps. 4 and 12, on investments in Eastern Europe and China, respectively, the authors suggested that IPR protection does play a role.

In a study of international transactions by the US and German corporations, Fink argued that there was no impact of stringent IP regimes. Overall, IPR protection did not seem to play a major role in boosting investment, but did play a role in technology transfers through licensing agreements. The foregoing suggests the need for a more nuanced and context-based approach to IP in relation to different types of countries and developing countries in particular.

Some IP scholars have sought the re-calibration of IP from a developmental perspective. Wong and Dutfield argue for a "capabilities" approach to such

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[5] Id.

[6] De Beer 2009

[7] Drahos and Brathwaite 2003.

[8] Fink and Maskus 2005.

[9] Id., 6.

re-calibration.[10] Using the "development as freedom" approach they borrowed from Amartya Sen's and Martha Nussbaum's "capabilities" or "IP from below" approach which they argue could be applied to both developed and developing countries. They argue that all IP law should be guided by what is best to ensure the complete enjoyment of a human being's life. As Martha Nussbaum has argued, the enjoyment of a human life includes:

> (1)Being able to live to the end of a human life of normal length; (2) Being able to have good health, including reproductive health; to be adequately nourished; (3) Being able to use the senses; (4) being able to imagine, to think, and to reason – and to do those things in a 'truly human' way, a way informed and cultivated by an adequate education, including but by no means limited to, literacy and basic mathematical and scientific training…[11]

While economic growth remains an important indicator of development it is no longer the only metric for measuring development.[12] Amartya Sen's and Martha Nussbaum's approaches, as reflected in the UNDP, are now accepted as an important matrix. The key is to retain sight of the instrumentality of GDP and other such indicators as tools for measuring the degree to which people can choose how they live their lives. A major challenge was to move away from development as merely "economic growth" to development as "freedom".[13] The Development Agenda of WIPO represents a "paradigm shift" in terms of IP policy in the twenty-first century. The Agenda re-establishes IP as a major public policy issue. This new development paradigm and the place of IP within has mirrored historic calls for a 'right to development' that followed the calls for a New International Economic Order in the early 1970s and that were grounded in the international bill of human rights. The substance of the right to development is explored hereafter.

5.2 The Right to Development

In 2011, the UN commemorated the twenty-fifth anniversary of the Declaration on the Right to Development. The right to development (RTD) was simultaneously of great importance to the suffering masses of the world and a subject of great controversy. A great African jurist, then Chief Justice of Senegal, Keba Mbaye, first advocated the concept in 1972 in a lecture at the International Institute of Human Rights in Strasbourg, France.[14] The African Charter on Human and Peoples'

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[10] Wong and Dutfield 2011.

[11] Nussbaum 1997.

[12] De Beer 2009, 5.

[13] This framework is used by by Wong and Dutfield 2011. See also Gervais 2007; Matthews 2011a; Khor and Khor 2002, Meléndez-Ortiz and Roffe 2009.

[14] M'Baye (1972). See also M'Baye, "Emergence of the 'Right to Development' as a Human Right in the Context of a New International Economic Order," address to Meeting of Experts on Human Rights, Human Needs and the Establishment of a New International Economic Order, 16 July 1979, SS-78/CONF.630/8.

Rights, which Judge Mbaye heavily influenced, then inserted it for the first time in a human rights convention. Article 22 of the Charter stated:

1. All peoples shall have the right to their economic, social and cultural development with due regard to their freedom and identity and in the equal enjoyment of the common heritage of mankind.
2. States shall have the duty, individually or collectively, to ensure the exercise of the right to development.[15]

The UN Declaration on the Right to Development (1987) would follow up by affirming in its Article 1(1) that:

> The right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully be realized.

One could also include as definitional elements Article 8, which provided that:

> States should undertake, at the national level, all necessary measures for the realization of the right to development and shall ensure, inter alia, equality of opportunity for all in their access to basic resources, education, health services, food, housing, employment and the fair distribution of income. Effective measures should be undertaken to ensure that women have an active role in the development process. Appropriate economic and social reforms should be made with a view to eradicating all social injustices.
> States should encourage popular participation in all spheres as an important factor in development and in the full realization of all human rights.

The World Conference on Human Rights in 1993 reaffirmed the right to development, as established in the Declaration on the Right to Development, as a universal and inalienable right, and as an integral part of fundamental human rights.[16]

There is a solid core content to the right to development at the national level that calls for the following: recognition of the right to development in the national legal order; taking all necessary measures to implement the right to development; formulation of national development policies in the spirit of the UN declaration; popular participation; equality of access; appropriate economic and social reforms; eradicating social injustice; halting violations of human rights; the role of women in the development process; acting on the core content of basic economic and social rights; and fair distribution of income.

Most of the action on the RTD has taken place in the former UN Commission on Human Rights, now the Human Rights Council, and in the UN General Assembly. However, the main focus has been on the international dimensions of the right to development rather than the national or regional dimensions. When a former UN Independent Expert on the Right to Development indicated in 1998–1999 that he intended to focus on the national dimensions of the right to

[15] African Charter on Human and Peoples Rights (1979), Article 22. See, generally, Zeleza and McConnaughay 2004.

[16] Vienna Declaration on Human Rights 1993, para 10.

development he was advised by the Group of 77 developing countries to concentrate on the international dimensions and the favored idea of developing countries is to work for the drafting and adoption of an international convention that would provide for transfers or resources from developed to developing countries. This is stoutly resisted by the former, as could be seen at the Copenhagen conference on climate change in December 2009.

The link between development and human rights has been prominent ever since the establishment of the UN. Article 55 of the UN Charter set out the interdependence and interrelatedness of peace, development, and human rights:

> With a view to the creation of conditions which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote:
>
> a. higher standards of living, full employment, and conditions of economic and social progress and development,
> b. solutions of international economic, social, health, and related problems, and international cultural and educational cooperation;
> c. universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.

The importance of development for human rights, and the need to integrate human rights in the development process have been emphasized ever since and there is nowadays much discussion of rights-based approaches to development as well as the role of human rights in poverty reduction strategies. But while related to, these are not the same as the right to development and we need to examine the pith and substance of the idea in view of the emphasis, but differing interpretations, given to it by developing and developed countries.

Article 9 of the UN Declaration on the Right to Development adopted by the GA in 1986, states that all the aspects of the right to development set forth in the Declaration are indivisible and interdependent and each of them should be considered in the context of the whole.[17] Is an 'aspect' the same as an 'element of the definition' of a right? The content of the Declaration may help to answer this question. The nearest that the Declaration comes to providing a definition of the right to development is in Article 1(1) which states that: "the right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural, and political development, in which all human rights and fundamental freedoms can be fully be realized". One could possibly include as definitional elements also Article 8, which provided that:

> 1. States should undertake, at the national level, all necessary measures for the realization of the right to development and shall ensure, inter alia, equality of opportunity for all in their access to basic resources, education, health services, food, housing,

[17] See, generally Chowdhury et al. 1992 and de Waart et al., 1988.

employment and the fair distribution of income. Effective measures should be undertaken to ensure that women have an active role in the development process. Appropriate economic and social reforms should be made with a view to eradicating all social injustices.

2. States should encourage popular participation in all spheres as an important factor in development and in the full realization of all human rights.

The remaining articles of the Declaration proceed to make a number of statements that serve different purposes. There are collateral statements such as the one in Article 6 (2) that all human rights and fundamental freedoms are indivisible and interdependent. The Declaration identifies the subjects and beneficiaries of the right to development in Article 1 (1), which refers to the right to development as one by virtue of which 'every person and all peoples are entitled'. Article 2(1) specifies that the human person is the central subject of development and should be the active participant and beneficiary of the right to development. Para 3 of the same article adds that states have the right and the duty to formulate appropriate national development policies. The possible subjects and beneficiaries are therefore the individual, the state, all Peoples.

The Declaration states what the right to development implies. Article 1 para 2 states that the right to development implies the full realization of the right of peoples to self-determination (development is cast, in Article 1 of ICESCR as a derivative of the right to self-determination). It indicates what the right to development requires. This is mentioned in places such as Article 3 (2) which states that the right to development requires full respect for the principles of international law concerning friendly relations and cooperation among states. Article 4 (2) adds that sustained action is required to promote more rapid development of developing countries. As a complement, effective international co-operation is also essential.

The Declaration indicates responsibilities. Article 2(2) states that all human beings have a responsibility for development. Article 3(1) adds that states have the primary responsibility for the creation of national and international conditions favorable to the realization of the right to development. It also indicates duties of the subjects and beneficiaries of the right to development, namely: in Article 2(2) that individuals should promote and protect an appropriate political, social, and economic order for development; in Article 2(3) that states have the right and duty to formulate appropriate national development policies; in Article 3(3) that states have the duty to cooperate with each other in ensuring development and eliminating obstacles to development; in Article 4 that states have the duty to take steps, individually and collectively, to formulate international development policies with a view to facilitating the full realization of the right to development. Sustained action is required to promote more rapid development of developing countries. Effective international co-operation is essential: under Article 5 states shall take resolute steps to eliminate massive and flagrant violations of human rights; under Article 6 all states should co-operate with a view to promoting, encouraging, and strengthening universal respect for and observance of all human

rights and fundamental freedoms and states should take steps to eliminate obstacles to development resulting from failure to observe civil and political rights as well as economic, social, and cultural rights; under Article 7 all states should promote the establishment, maintenance, and strengthening of international peace and security; in Article 8 states should undertake, at the national level, all necessary measures for the realization of the right to development. States should encourage popular participation in all spheres as an important factor in development and in the full realization of all human rights; in Article 10 steps should be taken to ensure the full exercise and progressive enhancement of the right to development.

Although all of the above-mentioned "aspects" are contained in a document entitled "Declaration on the Right to Development", they surely cannot all be part of the definition of the right to development. The elements that seem to be new, the normative statements that appear to have been added to the prior stock of human rights norms are in Article 1, para 1, which rests on the notions of participation in, contribution to, and enjoyment of development. The Declaration adds or consolidates a specific new right. ('The right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized'). This is the first time that such an explicit statement has been made in an authoritative international instrument.

The Declaration insists that development has to be of such a nature that 'all human rights and fundamental freedoms can be fully realized.' This point is further emphasized in Articles 5 and 6. In other words, when there is gross violation of human rights and fundamental freedoms, development is vitiated.

The Declaration insists on the indivisibility and interdependence of all human rights. It urges full respect for principles of international law and calls upon all states to promote the establishment, maintenance and strengthening of international peace and security. These are essentially statements about inter-relationships and inter-linkages. The right to development therefore cannot be considered what some claim that it is: namely a 'synthesis right' encompassing, englobing and subsuming other rights. Peace, disarmament, respect for human rights, and fundamental freedoms are required for development to take place. They are not, however, miraculously subsumed in an overarching right, 'the right to development'.

Development is conceptually employed in the Declaration in the following senses: more narrowly in the legal sense of a right (Article 1 (1)); broadly as a goal; relatively as a guide; and practically as a means. The first sense (a new right) represents an advance upon the ICESCR which does not contain a specific affirmation of the right to development although there may be some traces of the notion in the Covenant. The Declaration on the right to development and the International Covenant also cover very much similar ground in calling for national and international measures for the realization of economic, social, and cultural rights.

5.3 The Committee on Economic Social and Cultural rights and the Right to Development

The Committee on Economic Social and Cultural rights, which functions under the ICESCR has noted in its General Comment No. 3 that international cooperation for development was incumbent upon states which are in a position to do so. The Committee has elaborated a series of General Comments on the right to health, the right to food, the right to education, and the relationship between IP and human rights. These contribute core elements toward the development of a modernized rationale for an international protection regime.

The International Covenant on Economic, Social and Cultural Rights calls for Governments to pursue policies and strategies that can ensure satisfaction of basic needs to food, health, shelter, and education. This can be a healthy way for the society to monitor itself and to strive for the equitable advancement of its people.[18] An examination of the substantive articles of the International Covenant on Economic, Social, and Cultural Rights shows the concept of development performing six roles. First, development comes closest to being recognized as a right in Article 11 of the Covenant, which refers to the right of everyone to an adequate standard of living 'and to the continuous improvement of living conditions'. The Covenant follows a deliberate scheme in which many articles define the right recognized and then proceed to indicate the steps to be taken, nationally and internationally, with a view to promoting the realization of an element of the right of everyone to an adequate standard of living.

Second, development is cast, in some instances, as a derivative of a recognized right. This is the case for example, in Article 1 of the Covenant, dealing with the right to self-determination. After stating that all peoples have the right to self-determination, the article proceeds to add that by 'virtue of that right' they fully pursue their economic, social, and cultural development.

Third, development is in some instances cast in the role of a goal to be pursued in going about the realization of a right recognized in the Covenant. One may see this, for example, in Article 15 on the right to take part in cultural life. This article specifies that the steps to be taken by the States Parties to the Covenant shall include "the development and the diffusion of science and culture'. Another example is Article 13, para 2(e), which includes, among the steps to be taken to implement the right of everyone to education, 'the development of a system of schools at all levels.'

Fourth, in some instances, development is cast in the role of a guide in the implementation of a right recognized in the Covenant. For example, Article 12 on the right to the enjoyment of the highest attainable standard of physical and mental conditions requires States Parties to take steps 'for the healthy development of the child'. Likewise, Article 13, after recognizing the right of everyone to education, adds that 'education shall be directed to the full development of the human

[18] See, generally, Chapman and Russell 2002.

personality'. One might have thought that this element, namely the 'full development of the human personality' should have featured explicitly in the core definition of the right to development contained in the Declaration adopted by the UN General Assembly in 1986.

Fifth, the concept of development also finds itself in the Covenant as a means for enabling the realization of rights recognized in the Covenant. One sees this for example in Article 6, which recognizes the right to work and then specifies that the steps to be taken by the State Party to achieve full realization of this right should include 'policies and techniques to achieve steady economic, social, and cultural development'. One also sees this in Article 11, para 2 (a) which refers to the need for developing or reforming agrarian systems in such a way so as to achieve the most efficient development and utilization of natural resources.'

Sixth, and finally, one sees the concept of development being employed as a factor which may be taken into account in determining the extent of the obligations of a State Party to guarantee economic rights recognized in the Covenants to non-nationals.

The above-mentioned instances of the utilization of the concept of development indicate that the drafters of the Covenant definitely had at the forefront of their minds development issues when drafting the Covenant. However, they did not consider it necessary, at that stage, to include expressly the right to development. This has now been done in the Declaration on the right to development and at the World Conference on Human Rights (1993).

Article 15 of the Covenant on Economic, Social, and Cultural Rights recognizes "the right of everyone: (a) To take part in cultural life; (b) To enjoy the benefits of scientific progress and its applications; (c) To benefit from the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which he is the author". ICESCR General Comment No. 17 (2005): The right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he or she is the author (Article 15, para 1 (c), of the Covenant) notes as follows[19]:

1. The right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he or she is the author is a human right, which derives from the inherent dignity and worth of all persons. This fact distinguishes article 15, paragraph 1 (c), and other human rights from most legal entitlements recognized in intellectual property systems. Human rights are fundamental, inalienable and universal entitlements belonging to individuals and, under certain circumstances, groups of individuals and communities. Human rights are fundamental as they are inherent to the human person as such, whereas intellectual property rights are first and foremost means by which States seek to provide incentives for inventiveness and creativity, encourage the dissemination of creative and innovative productions, as well as the development of cultural identities, and

[19] ICESCR, GENERAL COMMENT No. 17, 2005: The right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he or she is the author (Article 15, para 1 (c), of the Covenant).

preserve the integrity of scientific, literary and artistic productions for the benefit of society as a whole.

2. In contrast to human rights, intellectual property rights are generally of a temporary nature, and can be revoked, licensed or assigned to someone else. While under most intellectual property systems, intellectual property rights, often with the exception of moral rights, may be allocated, limited in time and scope, traded, amended and even forfeited, human rights are timeless expressions of fundamental entitlements of the human person. Whereas the human right to benefit from the protection of the moral and material interests resulting from one's scientific, literary and artistic productions safeguards the personal link between authors and their creations and between peoples, communities, or other groups and their collective cultural heritage, as well as their basic material interests which are necessary to enable authors to enjoy an adequate standard of living, intellectual property regimes primarily protect business and corporate interests and investments. Moreover, the scope of protection of the moral and material interests of the author provided for by article 15, paragraph 1 (c), does not necessarily coincide with that is referred to as intellectual property rights under national legislation or international agreements.
3. It is therefore important not to equate intellectual property rights with the human right recognized in article 15, paragraph 1 (c). The human right to benefit from the protection of the moral and material interests of the author is recognized in a number of international instruments. In identical language, article 27, paragraph 2, of the Universal Declaration of Human Rights provides: "Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author". Similarly, this right is recognized in regional human rights instruments, such as article 13, paragraph 2, of the American Declaration of the Rights and Duties of Man of 1948, article 14, paragraph 1 (c), of the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights of 1988 ("Protocol of San Salvador") and, albeit not explicitly, in article 1 of Protocol No. 1 to the Convention for the Protection of Human Rights and Fundamental Freedoms of 1952 (European Convention on Human Rights).

...

11. The Committee observes that, by recognizing the right of everyone to benefit from the protection of the moral and material interests resulting from one's scientific, literary or artistic productions, article 15, paragraph 1 (c), by no means prevents States parties from adopting higher protection standards in international treaties on the protection of the moral and material interests of authors or in their domestic laws, provided that these standards do not unjustifiably limit the enjoyment by others of their rights under the Covenant.

5.4 The Millennium Declaration and Development Goals

In successive policy documents the UN has sought to set development goals and pursue development strategies for tackling the massive economic and social problems, particularly extreme poverty, facing two-thirds of the world's population. The Millennium Declaration is the latest example of such a policy document.

In the Millennium Declaration adopted on 8 September 2000, UN Heads of State and Government reaffirmed their commitment to the Purposes and Principles of the UN Charter and expressed their determination to establish a just and lasting

peace all over the world. They believed that the central challenge was to ensure that globalization became a positive force for all the world's peoples. They considered certain fundamental values to be essential to international relations in the twenty-first century including freedom, equality, solidarity, tolerance, respect for nature, and shared responsibility.

They declared their intention to spare no effort to free the peoples of the UN from the scourge of war, whether within or between states. They resolved to strengthen the rule of law in international as well as in national affairs and to make the UN more effective in maintaining peace and security. They solemnly declared that they would spare no effort to free their fellow men, women, and children from the abject and dehumanizing conditions of extreme poverty. They resolved in particular to halve by the year 2015 the proportions of the world's people whose income was less than one dollar a day as well as the same proportion of people from hunger. Further, they resolved, by the same date, to halve the proportion of people unable to reach or to afford safe drinking water. They also committed themselves, to ensure that children everywhere, boys and girls alike, would be able to complete a full course of primary schooling. Similar goals were set in relation to the reduction of maternal mortality, tackling HIV/AIDS and malaria, and to improving the lives of slum-dwellers.

The Heads of State and Government declared their solemn intention to protect the vulnerable and to protect and assist children and civilian populations that suffer disproportionately the consequences of natural disasters, genocide and armed conflicts, and other humanitarian emergencies. They undertook to spare no efforts to make the UN a more effective instrument for pursuing the fight for development for all the peoples of the world, the fight against poverty, ignorance and disease; the fight against injustice; the fight against terror and crime; and the fight against the degradation and destruction of their common home.

The Heads of State and Government undertook specific commitments in respect of human rights, democracy, and good governance. They resolved to strengthen the capacity of all their countries to implement the principles of democracy and respect for human rights, including minority rights. They also resolved to eliminate all forms of violence against women, to take measures for the protection of the human rights of migrants, migrant workers and their families, to eliminate the increasing acts of racism and xenophobia in many societies, and to promote greater tolerance in all societies.

The Heads of State and Government further resolved to strengthen cooperation between the UN and national parliaments and to give greater opportunities to the private sector, NGOs, and civil society to contribute to the realization of UN goals and programs. They requested the UN General Assembly to review the progress made in implementing the provisions of their declaration and asked the Secretary-General "to issue periodic reports" for consideration by the General Assembly and as a basis for further action".[20]

[20] Millennium Declaration, adopted by Heads of State and Government at the United Nations General Assembly, 2000, para 31.

The Millennium Development Goals (MDGs) were derived from the Millennium Declaration (See Annex B). Most of the goals and targets were set to be achieved by the year 2015 on the basis of the global situation during the 1990s. During that decade a number of global conferences had taken place and the main objectives of the development agenda had been defined. The MDGs laid down eight goals to be achieved by the year 2015. Goal 8 called for a global partnership for development with the following targets: addressing the special needs of the least developed countries, landlocked countries, and small island developing states; developing further an open, rule-based, predictable, non-discriminatory trading and financial system; dealing comprehensively with developing countries debt; in cooperation with developing countries, developing and implementing strategies for decent and productive work for youth; in cooperation with pharmaceutical companies, providing access to affordable essential drugs in developing countries; in cooperation with the private sector, making available the benefits of new technologies, especially information and communications to developing countries.

The MDGs are based more on partnership and cooperation rather than on right but they have been invoked by the developing countries in support of the implementation of the right to development, particularly the alleviation of extreme poverty.

5.5 High-Level Task Force on the RTD

The UN Human Rights Council adopted Resolution 15/25 on the Right to Development in October 2010. The latter emphasized the urgent need to make the right to development a reality for everyone, stressed the primary responsibility of States for the creation of national and international conditions favorable to the realization of the right to development and decided to act to ensure that its agenda promotes and advances sustainable development and the achievement of the MDGs.[21] The Committee on Economic, Social, and Cultural Rights, in a submission on Resolution 15/25, commented that "all of the substantive Articles 1-15 of the Covenant on Economic, Social and Cultural Rights touch upon the substance of the right to development".[22] On the occasion of the twenty-fifth anniversary of the Declaration on the RTD, the UN High Commissioner for Human Rights noted that the constituent elements of the right to development were rooted in the provisions of the UN Charter, the International Bill of Rights and other UN instruments, and included the right to self-determination, to full sovereignty over natural and wealth resources, to participation, fair distribution of benefits, as well as to

[21] UN Human Rights Council, "The Right to Development," Resolution 15/25, 7 October 2010, A/HRC/RES/15/25.

[22] Submission in follow-up to HRC Resolution 15/25.

remedies for inequality".[23] She noted that many elements of the right to development were reflected in human rights treaty provisions; States had ratified these treaties and were bound to comply with them. In effect they would need to comply with the right to development….Some elements of the right to development were realized when human rights under international standards were realized. Minimum core obligations relating to economic, social and cultural rights were needed to tackle issues of poverty, housing and health; when these obligations were met, the right to development would also be furthered".[24]

In the lead-up to the Resolution of the Human Rights Council its Working Group on the Right to Development had set up a High-Level Task Force in an effort to, *inter alia*, better define the content of RTD. The task force held consultations with States, international organizations and non-governmental organizations on various issues. A report on discussions during its sixth session in January 2010, by the Chairperson-Rapporteur, Stephen Marks, noted the argument of Egypt on behalf of the Non-Aligned Movement, supported by the African Group, which urged the elaboration and adoption of an international convention on the right to development "which should be on par with other human rights and fundamental freedoms, following the principles of universality, interdependence, indivisibility and interrelatedness".[25] Mexico stated that the right to development "had to be posited within the overall context of other human rights, particularly economic, social and cultural rights".[26] Mauritius argued that the right was a "fundamental human right that went beyond poverty eradication and was a bridge between economic, social and cultural rights and civil and political rights".[27]

The Chairperson-Rapporteur considered the content of the right to development as outlined in a report on the same by Susan Randolph and Maria Green which had advanced the notion that the right was "one of both peoples and individuals, which entails obligations of all states, regardless of their level of development towards those both within and outside their jurisdiction; and the obligation of states acting collectively".[28]

Thematic issues of relevance to intellectual property discussed by the Working Group were the right to health and access to essential medicines in relation to Millennium Development Goal 8, target E and technology transfer (in relation to

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[23] Summary of the Panel Discussion of the Human Rights Council on the theme, "The Way Forward inte h Realization of the Right to Development: Between Policy and Practice," (Geneva, 14–18 September 2011), 2 November 2011, A/HRC/WG.2/12/4.

[24] Summary of the Panel Discussion of the Human Rights Council on the theme, "The Way Forward in the Realization of the Right to Development: Between Policy and Practice," (Geneva, 14–18 September 2011), 2 November 2011, A/HRC/WG.2/12/4, para 31.

[25] Report of the High-Level Task Force on the Implementation of the Right to Development on its Sixth Session (Geneva, 14–22 January 2010), A/HRC/15/WG.2/TF/2, para 11. Canada, the European Union and the USA did not feel that an international convention would be appropriate.

[26] Id., para 15.

[27] Id., para 18.

[28] Id., para 63. See UN Doc. A/HRC/15/WG.2/TF/CRP.5.

MDG Goal 8, target F). The representative of the WHO's Department of Ethics, Equity, Trade and Human Rights, commented on WHO efforts to advance the right to health and to mainstream human rights in the work of the WHO, internally and externally.[29] The WHO's Director of Public Health, Innovation and Intellectual Property outlined the WHO's global approach to health, which recognized linkages with other global issues, including human rights and noted that intellectual property aspects featured in their global Strategy and Plan of Action. A representative of the Global Fund expressed strong interest in, and commitment to, promoting human rights as a means of improving access to essential medicines as a component of the right to health.[30] The Working Group on RTD stressed the importance of the Doha Declaration on Public Health and the decisions allowing for the exportation of pharmaceutical products under compulsory licenses to address public health problems afflicting many developing countries, especially those resulting from HIV/AIDS, malaria, tuberculosis, and other epidemics.[31]

In relation to technology transfer, Ms. Sakiko-Fukuda Parr reported on a technical mission of the Task Force to WIPO. Reporting on its Development Agenda, she highlighted the importance of technological innovation in creating and enabling environment for development. The uneven global distribution of spaces of innovation was a defining challenge of the twenty-first century. The WIPO Development Agenda was a major breakthrough in making sure that the framework of intellectual property was managed in the public interest.[32] Ms Fukuda Parr recalled the key tensions between intellectual property systems and the right to development:

> While intellectual property encourages innovation that produces market returns, it does not always provide incentives for investments in technology that meet the basic needs of poor people and countries who have little purchasing power. The bulk of intellectual property rights are held by a few developed countries, hence the importance that developing countries catch up with innovation. Collaboration with other United Nations agencies should be considered in technical assistance so that intellectual property policies can be considered from broader developmental perspectives, and take account of diverse conditions in different countries that require an approach unique to meeting the country's needs.

She also noted the:

> [T]he significance of policy space and autonomy in creating an enabling environment for development. In this regard, an important issue to be addressed was how to maintain policy space given the constraints arising from international agreements such as the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Implementation of the Development Agenda is just beginning; from a human rights perspective, the implementation process requires a monitoring process that is yet to be established.

The head of the WIPO's Innovation and Technology Transfer section stated to the Task Force that the development considerations formed an integral part of the

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[29] Id., para 29.

[30] Id., 31, 7.

[31] E/CN.4/2006/26, paras. 51–53.

[32] Id., para 36, 8.

work of WIPO and that 9 of the 45 recommendations of the Development Agenda focused on technology transfer and aimed at developing innovation capacity of developing countries.[33] More generally, the representative of WIPO stated that:

> Access to knowledge is a human right and intellectual property was made to build, not block, innovation and the rights of people. It is the responsibility of Governments to provide incentives for intellectual property, whereas the role of WIPO is to promote a culture for intellectual property and respect for indigenous, traditional and cultural knowledge and folklore.[34]

With reference to the tension between public and private interests, incentivizing innovation by providing intellectual property protection on the one hand and sharing the innovation, the WIPO representative noted that "market failures require Governments to intervene and address the needs of society, especially in the area of health".[35] He pointed to TRIPS flexibilities, such as compulsory licenses as a policy option to address the needs of society.

The WTO, in reaction to Resolution 15/25, has commented that development was among the founding goals of the organization. The TRIPS agreement was to promote innovation and technology transfer and it required developed counties to provide incentives for their companies to transfer technology to least-developed countries. It called attention to Article 66.2 which imposed an obligation upon developed countries to provide incentives for technology transfer. It called attention to the February 2003 decision by the TRIPS Council, following the Doha Agreement, to put in place a mechanism for ensuring the monitoring and full implementation of the obligations".[36]

The UN Secretary General's report on the right to development called attention to the Working Group's call for development "grounded in economic policies that foster growth with social justice", the need to build synergies "between growth-oriented development strategies and human rights" and the importance of the principle of equity, the rule of law and good governance.[37]

The Working Group on RTD recognized the need for strong partnerships with the private sector at the national level in pursuing poverty eradication and development efforts, as well as the need for good corporate governance. While acknowledging the potential positive and negative effects of transnational corporations and other business enterprises on the development efforts of host countries and the enjoyment of human rights, the Working Group recommended that transnational corporations should operate in a manner consistent with the domestic and

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[33] Id., para 38, 9.

[34] Id., para 41, 10.

[35] Ibid., para 41, 10.

[36] WTO, Submission in follow-up to HRC Resolution 15/25, "The Right to Development," Available at http://www.ohchr.org. Acessed on 12 December, 2011.

[37] UN, "The Right to Development," Report of the Secretary General, 1 August 2011, A/66/216, para 15.

international human rights obligations of the host countries and the countries of origin and that the elaboration of criteria should be considered for periodic evaluation of the effects of their activities.[38]

5.6 Conclusion

The preceding chapter has shown the emphasis given since the establishment of the UN to the pursuit of development and to the implementation of economic, social, and cultural rights alongside civil and political rights. It is acknowledged that development is needed for the full flowering of human rights—as much as human rights are necessary for the full flowering of development.

The GA and the World Conference on Human Rights have declared the existence of a right to development, and development is widely accepted as a human right, even if differing interpretations are given to it. Even so, the emergence of the idea of the right to development has not been free of controversy and to this day there are those who would contend that development is not a human right. This raises profound questions of the meaning of a human right. If one takes the legalistic view that a human right, to qualify, as such, must be legally enforceable, then development may not qualify as a human right everywhere. But if one takes the view of Amartya Sen that rights form part of social ethics, are situated within the process of public reasoning, and may inspire legislation if not already part of it, then surely the concept of the right to development is sound.

The international community assembled at the World Conference on Human Rights in Vienna in 1993, considered development so important as to confirm it by consensus as a human right. This should have removed any doubt as to the status of development as a human right. The task ahead is one of implementation, beginning with the implementation of the right to development at the national level.[39]

The late Professor Oscar Schachter, one of the greatest international lawyers of the twentieth century, writing in 1992 on the implementation of the right to development, argued that the concentrated target of implementation should be alleviation of the mass poverty and the plight of vulnerable peoples. “In the state of the world today”, he submitted, “mass poverty and deprivation require international action in more massive and sustained way than ever before”.[40]

In the next chapter we continue the discussion of the links between IP, human rights, and human security.

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[38] Id., para 37.

[39] See further Jolly et al. 2009.

[40] Schachter 1992, 27.

Chapter 6
IP, Human Rights, and Human Security

This chapter examines the ongoing dialogue between IP and human rights, which began recently. Scholars have examined critically the notion that IP rights can be categorized as "fundamental" human rights. It is nevertheless accepted that IP rights do play their part in advancing fundamental human rights. A sustained effort at "bridging" IPRs and human rights has begun and the argument that IP rights are subservient to human rights is explored briefly. These efforts and the major elements of this debate are discussed below.

6.1 IP, Human Rights, and Human Security

It is a truism that the protection of human rights is vital for human security. The pursuit of the right to development and its consequent benefits are anchored to the protection of fundamental human rights. Jeremy Philips and Alison Firth have noted that the Universal Declaration of Human Rights (UDHR) would appear to depend on intellectual property for the realization of some of its objectives and call attention to the right to privacy, property, and making a living.[1] Nefarious aspects of intellectual property were nevertheless pointed to by Professor C. G. Weeramantry who mentioned intellectual property in scientific knowledge as a source of possible denigration of the right to share in scientific advancement and its benefits.[2] Philips and Firth have raised the possibility that like all other rights, IP rights "are capable of abuse or, more accurately, of use in a manner which may be regarded as

[1] Philips and Firth 2009, 8.

[2] Cited in Philips and Firth 2009, 9. See Weeramantry 1983.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9_6,

prejudicial either to competing private interests or to the public interest."[3] They referred to the case of *Service Corpn International plc v Channel Four Television Corpn* (1999) in which Lightman J decided not to grant an injunction to suppress an alleged infringement of copyright on a direct application of the European Convention on Human Rights'.[4]

Drahos has cautioned that despite arguments in favor of IP rights based on welfare economics that are needed to overcome market failure problems in the market for invention and innovation, IP rights create costs, "most notably that the information that is the object of the rights can be priced above marginal costs."[5] The question is do the costs of these rights outweigh their benefits and measuring this is a very inaccurate 'science'. Yet, there is enough evidence, he noted, "to suggest that we should be extremely cautious about expanding the scope and strength of these rights."[6] While IP has become important to business strategy, "not all of these strategic uses of intellectual property add to dynamic efficiency and in some cases…they may well inhibit it."[7] There was evidence he suggested, that "should make us suspicious of arguments that continuing to globalise and ratchet up standards of intellectual property will serve human rights interests."[8] He pointed to possible negative impacts of heightened IP protection on markets in food and health. He argued in relation to health, that "the interest in health of all people has to date been met in relation to the production of drugs for people in developing countries by a market system that relies significantly on patents to generate investment in drug research."[9] Perhaps somewhat cynically, he noted that the promise of genomic-based technologies to liberate 'us' from disease refers to a largely western 'us', for the simple reason that the direction of patent-based research is determined by ability to pay." Calling attention to the fact that half of the world's population lives on less than two dollars a day, it was clear to him that "it is the ageing but wealthy populations of the West that will determine the direction of patent based R&D in health."[10] Drahos also cautioned that a "patent-driven culture" was expanding in ways that could profoundly affect the capacity of international institutions related to agriculture to deliver goods in the form of better agricultural technologies to developing countries."[11] In relation to the right to education, he noted that "it would be surprising if developing country needs for access to quality textbooks have changed all that much."[12]

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[3] Philips and Firth 2009, 9.

[4] Id., 9.

[5] Drahos 2000, 6.

[6] Philips and Firth 2009, 7.

[7] Drahos 2000, 7.

[8] Ibid.

[9] Ibid.

[10] Ibid.

[11] Id., 9.

[12] Ibid.

While the link between intellectual property rights and human rights has been made, it has been discussed almost exclusively, argues Philippe Cullet, in human rights forums. There was "a visible imbalance insofar as the language of human rights has not penetrated intellectual property rights institutions, while the language of intellectual property rights is now regularly addressed in human rights institutions."[13] Moreover, for Cullet, the WIPO and the WTO continually rethink the legal frameworks that have been adopted, largely with a view to strengthen them in favor of intellectual property rights holders. These two institutions neither have any specific mandate to consider human rights issues nor do they show any definite inclination to address the human rights implications of the legal regimes they put forward.[14]

Substantive discussions on the 'conflict' between the IPR and human rights regimes were generated as a result of Resolution 2000/7 of the Sub-Commission on Human Rights of the UN Economic and Social Council, which had requested a report on the aforementioned.[15] A *note verbale* was sent to Member States and letters sent to international organizations and non-governmental organizations on 6 March 2001, soliciting information that would be relevant to the report.[16] Subsequent commentary by States, non-governmental actors and scholars has offered some critical insights on the relationship between human rights and intellectual property. Pakistan's reaction was to call for a "comprehensive review of the intellectual property regime" in order to, *inter alia*, "restore the balance between the rights of the intellectual property holders and that of the users", a call also made by UNCTAD, and "to ensure that the implementation of the intellectual property agreement is not in conflict with the relevant provision of the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights."[17] The Center for International Environmental Law noted that the traditional balance between public and private rights was being tilted toward the latter as industry segments in society had "attempted to give added – unjustifiable – force to IPRs by promoting them as natural rights without limitation; in other words, rights that have a moral force that somehow is beyond political challenge."[18] This development denied the "contingent nature of IPRs – governments may, in the interests of citizens, choose not to grant IPRs, or to define them more narrowly."[19] TRIPS

[13] Cullet 2007, 414.

[14] Id., 419.

[15] Sub-Commission on Human Rights, Intellectual Property Rights and Human Rights, Res. 2000/7, 3, U.N. Doc. E/CN.4/Sub.2/RES/2000/7 (Aug. 17, 2000) [Hereafter Resolution 2000/7], available at http://www.unhchr.ch/Huridocda/Huridoca.nsf/0/c462b62cf8a07b13c12569700046704e?Opendocument. For a detailed discussion of the origin of Resolution 2000/7, see Weissbrodt and Schoff 2004; Weissbrodt and Schoff 2003.

[16] United Nations Economic and Social Council, The Realization of Economic, Social and Cultural Rights," E/CN.4/Sub.2/2001/12, June 2001.

[17] Ibid., para 6.

[18] Id., para 30.

[19] Ibid.

had shifted the balance in favor of IPR producing companies and countries. It called for a systematic "sustainability review" by WTO members in the TRIPS Council of the implications of implementing the Agreement for the public interest and sustainable development, as part of the mandated review of the TRIPS Agreement.[20]

The European Writers' Congress applauded the affirmation by the Sub-Commission "that the protection of moral and material interests of authors is a human right."[21] The German Justice and Peace Commission indicated that it was studying "the negative impact of the TRIPS Agreement on the human rights to adequate food, health and the right of peoples to freely dispose of their natural wealth and resources and not to be deprived of their own means of subsistence."[22] Greenpeace was concerned about the European Union's Patent Directive which it felt "would explicitly legalize the controversial practice of the European Patent Office of granting "patents on life".[23] It was deeply concerned over the "patenting of plants, cells and organs" which had led to intervention in the genome of the human germ line, thus breaking "a taboo and abus[ing] human dignity in a way which is without precedent."[24] The International Association of Audio-Visual Writers noted the moral interests of authors, referred to in Article 27 of the UDHR and in Article 6bis of the Berne Convention and the varying strength of protection of moral rights of authors from State to State.[25] The International Federation of Musicians noted that "the relationship between IPRS and human rights is crucial" especially given the emergence of new audio-visual technology in time of the era of globalization.[26] It noted that Article 27 of the UDHR, "as it concerns interpretive artists, is constantly being violated in both developed and developing countries."[27]

Substantive academic commentaries on the relationship between human rights and IPRs have appeared over the last decade.[28] Academic commentaries have centered, *inter alia*, on the following points: (1) General linkages between IP and human rights; (2) The evolution of IP and human rights regimes separate from each other; (3) The apparent conflict between a view of IP as property rights and human rights regimes' exclusion of IP rights under the ambit of "property" rights; (4) The need to bridge the two regimes; (5) There is no real conflict between the two regimes as claimed by some, since the IP incorporates the goals of the human rights regime; and (6) Lacuna in General Comment 17 of the CESCR in relation to Article 15(c) of the International Covenant on Civil and Political Rights.

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[20] Id., para 34.

[21] Id., para 35.

[22] Id., para 37.

[23] Id., para 19.

[24] Id., para 45.

[25] Id., para 47.

[26] Id., para 51.

[27] Ibid.

[28] See for example Helfer 2004; Torremans 2004.

6.2 Linkage Between Human Rights and Intellectual Property

According to Cullet, different kinds of links between intellectual property rights and human rights exist. Patent laws have recognized the socioeconomic dimension to the rights granted and a balance must be struck between the interests of the patent holder and the broader interests of society. In addition, Intellectual property rights have direct and indirect impacts on the realization of human rights. For example, intellectual property rights include economic and moral elements and the latter can be linked to certain aspects of human rights. Finally, human rights treaties recognize certain rights pertaining to science and technology. Indeed, links between intellectual property rights and human rights have been acknowledged for many decades, as exemplified in the science and technology-related provisions of the Universal Declaration of Human Rights (Universal Declaration).

Nevertheless, for Cullet, the main debates concerning the links between human rights and property rights have focused for a long time on real property rights rather than intellectual property rights. The adoption of the TRIPS Agreement and its implications for developing countries—health and food in particular—had "fundamentally changed the nature of the debate concerning intellectual property rights and human rights."[29]

Although the link between intellectual property rights and human rights is debated, this does not imply that there is no connection between human rights and intellectual contributions. On the one hand, existing intellectual property rights have the potential to affect the realization of human rights such as the right to health. On the other hand, it is possible to understand existing science and technology provisions in human rights treaties, not as providing a link to existing intellectual property rights but as providing a basis for the recognition of the noneconomic aspects of intellectual endeavor. For Helfer, this may have been what was sought in the context of the adoption of the relevant clauses in the Universal Declaration and the ICESCR.[30]

6.3 Separate Evolution of IP and HR Regimes

Audrey Chapman has noted that IP rights and human rights are strange bedfellows that have seldom interacted with each other historically. This was due to the fact that "Intellectual property lawyers tend to have little involvement with human rights law, and few human rights specialists deal with science and technology or intellectual property issues."[31] Laurence Heffler has noted the need for a

[29] Cullet 2007, 405.

[30] Id, 407.

[31] Chapman 1998.

comprehensive and coherent framework for intellectual property law and policy and human rights law, which has to be preceded by a better understanding of the attributes of each.[32]

The claim that IP rights have evolved from State-granted rights to being universal human rights has been made without substantial scrutiny according to Robert Ostergard. He makes the case for a hierarchy of IP rights given that the State's responsibility to provide for people's physical welfare takes precedence over an individual's right to profit. He advances two arguments: First, that there exists a hierarchy of intellectual objects based on a generally perceived notion of physical welfare. Second, when discussing IPR, the emphasis must not be exclusively on the rights of producers; IPR must also be examined from the perspective of consumers and the national welfare. These arguments focused on nations' attempts to fulfill their citizens' basic needs, which were largely grounded in technologies and processes that sustain physical well being. Consequently, if certain individuals had exclusive control of established technologies, "other individuals may be deprived of basic products that could contribute to their betterment."[33]

Ostergard, critically examined Lockean theories of property rights and their failure to prevent the emergence of systems of monopoly over IP matter. He turned to utilitarian arguments, advanced by Will Kymlika and John Rawls, who have argued that "the morally best acts are the ones that maximize human welfare" and that "the principle for society is to advance as far as possible the welfare of the group, to realize to the greatest extent the comprehensive system of desire arrived at from the desires of its members," respectively.[34] However, as noted earlier in this work, the utilitarian view has come under attack and "it is not clear that the long-term benefits outweigh the short-term drawbacks associated with the monopoly right."[35] Ostergard proposed that the 'development-as-capability' approach of Amartya Sen could help overcome the negative impacts of the utilitarian (societal benefit) approach to IP on the "individual". Development in this view is viewed as the extension of peoples' capabilities. This view of development centers on individuals rather than society and is constructed to incorporate three definitions of development: expansion of commodities, increase in utility, and basic needs. The capabilities approach to economic development has attempted "to integrate all of these components while at the same time demonstrating the deficiencies of defining development within the context of one of these concepts."[36] Ostergaard concluded that

> while the process of further technological advancement necessitates the protection of exclusive production rights that IPR grant, the maintenance and improvement of human physical well-being must be considered when allocating IP rights. The resulting decision

[32] Helfer 2007, 167–179.

[33] Ostergard 1999, 157.

[34] Id., 163.

[35] Ibid.

[36] Id., 168.

> has profound human rights implications, given that the Universal Declaration of Human Rights guarantees IP as a human right. In order to maximize both the benefits derived from IP and the physical well-being of its citizens, developing and developed countries must work to craft policies that strike a fine balance between these values. Part of this work must include allowing developing countries access to critical technologies that support the economic development of their people. The trade-off for developed countries is that weaker IP protection in developing countries may ultimately result in lower foreign aid requirements as the developing world acquires technologies that allow it to sustain itself.[37]

6.4 IP as "Property" Right

The place of private property rights in human rights treaties and bills of rights has been controversial for decades. The right of property forms part of the norms of international law but its nature and scope have been hotly debated. Peter Drahos examined the extent to which the right of property has been recognized as a human right and concluded that is difficult to see how intellectual property rights can be classified as fundamental human rights.[38] Having traced the evolution of IP law from its territorial phase (development of national IP systems since the fourteenth century, Venice), through the international phase (the emergence of international treaties on IP), and into the global phase (which features the TRIPS Agreement) he concluded that the links between IP and human rights were "thin at best" since "the emerging States of medieval Europe used them for political ends such as censorship or alternatively as economic tools" and States continued to view IP through the prism of economic pragmatism.[39] Following a survey of international human rights instruments and their bearing on IP as a property right, he observed that while it may be uncontroversial to view the right to property as part of the norms of international law the difficult issues have related to the nature and scope of the right. Is it a negative right (the right not to have possessions interfered with) or does it include positive elements (the right to acquire property)? The right of property can, using a variety of legal taxonomies, be disaggregated into a number of different types (real, personal, equitable, tangible, intangible, documentary, non-documentary, and so on). Does the recognition of a right of property in international law apply with equal force to all the different types of property that can be identified? Do all, some or any of these different kinds of property rights qualify as fundamental human rights?[40]

Most property rights, he has argued, do not fit into the category of rights so fundamental that they merit international enforcement. Moreover, "the absence of the

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[37] Id., 177.

[38] Drahos 1999.

[39] Id., 357.

[40] Ibid.

general right of property from the ICCPR weakens the claim that it is part of customary international law."[41] He continued:

> Attempting to put the property right into the category of fundamental human rights also encounters a conceptual problem. Both private international and public international law recognise the right of sovereign states to regulate property rights, to adjust them to economic and social circumstances. Yet this is precisely not the way in which we think about fundamental human rights norms that prohibit genocide, torture and slavery, norms that at least some scholars argue are part of customary international law. States cannot adjust these norms to suit their convenience. In the case of property, however, not only is it convenient for states to adjust property norms, but it seems vital to the development of their economies that they have the power to do so. It is for this kind of reason that the European Commission on Human Rights concluded that the grant under Dutch law of a compulsory license in a patented drug was not an interference in the patent holder's rights under Article 1 of Protocol 1 of the European Convention on Human Rights. The compulsory license was lawful and pursued a legitimate aim of encouraging technological and economic development.[42]

Could it be, asked Drahos that the universal recognition of IPRs somehow renders them universal norms, i.e., human rights? Simple recognition is unsatisfactory as a basis for concluding that they are fundamental human rights. Another line of argumentation is the natural rights argument. However, can it be argued that IPRs are "natural property rights"? A natural right cannot be dependent on legislative acts. Moreover, IPRs are temporary rights, not akin to rights to life and liberty. After considering several lines of argumentation Drahos concludes that, "The upshot of this short discussion is that the view that all intellectual property rights are human rights by virtue of their universal recognition is problematic."[43] One avenue for building a bridge between IPR and human rights is the "instrumental view" according to which "Some rights, then, are instrumental in securing the feasibility of claiming other types of rights." Following this view, "human rights would guide the development of intellectual property rights; intellectual property rights would be pressed into service on behalf of human rights."[44] But once again:

> [T]he history of intellectual property does not square with this ideal. It has as much to do with powerful elites using such privileges to obtain economic rents for themselves as it has to do with parliaments working on behalf of citizens to design rights that maximise social welfare. This should not be surprising. The economic theory of legislation, the theory of public choice argues that legislation is essentially a market process in which legislators and interest groups transact business in a way that sees the public interest subordinated to private interest.[45]

Drahos called for a dialog between IP and human rights regime, which has been absent historically since the development of intellectual property policy and law "has been dominated by an epistemic community comprised largely of

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[41] Id., 361.

[42] Ibid.

[43] Id., 367.

[44] Id., 368.

[45] Ibid.

technically minded intellectual property law experts."[46] Consequently, intellectual property developed "into highly differentiated and complex systems of rules", influenced by the narrow and often unarticulated professional values of this particular group. "Emblematic of this partiality has been the narrow interpretation that has been given to the morality clause in Article 53(a) of the European Patent Convention."[47]

Cullet has noted that finding a consensus around the notion of a fundamental right to property has never been possible.[48] On the positive side, property rights are deemed to foster security, to provide protection of the individual's autonomy, to provide a basis for participation in a democratic society, and are seen as conducive to the protection of other human rights such as the right to privacy. On the negative side, private property rights may constitute a source of inequality and condone existing ownership patterns without taking into account their legitimacy. Therefore, property rights tend to contribute to maintaining the status quo of a very unequal distribution of wealth. From a different perspective, it may be asked whether all types of property can or should fall within the scope of human rights protection.

In Europe, the right to property has been accepted as a human right since the adoption of the first Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms. Article 1 of the first Protocol, which provides that "[e]very natural or legal person is entitled to the peaceful enjoyment of his possessions", has been analyzed on numerous occasions by the European Court of Human Rights.[49] However, there have been comparatively few cases dealing with intellectual property. According to Cullet, the European Court of Human Rights (ECHR) has specifically indicated that a patent falls within the scope of the term possession but "no in-depth analysis of the place of intellectual property protection in the context of the Convention has been undertaken."[50] The European Union has gone further than the European Convention of Human Rights with the adoption of its Charter of Fundamental Rights. This Charter includes not only a right to property but also specifically provides that "[i]ntellectual property shall be protected."[51] The Charter falls short of introducing a human right to intellectual property rights because it is addressed to institutions of the European Union rather than

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[46] Ibid.

[47] Id., 370. Drahos called attention to the Oncomouse case, which revealed "a formalistic treatment of the morality criterion that did not really engage with the matters of principle that the opponents in that case were raising…This narrow line of interpretation has persisted despite the fact that there is a strong argument that human rights law operates to affect the interpretation of Article 53(a)." Ibid.

[48] Cullet 2007.

[49] Article 1, Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms Paris, 20 March 1952. Available on website of European Court of Human Rights at http://www.echr.coe.int/nr/rdonlyres/d5cc24a7-dc13-4318-b457-5c9014916d7a/0/englishanglais.pdf. Accessed on 2 June 2012.

[50] Cullet 2007, p. 410.

[51] Article 17(2), Charter of Fundamental Rights of the European Union, 2000 J.O. (C 364) 12.

right holders. Similarly, in India, for example, a fundamental right to property was included in the Constitution and it was this that led to the inclusion of intellectual property rights in some early judgments. This situation changed subsequently and a constitutional amendment removed this right from the list of fundamental rights. As per Cullet, "In India, a decision was taken to provide for a balance between rights, which puts property below inherent rights such as the right to health or food."[52] In South Africa, the Constitutional Court has determined that there was no universally accepted trend toward the protection of intellectual property rights in human rights instruments and bills of rights.[53] Different countries and different regions of the world had different positions on the place of scientific and cultural contributions in the human rights frameworks. Most countries protected the economic interests of authors through intellectual property rights such as patents and copyrights. Further, most countries failed to protect the moral and economic interests of intellectual contributions which cannot be protected under existing intellectual property rights. This was, for instance, the case for traditional knowledge.[54]

Human rights instruments like the Universal Declaration treat real property and intellectual property separately. Thus, while property rights are addressed in Article 17, culture and science come up at Article 27 in the context of the socio-economic rights recognized in the Universal Declaration. Further, the right to property was not included in the ICESCR while the rights recognized under Article 27 were substantially incorporated in Article 15(1) of the Covenant.

A rare IP case before the ECHR, *Anheuser-Busch Inc. v. Portugal*,[55] drew attention to the legal difficulties of marrying IP and human rights based on the right to property. In this trademark case, an American company (Anheuser-Busch) claimed that the Portuguese Supreme Court's decision to set aside the registration of "Budweiser" at the request of a Czech company constituted an expropriation without compensation of its property. In other words, the decision violated the Convention for the Protection of Human Rights and Fundamental Freedoms, which stipulates that "every natural or legal person is entitled to peaceful enjoyment of his possessions" and that "no one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law."[56] A subsequent proviso stipulates that these provisions do not "in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties."[57] The Court held that

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52 Cullet 2007, 411.

53 Id., 411.

54 Ibid.

55 *Anheuser-Busch Inc. v. Portugal (73049/01) [2006] E.T.M.R. (ECHR).*

56 Article 1 of Protocol 1 to the Convention for the Protection of Human Rights and Fundamental Freedoms, 1952.

57 Article 1, Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms Paris, 1952.

Article 1 was applicable to intellectual property, including trademarks, as well as to an application for registration of a trademark, which gave rise to interests of a propriety nature (a bundle of financial rights and interests). The Court noted that this was a case mainly about the way national courts interpreted and applied domestic law in proceedings essentially between two rival private claimants. However, one could not escape the fact that a legal person brought a case against a Supreme Court decision and not another private actor. The Court's ruling "reflects the widely held belief that those who produce "intellectual property" should in one way or another enjoy protection on the level of human rights."[58]

Several critical aspects of this case were highlighted by Klaus Beiter, which foreshadow some of the issues raised further below. First, he questions whether such protection is best achieved by recognizing a "human right to intellectual property" as in integral element of human right "to be entitled to the peaceful enjoyment of one's possessions."[59] He has argued that Article 15(c) of the ICESCR was the desirable form of formulating the human right of the creator of intellectual property alluded to, i.e., the right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which he is the author. A concern was that this latter right does not encompass the creator's moral interests that safeguard the moral links between creators and their creations. With regard to the creator's material interests, from a human rights perspective, only those economic interests that contributed to the enjoyment of the right to an adequate standard of living (Article 11, para. 1, ICESCR) deserved protection. Beiter has commented that "the protection of material interests in the intellectual creations do not cover all forms of economic rights as protected in the existing intellectual property system but rather the limited interests of authors and inventors in obtaining just remuneration for their intellectual labour."[60] Thus, the scope of material interests that should be protected is narrower than under the right to property. It may be held that the term of material interests need not extend over the entire lifespan of the creator since an adequate standard of living can be achieved through a one-time payment to the creator. While not arguing that proprietary interests should not be extensive, he makes the point that:

> [T]he protection of any such interests is neither required nor, as a matter of fact, legitimate in terms of human rights. Ultimately, granting human rights protection to claims not firmly grounded in human dignity may—in the context of the exercise of balancing competing human rights—be severely detrimental to claims that are genuinely rooted in that fundamental value.[61]

Second, Beiter continued, the *Anheuser-Busch case* appeared to accord human rights protection to the whole gamut of intellectual property rights regularly recognized. The Court concluded that Article 1 of Protocol 1 applied to intellectual

[58] Beiter 2008, 714–721.

[59] Beiter 2008, 715.

[60] Id., 717.

[61] Ibid.

property "generally" after a "rather short review of the sparse case law on the issue."[62] Third, Article 15(1)(c) and other human rights are recognized as fundamental, inalienable, and universal rights belonging to individuals, and under certain instances, to groups of individuals and communities, whereas intellectual property rights were first and foremost means by which States seek to provide incentives for inventiveness and creativity, to encourage the dissemination of creative and innovative products, and to preserve the integrity of scientific, literary, and artistic productions for the benefit of society. In light of this the various IP rights lack those characteristics necessary to be included under the rubric of human rights. Do trademarks really qualify for human rights protection?[63] Fourth, the right to benefit from the protection of the moral and material interests resulting from one's scientific, literary, or artistic productions can as per the ICESCR also be enjoyed in certain circumstances by groups of individuals or by communities, notably indigenous peoples. The latter's interests in intellectual creations falling "outside the Western model, were not reflected in traditional IP rights. The legalistic term property…suggests that what is sought to be protected under the latter right are clearly circumscribed property interest of individualized right holders rather than vaguely defined communal interests in property…"[64] Fifth, whereas the right to hold IP rights accrues to the holder of IP, the right elaborated in Article 15(1)(c) accrues solely to the creator thereof. The holder of IP need not be the creator. From the perspective of human dignity, "then the holder who is not the creator is not entitled to human rights protection, as his human dignity is not at stake in relation to a work that he has not created himself. Yet the right to property would afford him protection."[65] A final disturbing concern for Beiter was to see that a corporate actor could claim that their "human right" to property had been violated before the European Court of Human Rights. Article 1 of the Protocol did provide that "every natural or legal person is entitled to the peaceful enjoyment of his possessions." Thus, this unique provision grants "human rights" to "legal persons". The *Anheuser-Busch* decision greatly enhanced the risk that Article 1 protection might be granted to trademarks and trademarks application. "This is regrettable. Human Rights, being premised on human dignity, cannot accrue to legal persons."[66] Another more appropriate field of international law to afford protection for corporate actors may be "that expressing international law standards on the minimum treatment of aliens."[67] The CESCR comment on the Article 15(1)(c) of the ICESCR suggests that the drafters of the article believed that authors of scientific, literary, or artistic productions were to be "natural persons".

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62 Ibid.

63 Id., 718.

64 Ibid.

65 Id., 719.

66 Beiter 2008, 719.

67 Id., 719.

6.5 Reconciliation and the Myth of 'Conflict' Between IPR and Human Rights

Grossheide has advanced the thesis that overcoming tensions between IPR and human rights regimes required adopting the view that HR always prevails over IPRs. He has proposed that the IP and HR regimes are compatible—they are after the same goal and IPRs are in fact embodied in the human rights system. The fundamental challenge was to protect fundamental rights while providing access.[68] Grossheide has asked some important questions that need to be tackled: Are human rights universal or culturally defined? Do any legal consequences follow from the fact that domestically intellectual property belongs to the domain of private law and human rights to public law? Are all intellectual property rights, seen from a human rights perspective, of the same ranking? Constructing intellectual property as human rights implies constructing them as absolute rights—is executing any of these absolute rights acceptable even if it is at the expense of society at large? Can human rights such as IPRs are held by corporate entities? How should a proper balance be found between the protection of IPR and access to intellectual products protected by them? Is the debate about, and the need for, the human rights qualification of IPRs equally relevant for the developed world and the developing world?

Reconciliation of the IP and human rights regimes was taken up by Michael Yu and other scholars.[69] After an overview of the drafting history of Article 27 of the UDHR and Article 15 of the ICESCR, Yu demonstrated that many of the framers of the UDHR and the ICESCR, following an exploration of the protection of interests in intellectual creations, "found such a right to be overly complex, redundant, and secondary to basic human rights."[70] Today, however, "the right to the protection of interests in intellectual creations is recognized as a human right in the UDHR, the ICESCR, and many other international or regional instruments."[71] Today, what these drafters ignored or left for another day has become particularly important. From protection of public health to the maintenance of sustainable food supply, the tension between these paragraphs has raised serious concerns among the poor, the vulnerable, the abused, the powerless, and the indigenous—all of whom are in great need of human rights protection. Yu has noted two approaches to discussions on the relationship between IP and human rights: that they are in conflict and that they are complementary. While these two approaches have their benefits and disadvantages, they ignore the fact that some attributes of intellectual property rights are protected in international or regional human rights instruments, while other attributes do not have any human rights basis at all. Yu took the view

[68] Grossheide 2010.

[69] Yu 2007, Brown 2010.

[70] Id., 1123.

[71] Ibid.

that some attributes of intellectual property rights are, indeed, protected in international or regional human rights instruments and underscored the importance of using different approaches to resolve two different sets of conflicts: external conflicts (conflicts at the intersection of the human rights and intellectual property regimes) and internal conflicts (conflicts between rights within the human rights regime).[72] He has argued that it is important to distinguish between the human rights and non-human rights aspects of intellectual property protection. Focusing on Article 27(2) of the UDHR and Article 15(1)(c) of the ICESCR, he explores the nature and scope of the right to the protection of interests in intellectual creations. He considers that, under the principle of human rights primacy, the protection of the non-human rights aspects of intellectual property protection should be subordinated to human rights obligations in the event of a conflict between the two.[73]

The idea of a conflict between the human rights regime and IP regime has been challenged.[74] Rosemary Coombe, for example, has noted that there is already a case to be made that IP rights are part of human rights, though she recognizes they are rarely treated as such.[75] Writing from the perspective of a lack of attention to cultural rights, Coombe considered Article 15 of the CESCR as one of the four cultural rights that are to be respected with regard to three proscribed undertakings. Under Article 15(2) of the CESCR, the steps taken by the State party to respect IPRs "shall include those necessary for the conservation, the development, and the diffusion of science and culture."[76] Most States party to the CESCR report developments in intellectual property protections pursuant to their reporting obligations under the CESCR (rather than under the CCPR), "which indicated that there was an international practice and potentially a customary norm of recognizing IPRs *as* cultural rights in international human rights law."[77] She has recognized important implications stemming from this in relation to the recognition of indigenous knowledge.

If culture were viewed as the sum total of a society's cultural capital, then "cultural development" may mean "more culture" in the sense of encouraging more creative activity, more cultural products, and thus more intellectual properties (literary, artistic, musical, and cinematographic works as well as technological innovations). However, if the right to culture was understood as the right to "one's own culture" then cultural development may have a different meaning. Under the third understanding of culture, the right of a group to maintain its cultural integrity might take precedence over the rights of cultural creators in the wider society, and the group might choose to restrict access to and use of elements of its cultural heritage in the expressive and scientific works of others if doing so was deemed necessary to preserve the

72 Id., 1045.

73 Id., 1046.

74 Haugen 2007, 60; Helfer 2003.

75 Coombe 1998, 59.

76 Id., 65.

77 Ibid.

group's identity. Certain exercises of these cultural rights and rights to cultural identity, however, might also be seen to restrict improperly freedom of expression and the free flow of information in the larger society and thus to violate significant political and civil rights.[78] Global institutional divisions of labor reiterate and mirror these conflicting understandings of culture and their lack of reconciliation.[79]

The WTO's reaction to Resolution 2000/7 noted that "human rights of individuals and public interest" were traditional foundations of intellectual property protection and looked at how they were reflected in multilateral IP law.[80] The WTO noted that human rights and the equal treatment of authors and inventors, on the one hand, and public interest, on the other hand, remain the underpinnings of the IP systems. Whereas civil law traditions emphasized more of the first and the common law emphasized more of the second, "it would appear that these two conceptual starting-points are complementary rather than mutually exclusive."[81] An objective of IP was to promote long-term public interest by means of providing exclusive rights to holders for a limited duration of time. It acknowledged that "during the course of the term of protection, there is potential for conflict between these two considerations, which can also mirror differences between the interest of right holders and users."[82] The challenge of the national and international rule maker was to find the optimal balance between various competing interests with a view to maximizing the public good, while meeting also the human rights of authors and inventors. Article 7 of the TRIPS emphasizes the need for balance."[83] An optimal balance could be achieved by "properly determining the definition of protectable subject matter, scope of rights, permissible limitations and the term of protection."[84] The TRIPS was a minimum rights agreement "that leaves a fair amount of leeway to Member countries to implement its provisions within their own legal system and practice and fine tune the balance in light of domestic public policy considerations."[85] Rights under UDHR Articles 27(2) and 15(1)(c) of the ICESCR along with other human rights "will be best served, taking into account

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[78] Id., 74.

[79] Coombe notes that WIPO, "…has not historically been sympathetic to the concerns of minorities and indigenous peoples. Indeed, less than a decade ago, the Director General of WIPO informed the United Nations Human Rights Centre that it did not recognize the standing of indigenous peoples in intellectual property matters…" Id., 76.

[80] UN Economic and Social Council (2001), "The Realization of Economic, Social and Cultural Rights: Intellectual Property Rights and Human Rights," Report of the Secretary-General. Sub-Commission on the Promotion and Protection of Human Rights, 52nd Session, June 2001, E/CN.4/Sub.2/2001/12, paras 16–28. See Moon 2011, who looks at disproportionately adverse impacts of WTO rules on the human rights of individuals or groups who are protected under human rights law from discrimination. See generally, Garcia 1999; Hestermeyer 2007.

[81] Ibid.

[82] Id., para 21.

[83] Ibid.

[84] Id., para 22.

[85] Ibid.

their interdependent nature, by reaching an optimal balance within the IP system and by other related policy responses. Human rights can be used—and have been and are currently being used—to argue in favour of balancing the system either upwards or downwards by means of adjusting the equal rights or by creating new rights."[86] The best way to serve the objectives of human rights was at the end of the day a matter of social and economic analysis and empirical evidence. The problem of finding a balance was particularly acute in the case of patents on pharmaceutical products and TRIPS represented an effort to find an appropriate balance between rights holders and users. The WTO noted a number of provisions in TRIPS which enabled governments to implement their IP regimes in favor of immediate and long-term public health considerations. It acknowledged also the issue of traditional knowledge and noted the impossibility of patenting information that was already in the public domain. It noted TRIPS' silence on the topic of biodiversity, which "leaves governments free to legislate in accordance with the requirements of the CBD on these matters."[87]

Robert Anderson and Hanu Wager, both Counselors at the WTO, have defended the WTO against misperceptions that the WTO system was at odds with human rights. They were concerned with basic questions concerning the overall significance of trade, trade liberalization, and the role of the WTO for human rights and development. The concept of 'human rights' they have used included civil and political rights and they emphasized "the historic importance of freedom to participate in markets (absent private or publicly imposed distortions) as an aspect of civil and political rights."[88] Their argument was that: (1) the rules and procedures of the WTO are directly supportive of civil rights in the sense of freedom to participate in markets and freedom from arbitrary governmental procedures; and (2) the system also makes an essential contribution to development and to the realization of broader economic, social, and cultural rights, by stimulating economic growth and thereby helping to generate the resources that are needed for the fulfillment of such rights. They reiterated positions noted by the WTO above. They also examined developmental needs from the perspective of competition law, which aimed to promote the efficient and competitive operation of markets and to remedy certain deficiencies or 'market failures' that would otherwise arise in the operation of markets. These deficiencies or failures resulted, first and foremost, from anti-competitive practices of firms such as cartels and collusive practices, abuses of a dominant position or monopolization, and mergers that create a dominant position or otherwise stifle competition. It entailed a limited but important degree of government intervention to ensure the proper functioning of markets in the public interest. While the need for competition policy was typically explained in economic or utilitarian terms; however, it could also be explained in constitutional or human rights terms, particularly as being necessary for the fulfillment of economic,

[86] Id., para 23.

[87] Id., para 28.

[88] Anderson and Wager 2006.

social, and cultural rights. Recognizing the threat posed by anti-competitive practices to the welfare of citizens, competition laws were sometimes conceived as serving a constitutional function in respect of the market economy, ensuring that the rights and freedoms of citizens are not undermined through practices such as those discussed above. This role of competition law was captured by the US Supreme Court in its opinion in a landmark anti-trust case, *United States v Topco Assoc. Inc.:* "Antitrust laws … are the Magna Carta of free enterprise. They are as important to the preservation of economic freedom and our free enterprise system as the Bill of Rights is to the protection of our [other] fundamental freedoms."[89]

The well-known Max Planck Institute noted in its reaction to the UN Secretary General's report of 2001, the relationship between intellectual property rights and other human rights is "that of finding the proper balance rather than that of a conflict."[90] It continued:

> 56. The different human rights do and must complement each other. In this respect, the following remarks seem essential: intellectual property rights have since ever been characterized by the effort of balancing the authors' and inventors' rights against the public interest; for example, in the field of copyright, the exclusive rights are limited in favor of the public interest, and this exercise of finding the right balance by means of determining the limitations of and exceptions to exclusive rights has been part of any copyright legislation since the very beginning of the existence thereof. The same is true for the fixation of the term of protection, which is limited in time, as opposed to the duration of property rights in material objects. In addition, not all creative efforts are protected by copyright, in particular not ideas, methods, style or mere information or news of the day as such.
> 57. Another aspect of the complementarity of intellectual property and human rights which must not be forgotten is the fact that exclusive rights of authors and inventors themselves even have been justified by the public interest, as may be seen from the US Constitution of 1787, according to which the progress of science and useful arts shall be promoted "by securing for authors and inventors for limited times the exclusive rights to their respective writings and discoveries." In continental law countries, authors' and inventors' rights have been justified by the philosophy of natural law, following eh thought that the results of their work are the natural property of authors and inventors.
> 58. Another aspect…which seems essential….is the fact that regularly, it is only the exclusive rights recognized in favour of the author which allow him to make a living on the basis of the exploitation of his creations. Equally, in the field of patents, it is on the exclusive rights recognized in favour of the inventor which allow him to invest in research regarding for example new pharmaceutical products or medical procedures; without the possibility to amortise the high cost invested in such research, no one would even undertake to try to find new pharmaceuticals or other products which then may benefit to everybody.[91]

Similar positions were expressed in the European Commission's reaction to the resolution 2000/7 of the Sub-Commission on Human Rights requesting a report on intellectual property and human rights. The EU Commission's comments are instructive and are reproduced at length below. The Commission welcomed the

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[89] Id., 2006, 734. See *United States v. Topco Assocs., Inc., 405 U.S. 596 (1972).*

[90] UN Economic and Social Council 2001, para 56.

[91] Ibid.

reflection that was triggered by the request but was "more cautious about its general thrust" for the Resolution "assumes that the protection of Intellectual Property Rights….as embodied in the Agreement on Trade-Related Aspects of Intellectual Property Rights… conflicts, in one way or another, with a number of Human Rights."[92] Resolution 2000/7 had:

> Not(ed)… that actual or potential conflicts exist between the implementation of the TRIPS Agreement and the realization of economic, social and cultural rights in relation to, inter alia, impediments to the transfer of technology to developing countries, the consequences for the enjoyment of the right to food of plant variety rights and the patenting of genetically modified organisms, "bio-piracy" and the reduction of communities' (especially indigenous communities') control over their own genetic and natural resources and cultural values, and restrictions on access to patented pharmaceuticals and the implications for the enjoyment of the right to health,

The Resolution went on to State that it:

1. Affirms that the right to protection of the moral and material interests resulting from any scientific, literary, or artistic production of which one is the author is, in accordance with article 27, paragraph 2, of the Universal Declaration of Human Rights and article 15, paragraph 1 (c), of the International Covenant on Economic, Social and Cultural Rights, a human right, subject to limitations in the public interest;
2. Declares, however, that since the implementation of the TRIPS Agreement does not adequately reflect the fundamental nature and indivisibility of all human rights, including the right of everyone to enjoy the benefits of scientific progress and its applications, the right to health, the right to food and the right to self-determination, there are apparent conflicts between the intellectual property rights regime embodied in the TRIPS Agreement, on the one hand, and international human rights law, on the other…[93]

The UN Sub-Commission in a subsequent resolution, 2000/21, on Intellectual Property and Human Rights:

> *Reminds* all Governments of the primacy of human rights obligations under international law over economic policies and agreements, and requests them, in national, regional and international economic policy forums, to take international human rights obligations and principles fully into account in international economic policy formulation
> *Urges* all Governments to ensure that the implementation of the TRIPS Agreement does not negatively impact on the enjoyment of human rights as provided for in international human rights instruments by which they are bound;
> *Also urges* all Governments to take fully into account existing State obligations under international human rights instruments in the formulation of proposals for the ongoing review of the TRIPS Agreement, in particular in the context of the Ministerial Conference of the World Trade Organization to be held in Doha in November 2001;

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[92] European Commission (2001), "Submission to the United Nations Secretary General from the Services of the European Commission with Regard to Resolution 2000/7 and the Request for a Report on Intellectual Property Rights and Human Rights." 31 July 2001.

[93] UN Sub-Commission on the Promotion and Protection of Human Rights, "Intellectual Property Rights and Human Rights," Resolution 2000/7, E-CN_4-RES-2000-7.doc.

> *Calls upon* States parties to the International Covenant on Economic, Social and Cultural Rights to fulfill the duty under article 2, paragraph 1, article 11, paragraph 2, and article 15, paragraph 4, to cooperate internationally in order to realize the legal obligations under the Covenant, including in the context of international intellectual property regimes[94]

In its deliberations and in its Resolution 2000/1 the UN Sub-Commission drew attention to a report on "The Realization of Economic, Social And Cultural Rights: Globalization and its Impact on the Full enjoyment of Human Rights," by Special Rapporteurs J. Oloka-Onyango and Deepika Udagama, which itself cited the critiques of Professor Joseph Stiglitz regarding the North–South divide as follows:

> Again Prof. Stiglitz provides the most lucid examination of what would comprise a genuine regime of trade liberalization: "But trade liberalization must be balanced in its agenda, process and outcomes, and it must reflect the concerns of the developing world. It must take in not only those sectors in which developed countries have a comparative advantage, like financial services, but also those in which developing countries have a special interest, like agriculture and construction services. *It must not only include intellectual property protections of interest to the developed countries*, but also address issues of current or potential concern for developing countries, such as property rights for knowledge embedded in traditional medicines, or the pricing of pharmaceuticals in developing country markets."[95] [emphasis added]

The EU Commission, commenting on Resolution 2000/7 was of the opinion that IPRs, "including TRIPs, and wider public policy objectives, such as human development, protection of human rights, health, environment and traditional knowledge can be mutually supportive if all the relevant international fora work together in a co-operative spirit."[96] After calling attention to the foundations of IPR in Article 27.2 of the UDHR and Article 15.1(c) of the ICESCR, the Commission noted that TRIPS obliges WTO members to provide for substantive IPR provisions in their domestic legislations as well as enforcement measures. "A number of individual economic human rights are directly enshrined in several provisions of the TRIPS Agreement,[97] and illustrate the principles of the UNDHR and the ICESCR."[98] It called attention to the fact that a number of countries which "never previously recognized many of these rights, have now done so, for the first time" by adhering to the TRIPS Agreement. Therefore, TRIPS has fostered the international realization, securing, and respect of certain human rights.

The Commission drew attention to the human rights component of IPRs in the form of a right to property going back to the French revolution of 1789 and the

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[94] UN Sub-Commission on the Promotion and Protection of Human Rights, "Intellectual Property Rights and Human Rights," Resolution 2000/, E-CN_4-SUB_2-RES-2000-7.doc.

[95] Oloka-Onyango and Udagama 2000, para 19. See work cited by Professor Stiglitz 1999 at 387.

[96] Ibid.

[97] Articles 3, 4 and Part III on Enforcement, as per the Commission, para 1.

[98] UN Economic and Social Council 2001, Id.

American Constitution of 1787[99]; "Human Rights and the equitable treatment of authors and inventors, on the one hand and the public interest to have access and to benefit from these creations and discoveries, on the other hand, are the two pillars of the IP system."[100] Countries had reflected these two pillars in their national systems, with civil law-based systems tending to emphasize the former, while common-law-based systems tend to emphasize more the latter. It was also clear that the social objectives behind different areas of IP law varied: trademark laws concentrated more on consumer protection, and ensuring fair competition; copyright was designed to encourage creative works and patent laws promoted technological innovation and served as a means to provide finance for research and development.[101] The Commission continued:

6. The goal of patent and similar IP systems is to promote long-term public interest by means of providing exclusive rights to holders for a limited duration of time. Upon expiration of this period of protection, the protected works and inventions fall into the public domain and all are free to use them without prior authorization of the right holder. During the term of protection, there is potential for conflict between the exclusive rights of the right holder and the desire of users/consumers for access. The challenge always facing the IP system is how to provide the best balance between these two considerations. This is reflected in Article 7 of TRIPS… and in the tensions inherent in the goals of Article 15.1(a) and (b), on the one hand, and Article 15.1 (c), on the other, of the ICESCR.
7. The Preamble of the WTO Agreement to which the TRIPS Agreement is an annex, states that member countries' recognize the *"need for positive efforts designed to ensure that developing countries, and especially least developed countries among them, secure a share in the growth in international trade commensurate with the needs of their economic development."* This is further elaborated in the TRIPS Agreement itself where the public interest aspect of IP protection is emphasized in Article 7 which states that "*the protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conductive to social and economic welfare, and to a balance of rights and obligations*." The fact that such goals are singled out in a separate and specific provision of the TRIPS Agreement shows the importance attached to these principles by the WTO Members. Thus when considering the policy underlying IP protection, i.e., the balance between rights of the creator/inventor and the rights of the public/consumer, the objectives stated in Article 7 should be a decisive guide in the interpretation of the TRIPS Agreement. More importantly, the case law of the WTO Appellate Body emphasizes consistently that such goals are an essential yardstick in interpreting other provisions of the Agreement.

[99] The Law of 1791 in France stated that "the property of the work which is born of the writer's thought is the most sacred, the most legitimate, the most unassailable and the most personal of all properties." The US Congress in 1787 justified its legislative powers over IP on the basis of the need "to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." Id., para 5.

[100] European Commission 2001, para 5.

[101] Ibid.

8. In addition, many have rightly argued that the WTO and the TRIPS Agreements are also, in a way human rights agreements, since they enhance "due process and property rights of economic actors." Good examples of this would be Article 3 (national treatment) and Article 4 (Most-Favored Nation) of the TRIPS Agreement, which can be said to be expressions of the principle of non-discrimination enshrined in Article 2 of the UDHR and Article 2.2 of the ICESCR, that *"[t]the States Parties (…) undertake to guarantee the rights (…) will be exercised without discrimination of any kind as to (…) national (…) origin. (…)"*.
9. It is, moreover, important to note that the balance sought by the TRIPS Agreement goes beyond the point of its inception, extending also to its implementation phase. Article 8 of the TRIPS Agreement, for example, provides that *"Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measur5es are consistent with the provisions of this Agreement*." As argued elsewhere, countries have certain flexibility to reconcile the requirements of different human rights, according to their own understanding, with those of the TRIPS Agreement. This is clearly reflected in the compromise embedded in Article 8 of the TRIPS Agreement.
10. The Resolution claims that the Human Development Reports of 1999 and 2000 have identified circumstances where the implementation of the TRIPS Agreement can be said to constitute contraventions of International Human Rights Law. After a consideration of the reports in question, the Commission services consider that this statement is unsupported and, indeed, could be prejudicial. A number of the specific issues raised in the resolution are considered in the following sections.
11. The Commission services are committed to ensuring a high standard for the protection of human health in the development and implementation of its policies and actions. Human health is closely related and inter-related to issues of trade, development, and poverty. The health status of a population is essential for the development of a country, while improved development and the increased prosperity and resources it brings, are vital for the promotion of public health. By facilitating the creation of a more open trading system, the WTO and the TRIPS Agreement may help provide the increased development opportunities necessary for promoting human health.
12. The lack of access to medicines in general in the developing and least developed countries is, to a large extent, dependent on poverty. The limited research into disease which affect the Third World, poor health infrastructure and inadequately funded healthcare services and prevention and delivery systems are important factors in this respect. The reasonable solution to the current health crisis is not to change the IP system, but rather to develop all the elements necessary to improve health standards. This includes making the best possible use of the flexibility which the TRIPS Agreement already provides. Many pharmaceutical companies offer medical and pharmaceutical products at significant discounts to developing and least developed countries. In many cases, the countries concerned do not have patent protection legislation, or conversely, the companies involved do not apply for a patent protection where the possibility does exist. This ensures that the knowledge regarding how this medicine was prepared etc. is easily available and could be used in such countries for the development of their own versions of these products. However, this presupposes the means to utilize this knowledge to prepare such products. In practice, developing – a particularly least developed – countries rarely possess the know-how and funding capacity to be able to take advantage of this knowledge. It is, therefore, important to focus on developing and strengthening this capacity.
13. An important part of IP policy is that governments take appropriate measures in other areas of economic and social policy that enable the society to benefit from the IP system and to prevent its abuse. It should be firmly borne in mind that companies are

keen to avoid a situation where patented products made available at reduced price in one less developed country are reimported back into another more developed country where that product earns a higher market price. These companies rely on these (higher cost, developed) markets, and the patents they have obtained therein, to protect their products for a sufficient period to recoup the costs of research and development and to accumulate sufficient resources to finance the next generation of products.

14. The solution to this problem is to address such issues as the need to develop research and development programs into diseases prevalent in the developing and least developed countries. It is fair to say, that up-to-now, these diseases have often been neglected. Such a solution is unlikely to be met by the private sector alone as the purchasing power in the countries affected is often too low to achieve the necessary economies of scale required to even break even. Moreover, any incentive for such research and development that could be offered by IPRs, would be eliminated if effective IP protection for the final products were to be denied. This solution will require the development of initiatives, and significant funding, from the international community. Such initiatives are beginning to take place under the aegis of organizations such as the UN and the WHO and the Commission services are also fully involved.
15. The Commission services are of the opinion that the TRIPS Agreement should not burden developing countries with onerous obligations, but rather establishes a minimum level of agreed provisions which will ensure adequate IP protection. Developing countries already have a relatively wide margin of discretion in implementing the TRIPS. This flexibility should be adequate to enable developing countries to set up intellectual property regimes which not only meet their policy needs, but also respond to their public health concerns. Developed countries and the EC are generally also willing to provide technical assistance in this area.
16. Article 8 of TRIPS, entitled "Principles", recognizes that "Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement." The relevance of IP protection for the development of developing and least developed countries (LDCs) was acknowledged at a seminar on intellectual property which took place at the UN LDC conference in May 2001 in Brussels
17. The EC is an active participant in the ongoing debate on access to medicines. Discussions on alternatives such as differential pricing, with the objective of supplying the cheapest possible medicines to the poorest countries, are gaining momentum in different fora. The EC strongly believes that mutually satisfactory solutions for developing countries can be found without substantially altering either the foundations of IPR protection, of the TRIPS Agreement.

Right to Food and Genetically Modified Organisms

18. In a similar vein to that of access to the right to health, the question of the right to food widely exceeds the framework of intellectual property rights. Adequate access to food clearly depends largely on factors unrelated to the world of intellectual property, such as agricultural productivity, adequate infrastructures, weather conditions, peace, and stability.
19. Nevertheless, one element of IP which is relevant to the right to food relates to access to plant varieties. Article 27.3 of the TRIPS Agreement grants flexibility in the handling of new plant varieties as part of the specific provisions on biotechnology. While members may refuse patents on plants and animals, if this is the case, then there must be alternative means of protection provided, a so-called "effective sui-generis" system, for new plant varieties. Indeed, such systems may offer greater flexibility than the patent system and countries which have such systems usually incorporate

a breeders' exemption and the so-called "farmers' privilege." The latter ensures that farmers can re-sow on their own land protected varieties they have grown without having to purchase new seed each year. A review of Article 27.3 by the TRIPS Council is currently taking place.

20. Although having some bearing on the discussion over access to food as mentioned in the previous paragraph, the concern over the patenting of genetically modified organisms has to be recognized as part of a much larger discussion on the role of biotechnology and genetic modification in today's world. Issues related to whether or not research into technology should take place and, if so, how the results of such research should be commercialized or exploited are not related to intellectual property in general or the TRIPS Agreement in particular. These issues have to be decided by countries themselves. The only IP issue at stake in this debate is whether or not the inventor of a biotechnological invention should have the right to prevent other people from using his invention for the limited period of the patent's life. The granting of a patent does not in any way signify authorization to exploit an invention if there are regulatory or other objections. Governments can legislate on the production and distribution of products, including those covered by such patents, on the basis of any public policy considerations, such as public order, morality, health, and the environment. Finally, it should be noted that the IP protection offered to certain genetically modified organisms has contributed significantly to their development and widespread distribution. Leaving aside any doubts about its safety, this technology has had a major impact in the fight to eradicate famine in countries like China.

Protection of Traditional Knowledge

21. Article 8(j) of the Convention on Biological Diversity requires Parties, under certain conditions, to protect Traditional Knowledge (TK), innovations and practices of indigenous and local communities relevant for the conversation and sustainable use of biological diversity while encouraging the equitable sharing of the benefits arising from their use. This provision does not specify the means by which Parties can achieve this objective. However, the Article 8(j) group, in the CBD framework, has the task of clarifying the implications of this provision and to facilitate its concrete application.
22. The TRIPS Agreement mainly incorporates IPRs which have already been regulated under other international agreements, such as those falling under the auspices of WIPO. TRIPS is silent on the issue of TK. However, nothing in the TRIPS Agreement prevents WTO Members from setting up a protection system by (a) applying their existing intellectual property regimes to TK (to the extent that such regimes care adequately for this task) or (b) through the creation of a specific regime for the protection, regulation of access, enforcement of rights and attribution of rewards from the use of TK. A number of countries and regional organizations have already set up national or regional regimes for the protection of TK. Others have accommodated their patent laws so as to prevent abusive patenting of TK to ensure sharing of benefits arising from the use of TK.
23. Under the principles contained in TRIPS, the patenting of Traditional Knowledge should, in principle, not be possible. TK, usually, does not fulfill the basic criteria for patentability (novelty or inventiveness). The situation is different when TK, is used as a basis for *further* innovations. In such cases, these innovations are patentable, independently of the need to fulfill any accompanying national requirements to obtain authorization from the owners of the TK form which the invention is derived and to reward them for the use of it or share the benefits of its use. In this respect, the EU Biotechnology Directive (98/44/EU), in is recital 27, encourages the mention of the geographic origin of biological material in the patent application, along the lines indicated by Article 16(5) of the CBD. Where misappropriation of TK has taken place, this has been a result of the incorrect application of patentability criteria in individual

cases. In such cases, the patents concerned can, and have been, invalidated (cf. the '*Neem tree oil*' case).

24. On several occasions, the EC has indicated that it is in favor of measures for the protection of traditional knowledge, such as development of databases containing information relating to TK, and of measures to avoid abusive patenting of TK by parties other than the TK holders themselves. In this context, it is important to note the World Intellectual Property Organisation (WIPO) has established the Intergovernmental Committee on Genetic Resources, Traditional Knowledge and Folklore to consider possible systems for the protection of TK, with regard to both measures available under existing regimes and as regards the need for a specific protection regime of its own. Furthermore, the EC supports the CBD Ad Hoc Working Group…which will try to develop guidelines or other approaches in order to address the issue of access to genetic resources and benefit sharing, including traditional knowledge. Also, the EC has indicated that it is open to requests from developing countries to include TK on the agenda of a new round of multilateral trade negotiations.
25. The Commission services believe that it is important to ensure that the developing and least developed countries have the necessary means and resources to effectively implement protection regimes in TK. Capacity building is paramount, and can be supported through technical cooperation. The Commission services are prepared to play a role in the process and to encourage regional approaches in this area.

Right to Enjoy the Benefits of Scientific Progress

26. The issue here is that of technology transfer. While recognizing that the levels of technology transfer from developed countries may still be modest, one should not lay all the blame at the door of the IPR protection system in general, nor on TRIPS, in particular. The Commission services have put in place a number of initiatives to foster the transfer of technology. Currently the European Commission is conducting a thorough review on how to improve the transfer of technology from an IPR perspective.
27. At the same time, it should be noted that TRIPS itself provides the basis for the transfer of technology. Article 7 of TRIPS (see para 4 above) makes it clear that the protection of IPRs is to be achieved in a manner to ensure that a number of objectives can be fulfilled, i.e., (i) promotion of technological innovation; (ii) transfer and dissemination of technology, (iii) contribution to the mutual advantage of producers and users of technological knowledge, (iv) in a manner conducive to social and economic welfare, (v) balancing rights and obligations. Furthermore, Article 66.2 of TRIPS establishes that "*developed country members shall provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least-developed country members in order to enable them to create a sound and viable technological base.*" Any shortcomings in the area of technology transfer may, therefore, be best addressed to the developed countries themselves, or their enterprises and institutions, rather than to the IPR system or TRIPS Agreement.
28. Conversely, IPR protection, and in particular the patent system, can play an important role in promoting technology transfer. European industry confirms that adequate and effective patent protection is an important precondition for technology transfer. Indeed, many industries, which are inclined to adjust the marketing conditions of certain products to the particularities of developing countries, are reluctant to do so in the absence of adequate IPR protection. It is relevant to note in this regard that the absence of patent and other IP protection often results in the exportation of the relevant product back into developed world rather than in its provisions at a cheaper price to the poorer people.
29. While developed countries may be accused of investing relatively meager resources in technology transfer, action from developing countries is required as there is no one better placed than the authorities of these countries themselves to identify their own needs in terms of technology transfer. Nevertheless, such input from the developing countries is still missing in many of the existing technology transfer programs.

Right to Protection of Material Interests

30. The Resolution affirms that the right to protect the moral and material interests resulting from any scientific, literary, or artistic production of which one is the author is a human rights, subject to limitations in the public interest. The Berne Convention and Articles 9–13 of TRIPS give effect, at multilateral level, to authors' rights, while neighboring rights are explicitly addressed in Article 14 of TRIPS. In this, an appropriate balance between intellectual property rights of authors (and neighboring rights holders) and the human rights of others is achieved by defining with care the scope of the protectable subject matter, to ensure an appropriate level of protection, and, at the same time, allowing for appropriate exceptions and limitations to copyright protection which comply with Article 13 of TRIPS. Exceptions that are adopted are generally for the public interest and often cover a variety of cases, such as educational purposes, the needs of the disabled or disadvantaged, scientific research, religious celebrations, public security, criticism, caricature, or parody. Appropriate use of such exceptions demonstrate that the human rights and freedoms of education, health, religion, opinion, and expression, are all balanced against IPRs such as the rights of authors (which may, in turn, qualify as human rights) and other related rights.

Conclusion

31. As illustrated in the preceding paragraphs, the TRIPS Agreement provides for a minimum standard of protection while, at some other time, it gives Member Countries substantial freedom to implement its provisions and to find the right balance between human rights and IPRs. Developing countries have a relatively wide margin of discretion in implementing the TRIPS Agreement and this flexibility should be adequate to enable developing countries to set up intellectual property regimes which not only meets their policy needs, but also responds to their concerns over public health, access to medicines, access to food plant varieties, the protection of traditional knowledge, and the patenting of biotechnological inventions. The Commission services strongly believe that mutually satisfactory solutions for developing countries can be found without substantially altering the foundations of IPR protection of the TRIPS Agreement.

The EU response has been set out in full because it goes to the heart of many of the policy and legal controversies swirling around IP rights, human rights, and human security. The EU response is of such a nature as to justify the proposal we make later in this book for the establishment of an equity panel within WIPO.

6.6 Human Rights Primacy Over Intellectual Property Rights?

Hans Morten Haugen has argued that "Human rights, including economic, social and cultural human rights, do in principle prevail over intellectual property rights."[102] Article 27 of the Universal Declaration of Human Rights proclaimed that everyone has the right to share in scientific advance and its benefits and that everyone has the right to the protection of the moral and material interests

[102] Haugen 2009, 354.

resulting from any scientific, literary, or artistic production of which he or she is the author. Following up on the Universal Declaration, the International Covenant on Economic, Social and Cultural Rights stipulated in Article 15 that:

1. The States Parties to the present Covenant recognize the right of everyone: (a) to take part in cultural life; (b) to enjoy the benefits of scientific progress and its applications; (c) to benefit from the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which he is the author.
2. The steps to be taken by the States Parties to the present Covenant to achieve the full realization of this right shall include those necessary for the conservation, the development and the diffusion of science and culture.
3. The States Parties… undertake to respect the freedom indispensable for scientific research and creative activity.
4. The States Parties… recognize the benefits to be derived from the encouragement and development of international contacts and cooperation in the scientific and cultural fields.

The Committee on Economic, Social, and Cultural Rights, in its General Comment No 17, pointed out that human rights are fundamental, inalienable, and universal entitlements belonging to individuals and, under certain circumstances, groups of individuals and communities. Human rights are fundamental as they are inherent to the human person as such, whereas intellectual property rights are first and foremost means by which States seek to provide incentives for inventiveness and creativity, encourage the dissemination of creative and innovative productions, as well as the development of cultural identities, and preserve the integrity of scientific, literary, and artistic productions for the benefit of society as a whole.

It is important, the Committee emphasized, not to equate intellectual property rights with the human right recognized in Article 15, para 1(c). The human right to benefit from the protection of the moral and material interests of the author is recognized in a number of international instruments such as Article 27, para 2 of the Universal Declaration of Human Rights which provides that everyone has the right to the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which he is the author.

The right to benefit from the protection of the moral and material interests resulting from one's scientific, literary, or artistic productions, the Committee added, seeks to encourage the active contribution of creators to the arts and sciences and to the progress of society as a whole. As such, it is intrinsically linked to the other rights recognized in Article 15 of the Covenant, i.e. the right to take part in cultural life (Article 15, para 1(a), the right to enjoy the benefits of scientific research and creative activity (Article 15, para 3). The relationship between these rights and Article 15, para 1(c), is at the same time mutually reinforcing and reciprocally limitative ….As a material safeguard for the freedom of scientific research and creative activity, guaranteed under Article 15, para 3 and Article 15, para 1 (c), also has an economic dimension and is, therefore, closely linked to the rights to the opportunity to gain one's living by work which one freely chooses (Article 6, para 1) and to adequate remuneration (Article 7(a)), and to the human right to an adequate standard of living (Article 11, para 1). Moreover, the realization of Article 15, para 1(c), is dependent on the enjoyment of other human rights

guaranteed in the International Bill of Human Rights and other international and regional instruments, such as the right to own property alone as well as in association with others, the freedom of expression including the freedom to seek, receive, and impart information and ideas of all kinds, the right to the full development of the human personality, and rights of cultural participation, including cultural rights or specific groups

The Committee considered that Article 15, para 1(c) of the Covenant entails at least the following core obligations, which are of immediate effect:

> (e) To strike an adequate balance between the effective protection of the moral and material interests of authors and States parties' obligations in relation to the rights to food, health and education, as well as the rights to take part in cultural life and to enjoy the benefits of scientific progress and its application, or any other right recognized in the Covenant.[103]

The Committee has emphasized that it is particularly incumbent on States parties and other actors in a position to assist, to provide "international assistance and cooperation, especially economic and technical", which enable developing countries to fulfill their obligations. While only States parties to the Covenant are held accountable for compliance with its provisions, they are nevertheless urged to consider regulating the responsibility resting on the private business sector, private research institutions and other no-State actors to respect the rights recognized in Article 15, para 1 (c) of the Covenant.

There are principles of international human rights supervisory bodies that could help guide the development of a modernized regime for the protection of intellectual property rights. In the case of *LCB v. UK*, the European Court of Human Rights held that Article 2 of the European Convention, which protects the right to life, imposes an obligation upon the State to do "all that could have been required of it to prevent the applicant's life being put at avoidable risk."[104] It has been suggested that there may be a liability under Article 2 where a State places an individual's life at risk by denying him or her medical care that is available to the general public.[105]

The Decision of the European Court in *Cyprus v. Turkey* is interpreted by some as extending the guarantee of the Article 2 obligation to protect life in a way that would be in accord with national healthcare standards in European states and indirectly provide a partial, but welcome guarantee of the right to health, which is an established human right.[106] The role of the Court in such cases would be one of reviewing whether the failure to provide healthcare—for example, for an expensive drug or operation—needed to protect life was a reasonable use of limited financial resources, with the State being allowed a margin of appreciation in its

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[103] WIPO 2003, 3.

[104] *L.C.B. v. United Kingdom, 23413/94 [1988] (ECHR).*

[105] See on this Harris 1989, 42–48.

[106] *Cyprus v. Turkey (25781/94) [2001] (ECHR).*

allocation of resources, and did not infringe fundamental human rights norms, such as non-discrimination and due process. The right to life has been interpreted in some national jurisdictions, notably India, to cover the quality of life as well as mere physical existence. On this basis, rights such as the rights to health[107] and to livelihood[108] have been made indirectly justiciable through the civil right to life.

As we have seen earlier, the UN Special Rapporteur on the Right to Food has made a cogent case for intellectual property rights to be reconciled with international, regional, and national efforts to realize the right to food globally. He has noted that the dominant paradigm of agricultural development favors the strengthening of IP rights in order to promote and reward innovation by the private sector and the provision of improved seed varieties to farmers in order to help them produce higher yields. He considered, however, that this model may leave out precisely those who need most to be supported, because they are the most vulnerable, living in the most difficult environments. He thought that there were other ways of putting science at the service of farmers, which may better suit the needs of this category, and which public policies may have to pay greater attention to in the future.

He has also advised that there may be a tension between the right to enjoy the benefits of scientific progress and the continued strengthening of IP rights. The most visible, and indeed the most widely discussed, manifestation of this tension is between the right of those holding patents or other IP rights on the one hand, and those unable to access the knowledge or technology that is protected by the granting of temporary monopoly to the right holder, on the other hand. Especially when combined with excessive concentration within certain sectors, IP rights that are too far-reaching allow the rights holders to capture a disproportionate revenue in reward of their investment.

As regards, the direction that IP rights are given to scientific research, he thought that profit-driven research serves the needs of the high-value segments of the markets, while neglecting the real needs of the poorest and most marginalised groups. A strong role for public investment in research was therefore required in order to compensate this imbalance.[109]

A recent report of an expert consultation within the Human Rights Council on access to medicines as a fundamental component of the right to health has pointed out that:

> 47. While intellectual property rights have the important function of providing incentives for innovation, they can, in some cases, obstruct access by pushing up the price of medicines. The right to health requires a company that holds a patent on a lifesaving medicine to make use of all the arrangements at its disposal to render the medicine accessible to all. As patents create monopolies, limit competition and allow patentees to establish high prices, they consequently have a significant impact on access to medicines. While some countries lack sufficient awareness about the use of TRIPS flexibilities and have limited technical capacity to implement them, others have not streamlined their patent laws

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107 *Paramand Kataria v. Union of India* (1989) 4 SCC 286.

108 *Olga Tellis v. Bombay Municipal Corp (1986) AIR 180.*

109 De Schutter 2011, 349–350.

> sufficiently to facilitate use of such flexibilities. Furthermore, pressure from developed countries and multinational pharmaceutical corporations have played a prominent role in shaping the implementation of TRIPS flexibilities in developing and least developed countries. For example, a number of developing countries, while attempting to implement TRIPS flexibilities to address public concerns have experienced pressures from developed countries and multinational pharmaceutical corporations.[110]

In relation to access to medicines, according to Hafiz Aziz Ur Rehman, it was not advisable for India to conclude a free trade agreement with the USA because of the tendency of "TRIPS plus" type of agreements engaged by the US to limit the ability of developing countries to effectively use the safeguards and flexibilities of the 1994 TRIPS Agreement.[111] The author called attention to a WHO report of 2006 on the same, advising against TRIPS-plus agreements that may reduce access to medicines.[112] In her exploration of methods of achieving linkage in international law between the human right to health and the TRIPS, Lisa Forman, has suggested that "*jus cogens* (peremptory norms), *erga omnes* duties (duties ''owed to all'') and section 103 of the UN Charter "collectively prohibit gross violations of any rights including health, and place reasonable limits on all human conduct (including trade) to protect human health and life."[113] Forman has argued the case for the prioritization of health in WTO institutions by advancing legal arguments "about health's appropriate location within international law's existing hierarchies."[114] Forman, referred to a report of the International Law Commission of 2007, which made the case that "no specialized regime, including the WTO, operates outside of international law."[115]

With regard to the right to education, Armstrong and colleagues have noted that there is a growing movement of national and international policy makers, private sector industry leaders, researchers and members of civil society who view copyright from a different perspective. Their focus is not only on protecting copyright

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[110] UN Doc. A/HRC 17/43: Report of expert consultation on access to medicines as a fundamental component of the right to health.

[111] Rehman 2010, 267–300.

[112] Id., 270. See World Health Organization Commission on Intellectual Property Rights, Innovation and Public Health 2006. Public health innovation and intellectual property rights. Geneva: WHO Press. See http://www.who.int/intellectualproperty/documents/thereport/ENPublicHealthReport.pdf. Accessed 1 April 2012.

[113] Forman 2011, 155.

[114] Ibid.

[115] The report argued that "systemic integration between functional areas of international law can be achieved in two primary ways: first, because all bodies of law must respect hierarchically superior norms in international law, and second, because all international law is linked through treaty interpretation in the Vienna Convention on the Law of Treaties, a legal treaty that establishes the framework and interpretive methods that all international treaties are subject to." Forman, Id., 157. See International Law Commission (ILC) (2006) 'Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law: Report of the Study Group of the International Law Commission—Finalized By Martti Koskenniemi'. U.N. Doc. A/CN.4/L.682, 13 April.

owners. They also paid attention to the externalities of copyright systems, specifically copyright's implications for enabling or restricting access to knowledge: "…the ultimate objective of copyright cannot be the protection of creative works for its own sake; copyright serves a nobler role in furthering broad public policy objectives, such as the advancement of learning."[116]

6.7 Lacuna in General Comment 17 of the ESCR

With a view to strengthening the human rights perspective on IP, Cullet provides some incisive critiques of the CESCR's General Comment 17 on Article 15 of the ESCR Covenant, which are summarized as follows.

First, he has argued that the limited focus of the General Comment ensures that it does not provide a sufficient framework for addressing all relevant links between human rights, intellectual property rights, and contributions to knowledge. In view of the importance of science and technology in the twenty-first century, Cullet has argued that it is imperative to move beyond existing intellectual property rights when addressing the issue from a human rights perspective.

Second, it does not indicate how the balance between the enjoyment of the fruits of science and incentives for innovation is to be achieved.

Third, subsection (c), which deals with the reward for individual contributions, does not indicate with any specificity the type of contributions that are covered. Intellectual property rights are based on the premise that there must be a balance between the rights granted to the property rights holder and society's interest in having access to novel developments in the arts, science, and technology. This is related to, but much narrower than, the scope of Article 15(1). While the intellectual property rights frameworks introduce rights for individual contributors, they only balance it with a general societal interest in benefitting from artistic or technological advances. Intellectual property rights frameworks do not recognize everyone's right to enjoy the benefits of scientific progress and its applications as an individual and/or collective right. While Article 15(1)(c) may sometimes be read as referring to existing intellectual property rights, there is nothing that indicates that subsection (c) is limited to existing categories of intellectual property rights. In fact, for Cullet, Article 15(1)(c) recognizes intellectual contributions in general without making any special reference to one or the other category of existing intellectual property rights.

Fourth, from a human rights point-of-view, the Committee introduced an important restriction to the scope of the concept of author under the General Comment. It made it clear that no legal entity could be deemed to be an author. However, the General Comment appeared not to have taken into account the fact that it has become difficult to distinguish the rights of the individual author and the

[116] Armstrong 2010, 3.

rights that may accrue to businesses under intellectual property rights frameworks. In the context of innovations protected by patents, he noted, it had become much more difficult to dissociate individual inventors from institutions with which they are associated. The General Comment appeared not to take into consideration the fact that today there are few, if any, patented inventions that are commercially exploited by individual inventors. Indeed, most patents are owned by big businesses. In today's world, it is only large companies holding intellectual property rights, such as patents, whose actions can have a direct impact on people's access to medicines. This means that, if the General Comment really focuses exclusively on individual authors' material claims allowing them to individually have an adequate standard of living without any link to intellectual property rights regimes, there is no direct link between the rights protected at Article 15(1)(c) and the impacts of medical patents held by big pharmaceutical companies. The fact that intellectual property rights regimes failed to provide effective protection to individual inventors is cause for worry in the context of Article 15(1)(c). The Committee seemed to have conceived of levels of protection in the context of existing intellectual property rights regime as opposed to providing alternative solutions.

Fifth, the Committee took, arguably, a progressive position by highlighting the special position of indigenous peoples and the need to provide protection to expressions of their cultural heritage and traditional knowledge. This opened the scope of protection beyond mainstream conceptions of protection. However, there was no reason to limit the scope of Article 15(1)(c) to indigenous peoples. In the context of traditional agricultural knowledge it was not only the knowledge of indigenous peoples that needed to be protected but the knowledge of all agricultural communities and all farmers.

Sixth, the Committee also devoted space to defining the concepts of moral and material interests. The notion of moral interest which is proposed by the Committee was close to the notion of *droit moral,* whose main characteristics it incorporated. This included the notion that the moral interests protected under the covenant were closely connected to the person of the author, in part because they cannot be ceded. While the notion that individuals had moral interests over their intellectual contributions was relatively uncontentious, this was not the case with regard to material interests. In the General Comment the definition of material interests given highlighted the difficulties faced by the Committee in neither clearly moving away from the conceptual framework of intellectual property rights regimes nor analyzing Article 15(1) in its entirety. On the one hand, the Committee emphasized that the protection of material interests under the covenant was limited to the basic material interests of authors allowing them to enjoy an adequate standard of living. The General Comment also linked this economic dimension of the rights protected under Article 15(1)(c) to other rights protected under the covenant such as the opportunity to gain one's living by work which one freely chooses and the right to an adequate remuneration. On the other hand, the Committee asserted that there is a close link between the protection of authors' material interests and the right to own property. The General Comment seemed to emphasize the link between what it sees as the human right to property and Article 15(1)

(c). Cullet has argued that this is both unnecessary in view of the Committee's claim that there is no link between Article 15(1)(c) and property rights and inappropriate because this link may be made only by referring to Article 17 of the Universal Declaration because there is no right to property under the Covenant.

Seventh, an analysis of the General Comment also needs to take into account the scope it delineates. As noted earlier, the Committee consciously decided to first consider Article 15(1)(c) and move to the other two subsections subsequently. Further, since there is a direct relationship between the three subsections, the interpretation given to Article 15(1)(c) by definition constrains and probably restricts the interpretation that will be given to the other two subsections. The problem is that while Article 15(1)(c) tends to take a narrow view of intellectual contributions to socioeconomic development, subsections (a) and (b) provide a much broader perspective. Cullet has noted that the relationship between the three subsections was of great importance because this was the kind of balance that intellectual property rights regimes have failed to effectively provide. It related to the balance between social policy and private interests found in intellectual property rights regimes but goes much further because sections (a), (b), and (c), in principle, each have the same weight. It was therefore regrettable to Cullet that the General Comment does not follow the structure of Article 15(1), which would have allowed human rights law to make substantial headway on the issue of the balance of rights between the different claims found in each subsection.

Eighth, Article 15(1) of the ICESCR provided an appropriate basis for addressing issues related to culture, science, and technology in a human rights framework because it recognized the existence of different rights in this field and provided a balance between everyone's interest in sharing traditional knowledge. Article 15(1)(c) constituted only one of three important sets of rights recognized under Article 15(1), which should be approached concurrently. In light of the context given to Article 15(1)(c) by the other two subsections and in view of human rights such as the rights to health, food, education, and participation, Cullet proposed an alternative reading of Article 15(1)(c) to the reading proposed under the General Comment. Principles underlying such alternative reading of Article 15(1)(c) are fourfold. First, any form of individual or collective protection of knowledge may not be appropriate or welcome in all situations and all contexts. Second, there was no relationship between the rights protected under Article 15(1)(c) and existing intellectual property rights, and the protection afforded under this provision did not cover anyone who could directly or indirectly benefit from existing intellectual property rights. These frameworks provide more than adequate protection of material interests. Third, the focus of any interpretation of a human rights provision should be on people who are most disadvantaged and least able to take advantage of the protection offered. In the case of the protection proposed under Article 15(1)(c), one of the starting points for protection should be the protection of traditional knowledge holders who are largely excluded from the protection provided by intellectual property rights regimes while often being subjected to biopiracy. Fourth, any regime for the protection of individual or collective contributions to knowledge should take into account the fact that different people have different

reasons for seeking the protection of their knowledge which may or may not have any links with prospects for its commercialization.

In the context of Article 15(1), traditional knowledge protection did not need to be equated with protection in an intellectual property context. A human rights perspective on traditional knowledge provided an opportunity to conceive protection in a broader sense that took into account new contributions to knowledge and existing contributions. Further, while Article 15(1) formulated rights as individual rights in accordance with the general orientation of the ICESCR, human rights were generally more easily adaptable to notions of collective rights than intellectual property rights instruments.[117]

In summarizing, Cullet noted two main challenges needed to be addressed in coming years at the national and international levels. First, the increasingly visible impacts of certain types of intellectual property rights on the realization of human rights needed to be tackled by ensuring that measures were taken to protect everyone who was likely to be negatively affected by strengthened intellectual property rights standards. Second, a broader question of the place of science and technology in a human rights framework needed further consideration. This would provide a basis for addressing the question of the protection of all contributions to knowledge, something that the existing intellectual property rights system is struggling to achieve. A human rights perspective on knowledge contributions that was not shackled by intellectual property rights treaties and laws constituted a basis to rethink the position of bodies of knowledge, which could not be protected at present. Traditional knowledge, which has acquired an increasingly important position in law and policy debates in the agricultural, environmental, and intellectual property rights arenas might also be addressed from a human rights perspective in the context of Article 15(1) of the ICESCR.

In relation to the right to food, Haugen has criticized specific aspects of General Comment No. 17 (CESCR), namely, that "there are problematic paragraphs in General Comment No. 17."[118] Likewise, reflecting the lack of dialog between IPR and human rights, he has also noted that "The General Comment No. 12 on the right to adequate food "does not say anything explicit about IPRs."[119] It merely states that "As part of their obligations to protect people's resource base for food, States parties should take appropriate steps to ensure that activities of the private business sector and civil society are in conformity with the right to food". Moreover, the emphasis on distribution of food producing resources, which was said earlier to be crucial, is not explicitly acknowledged in General Comment No. 12.[120]

The goal of the human rights community, as per Drahos, was to "make those involved in intellectual property to think about intellectual property rights

[117] Cullet 2007, p. 417.

[118] Ibid.

[119] Haugen 2011, 6.

[120] Ibid.

systematically in relation to human rights values and law."[121] This meant that the human rights community had to become active in the IP standard setting arena by engaging the WTO and the WIPO in such discussions. A long term desirable outcome was the evolution of jurisprudence within the WTO dispute settlement process "be interpreted constitutionally and broadly rather than commercially and narrowly" as has been the case in relation to GATT jurisprudence historically."[122]

A substantial effort at analyzing the linkages between IP and human rights has begun. Although IP defenders stress that IP rights already serve to advance human rights, there is a sustained argument in favor placing the international IP regime squarely under the ambit of the human rights obligations. Various stakeholders are involved in this enterprise, including States, NGOs[123] and major international organizations such as the WTO and the WIPO.[124] Audrey Chapman has summarized neatly the challenge faced in achieving a better linkage between IP and human rights:

> intellectual property conceptualized as a universal human right differs in fundamental ways from its treatment as an economic interest under intellectual property law. A human rights approach takes what is often an implicit balance between the rights of inventors and creators and the interests of the wider society within intellectual property paradigms and makes it far more explicit and exacting. A human rights approach is predicated on the centrality of protecting and nurturing human dignity and the common good. The goal is to improve human welfare and not to maximize economic benefits. Or to put the matter another way, from a human rights perspective, intellectual property protection is understood more as a social product with a social function and not primarily as an economic relationship.[125]

6.8 Conclusion

This chapter has been devoted to a discussion of IP, Human Rights, and Human Security. There are serious debates ongoing as regards the relationship between these three areas. The discussions have been set out at length because there is room for more reflection and distillation of principles. An equity panel within WIPO can help produce clarifications on some of these issues.

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[121] Drahos 1999, p. 11.

[122] Id., p. 12.

[123] See Matthews 2011, who outlines how NGOs seeking to draw attention to the potentially adverse effects of patents for pharmaceutical products for public health, particularly for people living with Human Immunodeficiency Virus/Acquired Immune-Deficiency Syndrome (HIV/AIDS), not only reshaped the international debate about the relationship between intellectual property rights and access to medicines by framing it as a human rights issue, but have also utilized the concrete human rights principles enshrined in national constitutional law as a practical tool in their campaigns.

[124] Haugen 2010, "Access versus incentives: analysing intellectual property policies in four UN specialized agencies by emphasizing the role of the World Intellectual Property Organization and human rights," 697–728.

[125] Chapman 2002.

Chapter 7
A Human Security Perspective for International Business Organizations

This chapter examines the role of international business organizations in relation to the intellectual property regime. It argues that while, historically, there has been little concern for human security issues among such organizations, there are increasing calls for them to adopt more socially responsible strategies towards basic threats to human security. Some principles are offered as a guideline for IBOs in developing a more equitable international intellectual property regime.

7.1 International Business Organizations (IBO) and the IP Regime

International business organizations such as the International Chamber of Commerce (ICC) have had a decisive influence in the development of international intellectual property laws. With successive rounds of revisions of IP treaties historically, those revisions have tended to strengthen the rights of intellectual property owners. This is hardly surprising to Musungu and Dutfield, who have noted that the *Association Internationale pour la Protection de la Propriété Industrielle* (AIPPI), which was founded in 1897, and the International Chamber of Commerce (ICC), which was founded in 1921 (and immediately established a Permanent Commission for the International Protection of Industrial Property), attended as observers of most of the intergovernmental conferences at which the Paris and other industrial property conventions were revised. Few, if any, consumer, development, or other civil society groups ever participated in those conferences.[1] They

[1] Musungu and Dutfield 2002, 14.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9_7,

call attention to studies by the eminent IP expert, Ladas (at one time a chairman of the ICC's Commission on International Protection of Industrial Property and also an official delegate of the USA at the 1958 revision conference), who has shown that at the fourth revision conference of the PARIS Convention in London in 1934, "'as usual the International Bureau, in cooperation with the British government, prepared the work of the Conference on the basis of resolutions adopted by non-governmental organisations, such as particularly the International Association for the Protection of Industrial Property and the International Chamber of Commerce'."[2]

International business alliances were key players also when it came to the adoption of the TRIPS Agreement. Duncan Matthews has documented the fact that during the TRIPS negotiations corporate lobbies "maintained good relations with the delegations representing developed countries throughout the Uruguay |Round negotiations."[3] US officials were in "frequent" contact with their national industry associations the IPC, the AIIPA and the PhRMA. The latter in turn "provided technical and legal expertise and advocacy skills based on years of experience in international intellectual property protection."[4] The IIPA and the Business Software Alliance (BSA) provided the USTR with a "continuous stream of data on trade losses accrued by US companies as a result of inadequate intellectual property protection in other countries." The European Community also received "important business input from European businesses", and the Japanese business advised its government delegation via Keidanren. "These three business groups provided expert advice to negotiators in Geneva on an *ad hoc* basis, while the publication of the trilateral 'Basic Framework' of GATT Provisions on Intellectual Property in 1988 offered national delegations a clear statement of business views on which they could base their negotiating positions."[5] The Basic Framework enabled representatives of multinational companies at CEO level "to travel to Geneva and personally represent their arguments to staff of the GATT Secretariat and to national delegations of GATT Member countries."[6] It should be said that the business community found some allies in newly industrialized countries in Southeast Asia who lent some support to the trilateral approach. In general, the influence of the business interests "was undoubtedly crucial to the developed countries' negotiating positions" on IP protection during the Uruguay Round. Matthews observes that by the final stages of the Round "developing countries had long given up their resistance to the TRIPS Agreement" as the trilateral alliance (US, EU, Japan) with the support of industry experts, played a

[2] Ibid, 34. See Ladas 1975, 83.

[3] Matthews 2002, 43.

[4] Ibid.

[5] Ibid.

[6] Ibid.

crucial negotiating role. Special 301 bilateral initiatives by the US were also used to undermine resistance.[7]

There is little evidence that these business organizations have taken on a concern for human security in their policies and lobbying strategies. This has taken place in the context of the spectacular growth of IBOs and their impact on world affairs and the process of rule-making for the world.[8] The UN Economic and Social Council, in Resolution 1721 (LIII) in July 1972, formally and explicitly recognized the importance of multinational corporations as a subject for comprehensive study and possible action by the world organization.[9] The UN had noted in 1973, that:

> The multinational corporations have developed distinct advantages which can be put to the service of world development. Their ability to tap financial, physical and human resources around the world and to combine them in economically feasible and commercially profitable activities, their capacity to develop new technology and skills and their productive and managerial ability to translate resources into specific outputs have proven to be outstanding. …. At the same time, the power concentrated in their hands and their actual or potential use of it, their ability to shape demand patterns and values and to influence the lives of people and policies of governments, as well as their impact on the international division of labour, have raised concern about their role in world affairs. This concern is probably heightened by the fact that there is no systematic process of monitoring their activities and discussing them in an appropriate forum.[10]

The eminent international relations expert and diplomat, Joseph Nye, had already begun exploring, in 1974, the increased political prominence of multinational enterprise and its impact on international relations, on the concept of exclusive sovereignty of states, and on development. By that time it was noted that some 200 corporations operated in some 20 or more countries and were joined together by common ownership and strategies.[11] Globalization studies today routinely point

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[7] Ibid. Special 301 of the Omnibus Trade and Tariff Act 1988, which provided to the USTR powers previously held by the President. It required the USTR to make an annual review of IP practices of foreign trading partners and to determine whether the acts, policies and practices of foreign countries deny adequate and effective protection for IP rights or fair and equitable market access for US persons that rely on intellectual property protection. The USTR is required to report to Congress, identify foreign countries that have the most onerous acts, policies and practices that have the greatest adverse impact, either actual or potential, on the relevant US products. The USTR decides whether to place those countries on a 'watch list'. Investigations may follow and if the practices continue trade sanctions may be imposed. This provides the US with strong leverage with regard to countries deemed to be non-compliant with adequate IP protection. With insufficient staff and resources, the USTR "is largely reliant on surveillance of foreign countries by US businesses." Ibid., 26–27.

[8] See for example, Keohane and Nye 1977. These eminent analysts of international relations have developed theories of IR that factor in the rise of multinational corporations into global affairs. See also Vernon and Raymond 1971; Knight and Keating 2010.

[9] UN 1973, Multinational Corporations in World Development UN New York, ST/ECA/190.

[10] Id., p. 2.

[11] Nye 1974.

to multinational corporations collectively as an 'actor' world affairs.[12] The latter is implicit in the suggestion by Kristin M. Lord and Richard Fontaine that the global operations of IBOs may hold important lessons for the conduct of diplomacy by the US State Department, which operates in at least 180 countries, with some 57,000 employees. The authors draw lessons for the State Department from the global operations of General Electric with 304,000 employees in 160 countries, of McDonald's with 1.6 million employees in 117 countries, of IBM with 399,409 employees in some 170 countries, and of FedEx, with 280,000 employees in 200 countries and territories.[13]

IBOs affect the lives of billions of people directly and indirectly. They themselves have come to understand that they cannot remain indifferent to social, economic, and political footprints that they generate. The UN and other international organizations, such as the OECD, have sought to engage IBOs in the promotion and protection of human rights through the adoption of better corporate social responsibility standards and practices. As Ratner noted in 2001, the previous decade had witnessed "a striking new phenomenon in strategies to protect human rights: a shift by global actors concerned about human rights from nearly exclusive attention on the abuses committed by governments to close scrutiny of the activities of business enterprises, in particular multinational corporations."[14]

IBOs have consequently begun to take stock of the need to reconcile a 'shareholder' vision of their roles in society with a "stakeholder view". Whereas the former holds that the IBO is responsible principally for generating profits for its shareholders, the latter emphasizes that this must be tempered by strategies and policies that foster respect for the larger communities in which they exist, domestic and international.[15] The attention to corporate social responsibility (CSR), from a branding perspective, is reflected in the creation by IBOs of CSR departments in their corporate structures and in the integration of international standards such as ISO 26000 and the SA8000 Standard of a private non-governmental group.[16] The World Bank Groups' IFC, for example, awards funds to organizations with projects with socially progressive goals, such as environmental sustainability and poverty reduction. IBO have been called upon to take a more comprehensive perspective on CSR and to contribute to alleviating the plight of the world's poor and to integrate a concern for human development in their activities.

The growing importance of IBOs for innovation and economic growth is pushing governments to consider higher standards of IP protection that benefit such

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12 Knight and Keating 2010.

13 Lord and Fontaine 2010.

14 Ratner 2001, 446.

15 The Economist 2010; Martin 2010.

16 See "ISO 26000: 2010: Guidance on Social Responsibility," of the International Standards Organization available at http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=42546. Accessed on 2 June 2012. See also the SA 8000 standard of Social Accountability International at http://www.sa-intl.org/index.cfm?fuseaction=Page.ViewPage&PageID=937. Accessed on 2 June 2012.

organizations. While IP rights are in principle private rights and, in essence, pertain to individuals, in practice these rights are being exercised more and more by corporate entities, such as firms, businesses, corporations, and other institutions. "It is no wonder that the IP system has become an instrument of economic and trade policies in many countries."[17]

Amidst growing international concern for corporate social responsibility, IBOs have faced mounting pressure to adapt to demands for greater attention to developmental and human rights concerns. Yet, some bodies like the International Chamber of Commerce are yet to internalize this in their representation of the interests of the global business community. The 'Ruggie Principles' on business and human rights and the OECD guidelines for multinational enterprises have provided yardsticks by which IBOs might incorporate human security issues into their strategies and operations.

7.2 IBO's, IP and Human Security

As noted earlier, AIPPI and the ICC have been important players in setting global IP norms and "few, if any, consumer, development or other civil society groups ever participated in those conferences."[18] The involvement of ICC, AIPPI and other business and lawyers associations "went well beyond the presence of their representatives as observers at meetings."[19] There is evidence of industry influence upon drafting the rules of IP. For example, while the 1883 version of the Paris convention stated that 'the patentee shall remain bound to work his patent in conformity with the laws of the country into which he introduces the patented objects', later revisions strengthened the rights of patent holders, by providing for compulsory licensing as the main sanction for non-working as opposed to revocation. From 1934, the Convention forbade the revocation of a patent for non-working until after a compulsory license had been granted and subsequently deemed insufficient to prevent the failure to work the patent. "Variations of this measure had been formulated previously by the ICC and AIPPI and these were provided to the official delegates to the 1934 Conference in London at which the Paris Convention was revised."[20] A second example, concerns the patenting of pharmaceutical and chemical substances. The Paris Convention had never explicitly required that pharmaceuticals and chemical substances be patentable. This was due to the fact that the Convention had always avoided the controversial question of actually stating what is or is not patentable subject matter. The developed countries tended, until the 1960s and 1970s, to keep chemicals and drugs outside their patent systems.

[17] Alikhan and Mashelkar 2009, 2.

[18] Musungu and Dutfield 2003, p. 14.

[19] Ibid.

[20] Ibid.

However, the fifth revision conference, which took place in Lisbon in 1958, discussed the issue and adopted a resolution recommending that member countries study the possibility of requiring them to be patentable. "Considering how influential it was, AIPPI almost certainly was behind this resolution."[21] According to the head of the US branch of AIPPI who attended the Conference,

> No amendment of the Convention was adopted on any point which was not the subject of a resolution by the AIPPI, though in some cases the text adopted differs in some respects from the AIPPI text. A number of proposed amendments of the Convention voted for by the AIPPI failed at Lisbon by the opposition of countries represented particularly by officials of the Patent Office only.[22]

This trend of heavy advanced-country-industry influence upon the negotiation of rules, continued in the Uruguay Round of the WTO when major firms, out of concern for theft of their intellectual property assets, lobbied hard for the inclusion of IPRS on the trade agenda. They argued that it was precise when developing countries decided to use their numerical strength in WIPO to revise the Paris Convention to further their developmental interests "that lawyers and businesses associations in the USA came up with the idea that a comprehensive agreement on intellectual property should be negotiated in the GATT framework rather than under WIPO's auspices."[23]

The international furore in 2000 and 2001 over pharmaceutical companies' attempt to stifle South Africa's efforts to deal with its HIV/AIDS health crisis, through empowering local firms to produce the cocktails of drugs required through compulsory licensing, powerfully underscored the need for IBOs to adjust to and accommodate human security concerns worldwide, in this case access to affordable medicines. The Doha Declaration, in the wake of the TRIPS agreement, affirmed that the TRIPS Agreement did not and should not prevent Members from taking measures to protect public health.[24] The Doha Declaration affirmed that each Member had the right to grant compulsory licences and the freedom to determine the grounds upon which such licences were granted. The second "South Summit" of the G77 Group in Doha, Qatar, from 12 to 16 June 2005 noted in their Doha Declaration:

> 25. We believe that restrictive business practices and monopoly rights exercised by global corporations and other entities often impede innovation, flow of information and technology, and that a major component of good governance at the international level should be good corporate governance and corporate social responsibility, which should address issues such as anti-competitive practices of larger market players including transnational corporations; a fair balance between holders of intellectual property rights and public policy and societal goals; the need for access to knowledge, transfer of technology and FDI.[25]

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[21] Id., p. 16.

[22] Ibid.

[23] Id., p. 15.

[24] Doha Declaration on the TRIPS Agreement and Public Health. WTO Doc. WT/MIN(01)/DEC/2, 20 November 2001.

[25] Doha Declaration, South Summit, G77, G-77/SS/2005/1, para 25.

They also reaffirmed "the urgency…of recognizing the rights of local and indigenous communities that are holders of traditional knowledge, innovations and practices [and] of developing and implementing benefit-sharing mechanisms on mutually agreed terms for the use of such knowledge, innovations and practices."[26]

One will have noted the principle of fair and equitable benefit-sharing for the commercial use of TK and the principle of social equity.[27] The question arises for reflection: are principles such as these acknowledged in the policies and practices of business associations? To help us consider questions such as these, we consider next, the policies of one of the leading international business organizations, the International Chamber of Commerce.

7.3 The International Chamber of Commerce and Intellectual Property Issues

The ICC, which styles itself as "the world's business organization", has been particularly active on the defense and enforcement of intellectual property rights but gives no trace whatsoever of understanding the social, equity, or human rights dimensions of the issues facing large parts of humanity. The ICC was founded in 1919 in order to monitor policy decisions affecting international commerce. It does this by forming commissions. The ICC has a Commission on Intellectual and Industrial Property consisting of some 240 IP experts currently headed by David J. Koris General Counsel, Head of IP for Shell International B.V., of The Netherlands. The ICC Commission on Intellectual and Industrial Property brings together leading experts from all over the world to promote an environment favorable for the protection of intellectual property at the national, regional, and international levels. It believes that the protection of intellectual property stimulates international trade, creates a favorable climate for foreign direct investment, and encourages innovation and technology transfer. The ICC works closely with intergovernmental and non-governmental organizations involved in intellectual

[26] Id., para 26.

[27] In commenting on the 'Ruggie Principles' for business and human rights, discussed below, the Human RightsCouncil observed in relation to the duty of states to protect human rights that "Guidance to business enterprises on respecting human rights…should advise on appropriate methods, including human rights due diligence, and how to consider effectively the…specific challenges that may be faced by indigenous peoples." (8) The Council also noted, in relation to corporate responsibility to respect human rights, that "enterprises should respect the human rights of individuals belonging to specific groups or populations that require particular attention, where they may have adverse human rights impacts on them. In this connection, United Nations instruments have elaborated further on the rights of indigenous peoples…." (14) Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, John Ruggie Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework. Human Rights Council 17th Session, 21 March 2011, A/HRC/17/31.

property policy, such as the World Intellectual Property Organisation (WIPO), the WTO), the World Customs Organisation (WCO), the UN Economic Commission for Europe (UNECE), the International Association for the Protection of Industrial Property (AIPP) and the Licensing Executive Society (LES).

The ICC has published a study on *Intellectual Property: Powerhouse for Innovation and Economic Growth*[28] in the belief that a critical element in the fight against counterfeiting and piracy is to do a better job communicating what IP is and why it's such a valuable part of the economy. It considers that greater respect for IP in this generation and the next will go a long way toward guarding against IP theft. The IP study examines the effects of IP protection in five areas:

- IP protection benefits the economy in terms of GDP, employment, tax revenues and is of strategic importance. IPR also promotes foreign direct investment (FDI) and technology transfers in developed and developing countries.
- IP protection promotes innovation, increases funding for R&D, and helps firms realize more value from innovations.
- IP helps firms monetize their innovations, secure investment, grow market value, and develop new markets. Companies that use IPR generally succeed better and have a higher market value than those that do not.
- IP protection helps small and medium enterprises. SMEs that rely on IP of all sorts reported higher growth, income and employment than those that do not—in some cases as much as 20 % more.
- IP protection benefits consumers and society—providing consumers with innovative products and services in virtually every area of life, drives solutions to many of society's most import needs—from clean energy, reduced carbon emissions, and health care, and helps protect consumers from inferior and dangerous counterfeits.[29]

The ICC considered that just as adequate IP protection and enforcement mechanisms support the numerous societal, consumer and economic benefits, inadequate IP protection, and inadequate enforcement against IPR violations have the opposite effect. The ICC has adopted policy statements and engaged in international campaigns on a variety of issues including the following: ICC and Software Patents,[30] ICC Statement on trademarks, and the Internet,[31] Access and benefit-Sharing for Genetic Resources[32] and the fight against piracy and counterfeiting of intellectual property.[33]

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[28] 2 February, 2011. See http://www.iccwbo.org/policy/ip/id41147/index.html.

[29] Ibid.

[30] See http://www.iccwbo.org/id485/index.html. Accessed 1 May 2012.

[31] See http://www.iccwbo.org/id369/index.html. Accessed 1 May 2012.

[32] See http://www.timeshighereducation.co.uk/story.asp?storyCode=192267&sectioncode=26. Accessed 1 May 2012.

[33] See http://www.iccbo.org.

On the occasion of the annual G8 summits, the ICC has highlighted in particular the issue of product counterfeiting and copyright piracy. Thus, on the occasion of the G8 Heiligendamm Summit of 6–8 June, 2007, the ICC submitted a statement, 'Business and the Global Economy' that advanced the following positions on "Intellectual property and innovation":

- ICC welcomed the fact that product counterfeiting and copyright piracy had become a regular topic on the agenda of the annual G8 Summit meetings. Counterfeiting and piracy had become a global epidemic. Virtually no sector of industry was untouched by this illegal—and often dangerous—activity. The internet was being used for massive copyright theft.
- ICC was deeply disturbed by this rapidly spreading phenomenon since it believed strongly that the protection of intellectual property was a vital element in encouraging research and innovation, international trade and investment, and sound economic growth and development.
- Governments should give higher priority to fighting counterfeiting and piracy by gathering more accurate data on the extent of the problem.
- ICC supported the recent promotion by the World Customs Organization of a new framework of standards on border control.[34]

In addition, ICC presented to the same summit a specific Statement on protecting intellectual property with very much the same content.[35] The ICC statement argued that "Present and future competitiveness in the "knowledge economy" demands immediate attention to the problem of intellectual property theft." It noted "myriad adverse costs to social welfare and economic development associated with the growth of counterfeiting and piracy" that "hinder governments' ongoing efforts to improve social welfare and stimulate economic development." This illicit activity had "impacts on employment, consumer health and safety, technology transfer, tax revenues and public finance, law enforcement and organized criminal activities." It urged the establishment of legal precedents, including civil and criminal liability for landlords of these counterfeit markets, the improvement of the legal framework governing free trade zones so as to eliminate illegal pirate activity in these areas and the enhancement of measures that harmonize policies and practices to protect IPR in the area of border control and customs. It called for governments to empower the G8 IPR Working Group to initiate a global dialog aimed at elaborating instruments or new standards or other form of international agreements that can be put in place to "further tackle threats to IP rights."[36] In this regard, it called attention to the WTO TRIPs Agreement Article 61, which obliges members *"to provide for criminal procedures and penalties to be applied at least in cases of*

[34] The ICC has presented similar statements to the annual G8 Summits.

[35] ICC, http://www.iccwbo.org/uploadedFiles/BASCAP/Pages/Statement.pdf.

[36] Statement on protecting intellectual property, Presented to the 2007 G8 Summit, Heiligendamm, http://www.iccwbo.org/uploadedFiles/BASCAP/Pages/Statement.pdf.

willful trade mark counterfeiting or copyright piracy on a commercial scale."[37] It recognized "that the private sector has responsibilities to institute effective measures against counterfeiting and piracy" called attention to the ICC's efforts in concert with the global business community, to develop a model IP compliance guideline that provides detailed information to businesses on what practical steps they can take to improve their compliance with IP laws. There was not a word about the human rights or human security dimensions and, again, not a word about the human costs of the application of many international norms on intellectual property, particularly those affecting the rights to life, food, health, and education

In relation to the WIPO's ongoing Development Agenda, the ICC has commented that "WIPO should not waste time and resources by reinventing the wheel but should use and build on existing work by other organizations." It felt that work has been or was being done by other organizations, both in the public and the private sector, on several of the issues addressed in the Development agenda proposals and that it was "more efficient for WIPO and its member states to take stock of such work first to see if existing mechanisms are sufficient before deciding to start a separate initiative in the same area."[38] It considered that past norm-setting activities in the IP system "already took into account different levels of development, and that future norm-setting activities could build on the experience drawn from these. Existing multilateral agreements contain built-in flexibilities which enable contracting parties to implement minimum standards in a manner befitting their national environment."[39]

The absence of the human security dimension is also evident on the part of the US Chamber of Commerce. Following a Global Intellectual Property ("IP") Protection and Innovation Forum held in Beijing on 27 and 28 March 2007, the US Chamber of Commerce adopted a Statement declaring that it had 'observed a growing global consensus on the following principles and best practices in fostering innovation and IPR protection and enforcement':

- Governments can best stimulate innovation by supporting strong basic educational training and a technologically proficient workforce, funding basic scientific research and making that research available for commercialization by industry and providing tax and related incentives for companies to invest in R&D.
- Market competition by entrepreneurs and enterprises is essential for sustained innovation and economic growth. To that end, governments should ensure that competition laws and related regimes are applied in a manner that promotes efficiency and consumer welfare and does not restrict the commercial

[37] Ibid.

[38] ICC Commission on Intellectual Property 2007. 1.

[39] Id., 4.

exploitation of IPRs, or deter companies—whether domestic and foreign—from competing vigorously in the marketplace.

- Governments can play a critical role in fostering innovation by facilitating access to capital through development of sound and efficient financial and capital markets and dissemination of basic business and management know-how among enterprises, both of which are important to promote economies of scale in production and distribution.
- Weaknesses in IPR protection, in addition to undermining innovation, also threaten market order, free and fair competition, and tax receipts of governments, thereby undermining the public access to social services. Organized crime and the underground economy thrive in the absence of adequate IPR enforcement and a concerted effort to address private and public corruption.
- Strengthening of IPR laws and enforcement is an essential task for all governments. IPR laws should reflect international norms and be consistent with the standards agreed by nations belonging to the *World Intellectual Property Forum*, World Customs Organization, the Organization for Economic Cooperation and Development, Interpol, and the World Trade Organization (WTO). Effective enforcement requires effective deterrence of illegal conduct, which in turn requires allocation of adequate government enforcement resources and sustained commitment.
- There exists a close link between IPR protection and consumer health and safety; there is a consequent need for governments to provide adequate resources for enforcement (criminal, administrative and civil).
- The increasing globalization of production and trade makes it vital that governments strengthen efforts to harmonize their laws and avoid divergent or conflicting enforcement practices and remedies. Governments should cooperate in all aspects of IPR protection, including education, awareness-raising, and enforcement.
- As efforts to deal with 'hard' infringements in retail and wholesale markets are strengthened, copyright piracy and trademark counterfeiting continue to shift further to the online environment. This newest battlefront for IP protection—the internet—increases the urgency for countries to update relevant laws, increase enforcement capacity, and develop better structures for inter-governmental and public–private sector collaboration.[40]

Not a word was said about the human dimensions of these issues. This makes it particularly interesting to consider whether the much discussed 'Ruggie Principles' on Business and Human Rights have anything to offer to the IP field.

[40] US Chamber of Commerce 2011, "Statement of the U.S. Chamber of Commerce Upon The Conclusion Of The Global Intellectual Property Protection and Innovation Forum," Available at Chamber website: http://www.uschamber.com/press/releases/2007/march/statement-us-chamber-comme. Consulted on 8 September, 2011. Accessed on 1 November 2011.

7.4 The 'Ruggie Principles' on Business and Human Rights

On 21 March 2011, Professor John Ruggie, Special Representative of the UN Secretary-General on the issue of human rights and transnational corporations and other business enterprises submitted to the UN Human Rights Council his final report containing a set of Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework which were endorsed by the UN Human Rights Council on 16 June, 2011.[41] The Guiding Principles, whatever their other merits, have little relevance to the human rights responsibilities of business enterprises when it comes to the adverse impact on fundamental human rights of the application of international laws on intellectual property.

The Guiding Principles rest on three pillars: the state duty to protect against human rights abuses from third parties, including business, through policies, regulation, and adjudication; the corporate responsibility to respect human rights, implementing due diligence to avoid infringement and address adverse impacts; access to effective remedy for victims of human rights abuses. Principle 11 provides that Business enterprises should respect human rights. This means that they should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved. Principle 12 adds that the responsibility of business enterprises to respect human rights refers to internationally recognized human rights—understood, at a minimum, as those expressed in the International Bill of Human Rights and the principles concerning fundamental rights set out in the ILO's Declaration on Fundamental Principles and Rights at Work.

According to Principle 13, the responsibility to respect human rights requires that business enterprises avoid causing or contributing to adverse human rights impacts through their own activities and address such impact when they occur. Business enterprises should also seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.

The responsibility of business enterprises to respect human rights applies to all enterprises regardless of their size, sector, operational context, ownership, and structure (Principle 14). In order to meet their responsibility to respect human rights, business enterprises should have in place appropriate policies and processes, including a policy commitment to meet their responsibility to respect human rights; a human rights due diligence to identify, prevent, mitigate, and account for how they address their impacts on human rights, and processes to enable the remediation of any adverse human rights impacts they cause or to which they contribute (Principle 15).

As mentioned above, the Ruggie Principles shed little light on the responsibilities of IBOs regarding the equitable application of international intellectual property laws.

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[41] UN Human Rights Council 2011, A/HRC/17/31.

7.5 The OECD Guidelines

The Organization for Economic Cooperation and Development (OECD) has also issued *Guidelines for Multinational Enterprises* for the responsible conduct of multinational enterprises. The updated Guidelines in 2011 included a chapter on human rights.[42] It has recommended that:

> Enterprises should take fully into account established policies in the countries in which they operate, and consider the views of other stakeholders. In this regard:
>
> A. Enterprises should:
> 1. Contribute to economic, environmental and social progress with a view to achieving sustainable development.
> 2. Respect the internationally recognized human rights of those affected by their activities.[43]

In May 2011, OECD ministers announced the adoption of updated Guidelines on human rights abuse and company responsibility for their supply chains. The *Guidelines* established certain general principles including that: (1) Firms should respect human rights in every country in which they operate; (2) Obeying domestic laws is the first obligation of enterprises; and (3) Governments have the right to prescribe the conditions under which multinational enterprises operate within their jurisdictions, subject to international law. It advanced some general policies that enterprises should follow including: (1) Contributing to economic, environmental and social progress with a view to achieving sustainable development; (2) respecting internationally recognized human rights of those affected by their activities; (3) refraining from seeking or accepting exemptions not envisaged in the statutory or regulatory framework related to human rights, environmental, health, safety, labor, taxation, financial incentives, or other issues; (4) carrying out risk-based due diligence to identify, prevent and mitigate actual and potential adverse impacts though the nature and extent of due diligence depended on the circumstances of a particular situation; and (5) engaging with relevant stakeholders in order to provide meaningful opportunities for their views to be taken into account in relation to planning and decision making for projects or other activities that may significantly impact local communities. In a chapter on "Human Rights" the *Guidelines* advocate as follows:

> States have the duty to protect human rights. Enterprises should, within the framework of internationally recognized human rights, the international human rights obligations of the countries in which they operate as well as relevant domestic laws and regulations:
>
> 1. Respect human rights, which mean they should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved.
> 2. Within the context of their own activities, avoid causing or contributing to adverse human rights impacts and address such impacts when they occur.

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[42] OECD Guidelines for Multinational Enterprises 2011.

[43] Id., 19.

3. Seek ways to prevent or mitigate adverse human rights impacts that are directly linked to their business operations, products or services by a business relationship, even if they do not contribute to those impacts.
4. Have a policy commitment to respect human rights.
5. Carry out human rights due diligence as appropriate to their size, the nature and context of operations and the severity of the risks of adverse human rights impacts.
6. Provide for or cooperate through legitimate processes in the remediation of adverse human rights impacts where they identify that they have caused or contributed to these impacts.[44]

One will notice the emphasis on prevention of human rights abuses. Commentary on para 5 in the *Guidelines* has noted that the due diligence process "entails assessing actual and potential human rights impacts, integrating and acting upon the findings, tracking responses as well as communicating how impacts are addressed." Human rights due diligence can be included within broader enterprise risk management systems "provided that it goes beyond simply identifying and managing material risks to the enterprise itself to include the risks to rights-holders." It was to be an ongoing exercise, "recognising that human rights risks may change over time as the enterprise's operations and operating context evolve."[45]

Intellectual property is specifically mentioned in relation to the environment and to technology transfer. Enterprises were called upon to "take due account of the need to protect the environment, public health and safety, and generally to conduct their activities in a manner contributing to the wider goal of sustainable development."[46] Taking into account concerns about cost, business confidentiality, and the protection of intellectual property rights enterprises were asked to:

a) Provide the public and workers with adequate, measureable and verifiable (where applicable) and timely information on the potential environment, health and safety impacts of the activities of the enterprise, which could include reporting on progress in improving environmental performance; and
b) Engage in adequate and timely communication and consultation with the communities directly affected by the environmental, health and safety policies of the enterprise and by their implementation.

They were also called upon to adopt, "where practicable in the course of their business activities, practices that permit the transfer and rapid diffusion of technologies and know-how, with due regard to the protection of intellectual property rights." When appropriate, enterprises were asked to "perform science and technology development work in host countries to address local market needs" and when granting licenses for the use of intellectual property rights or when otherwise transferring technology, to "do so on reasonable terms and conditions and in a manner that contributes to the long term sustainable development prospects of the host country."[47]

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[44] Id., 31.

[45] Id., 34.

[46] Id., 55.

[47] Ibid.

7.6 IBOs and Human Rights

As was seen in Chap. 6, the human rights challenges in the application of international intellectual property norms are of a different order and require quite a different approach from that of the 'Ruggie Principles' and the OECD guidelines. Chapter 6 offered some important insights into the need for the modernization of the international intellectual property regime, building in elements of equity and human rights and on the challenges facing the same. What specific roles and responsibilities do international business organizations have in this context?

In the last three decades, the traditional role of the state as rule maker and of international business organizations as rule-takers has changed. The firm was to play within the rules set by states for the making of profit. With globalization states face increasing difficulties in providing businesses with a functional and reliable institutional framework for competition. Moreover, business actors see themselves confronted with the expectations of society that increasingly see them not merely as rule-takers. They are expected to take on a high degree of moral responsibility for moral issues such as corruption, environmental protection, curbing climate change, establishing labor standards, coping with child labor, improving labor and safety conditions, and catering for poor and weak communities. It could be said, therefore, that they are political actors. They are increasingly 'rule makers' as they engage with states and civil society towards meeting these challenges. As they participate in rule making and deliberations about 'rule-finding' they acquire a participatory role in framing rules of the game.

The political role of international business organizations in international affairs is a nascent field of study.[48] Some scholars take a political science approach and discuss IBOs in terms of 'corporate citizens'. How can IBOs participate in the processes of rule making? Others have taken more philosophical approaches, such as the Habermasian,[49] and consider issues of legitimacy in the context of governance and rule making. Other scholars have adopted 'rational-choice' approaches which conceptualize the political role of companies by analogy to their role in value creation. In this view, companies do not abandon the logic of value creation, but participate in rule-making and rule-finding to improve the deficient rules of the game. The emphasis on IBO's as 'corporate citizens' participating in rule making and finding is a controversial one, which arguably has no precedent.

As John Morrison has emphasized, international businesses increasingly faces human rights challenges in their daily operations.[50] Problems do not face IBOs simply along the international value chain of production. Companies are confronted with more political issues of "administration" when they decide to abandon a

[48] Morrison 2011.

[49] "Habermasian" refers to the writings of Jurgen Habermas of the Frankfurter School of Philosophers who advanced a communications theory of social relations.

[50] Morrison 2011.

location, for example.[51] There is a growing web of international standards reflecting the concerns over human rights responsibilities of IBOs: ISO 9001 (consumer satisfaction and quality management); ISO 14001 (environmental management systems); Forest Stewardship Council (sustainable resource management); and SA8000.

The general area of corporate social responsibility of IBOS in relation to international human rights law was comprehensively explored by Stephen Ratner who has written on the expansion of international law into areas of regulation, including human rights, and the deepening of international law through erosion of the notion of *domaine reservé*, that is, the area seen as exclusively within the domestic jurisdiction of states.[52] With regard to the exclusive prerogative of states to regulate business enterprises by imbuing them with duties to respect human rights, Ratner has stated that "it bears brief mention that international law doctrine poses no significant impediment to recognition of duties beyond those of states."[53] It has been accepted that non-state entities may bear forms of international personality. The UN has for a long time been recognized as having the capacity to bring claims against states for violations of obligations toward the UN. Ratner surveyed the emerging practice of states in relation to the human rights obligations of private enterprises. During the Nuremberg Trials after WWI, in three cases, *United States v. Flick*,[54] *United States v. Krauch* (the *I.G. Farben Case*),[55] and *United States v. Krupp*,[56] the leaders of large German industries were prosecuted for crimes

[51] Morrison 2011, 3.

[52] Ratner 2001, 443–545, See also: Mares 2004.

[53] Ratner 2001, Ibid., 475.

[54] Friedrich Flick was a prominent steel industrialist who was charged, along "with five associates, variously, on several counts: (1) the forcible deportation of foreign nationals, concentration camp inmates and prisoners of war to forced labor in Germany and specifically in Flick mines and factories; (2) the seizure of plants and property in France and the USSR; (3) crimes against humanity in the persecution of Jews during the prewar years 1936–39; (4) knowing participation in persecutions and other atrocities perpetrated by the Nazi SS." Two of the defendants had taken the steps in one instance to secure a contract and, such "active steps" deprived them of a defense of necessity. Two defendants were convicted on the charge of economic plunder, and two on charge (4) above. Taylor (1949), "The Nuremberg War Crimes Trials." International Conciliation, No. 450, April 1949. Available at http://www.ess.uwe.ac.uk/genocide/cntrl10_trials.htm#Taylor (University of West Anglia, Bristol, UK). Accessed on 3 June 2012.

[55] The 24 defendants were all directors or officers of the German conglomerate, I.G.Farbenindustrie A.G., and the charges were "(1) planning and waging aggressive war; (2) conspiracy to that end; (3) enslavement and mistreatment of prisoners of war, deportees, and concentration camp inmates." Thirteen were found guilty of the commission of offenses of spoliation or employment of slave labour. Taylor 2919, Id.

[56] Alfried Krupp was an armaments manufacturer who was indicted along with another eleven officers of the firm. They were variously charged with "planning and waging aggressive war, with conspiracy to commit crimes against the peace, having participated in the forcible deportation of foreign nationals, concentration camp inmates and prisoners of war to forced labor, and economic plunder. "The Krupp firm and the convicted defendants were found guilty of constant, widespread, and flagrant violations of the laws of war relating o the employment of prisoners of war, eager participation in the forced labour procurement program, and shocking mistreatment of the prisoners, deportees, and concentration camp inmates who toiled in the Krupp plants." Id., 313.

against peace (i.e., initiating World War II), war crimes, and crimes against humanity. Though individuals were being tried "the courts …nonetheless routinely spoke in terms of corporate responsibilities."[57]

The International Labour Organization has adopted conventions on labor laws, which collectively "assume special significance with respect to the possibility of duties on corporations in the human rights area."[58] International Environmental Law has advanced the "polluter pays principle" as state responsibility may not be sufficient for repairing harm done. Ratner cites a number of treaties that collectively impose an international standard of liability on the corporation. Indeed, one key environmental treaty recognizes some pollution damage as a *bona fide* international crime.[59] States have also developed international law creating binding obligations on corporations with respect to discrete economic activities. For example, in 1997, the OECD states concluded the Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. During the Cold War the members of the UN used the General Assembly and the Security Council to recommend or impose economic sanctions against a variety of states, or, on occasion, insurgent groups, which had implications for the conduct of private business organizations. The Sanctions regime for Iraq after the 1991 Gulf War "had placed strict requirements on corporations regarding their purchases of oil from Iraq."[60] European Union practice has created "a vast body of legal obligations which apply directly to corporate entities." The European Court of Justice has not only imposed legal obligations on companies but also human rights obligations in relation to non-discrimination.[61] Treaty monitoring bodies have also imputed responsibilities to private enterprises. The CESCR has interpreted an individual's right to food under Article 11 of that Covenant in terms of responsibilities for companies.[62] Soft-law provisions, such as the Ruggie Guidelines and the OECD Guidelines have also targeted their recommendations at private companies. For Ratner "if states and international organizations can accept rights and duties of corporations in some areas, there is no theoretical bar to recognizing duties more broadly, including

[57] Ratner 2001, 477.

[58] Id., 479.

[59] Id., 480. The treaties he cites are the 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy, the 1962 Brussels Convention on the Liability of Operators of Nuclear Ships, the 1963 Vienna Convention on Civil Liability for Nuclear Damage, the 1969 International Convention on Civil Liability for Oil Pollution Damage and the 1984 Protocol thereto, the 1971 Brussels Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material, and the 1976 Convention on Civil Liability for Oil Pollution Damage Resulting from Exploration for and Exploitation of Seabed Mineral Resources.

[60] Id., 484.

[61] Ibid.

[62] Id., 486.

duties in the human rights area."[63] He argued that his theory for developing a model of enterprise liability:

> is based on an inductive approach that reflects the actual operations of business enterprises. It appraises the ways in which corporations might affect the human dignity of individuals and posits a theory that is sensitive to the corporations' diverse structures and modes of operating within a particular country. This theory asserts that corporate duties are a function of four clusters of issues: the corporation's relationship with the government, its nexus to affected populations, the particular human right at issue, and the place of individuals violating human rights within the corporate structure.[64]

In arguing through his theory, Ratner sought to "differentiate between those sorts of rights that the corporation can directly infringe and those that only the government can directly infringe, for example, between the right against cruel, inhuman, or degrading treatment and the right to cross-examination in criminal trials."[65] But there were nevertheless a large number of rights that were capable of infringement by both states and non-state actors. At minimum, he argued, "as long as the state can violate the right, the corporation has a duty not to be complicit in such conduct."[66] After a lengthy consideration of doctrinal and practical aspects of his theory, Ratner advanced the following propositions:

(1) All other things being equal, the corporation's duties to protect human rights increase as a function of its ties to the government. If the corporation receives requests from the government leading to violations, knowingly and substantially aids and abets governmental abuses, carries out governmental functions and causes abuses, or, in some circumstances, allows governmental actors to commit them, its responsibility flows from that of the state.
(2) All other things being equal, the corporation's duties to individuals increase as a function of its associative ties to them. These connections may, for example, emanate from legal ties (as with employees), physical proximity, or possession of de facto control over a particular piece of territory. As these connections dissipate, the duties do as well. For certain severe abuses, the corporation's duties will not turn on such ties.
(3) In situations not involving cooperation with the government in its own human rights violations, the enterprise's duties turn on a balancing of the right at issue with the corporation's interests (and in some cases, rights), except for certain non-derogable human rights. The nexus factor will need to be taken into account in determining any derivative duties. The company's derivative duties will not extend to duties to promote observance of the rights generally.
(4) The attribution of responsibility within the corporate structure depends upon the degree of control exercised by the corporation over the agents involved in the abuses, not simply financial or contractual links with them.
(5) The extent to which the corporation must have some fault to be responsible will depend upon the particular sanction envisioned. It is not a required element of responsibility with respect to corporate agents acting under corporate authority, but should be an element regarding the duty of the corporation to prevent violations by actors not connected with it.[67]

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[63] Id., 488.

[64] Id., 496.

[65] Id., 511.

[66] Id., 512.

[67] Id., 525.

He noted that his theory ultimately resulted in two sets of duties upon the corporation. First, were the complicity-based duties that the corporation not involve itself in illegal conduct by the government; these duties rise, in those circumstances in which the corporation's links to the government are akin to those in the doctrine of superior responsibility, to a duty to prevent abuses by governmental forces. For these duties, the factor of the nexus affected population's drops out. Second, were a set of duties on the corporation not to infringe directly on the human rights of those with whom it enjoys certain ties, with the possibility of greater duties depending upon the scope.[68]

The prospects for effectively increasing IBO attention and respect for international human rights standards are heightened by a number of developments in the field of international law heralded by the advent of the human rights movement and resulting conventions. The protection of human rights from violations by non-state actors, notably individuals, "has been approved and applied by human rights courts and tribunals", according to Javaid Rehman..[69] This "horizontal or positive application of law" was intended to provide "a comprehensive protection of human rights." State liability would be incurred not only in situations where the State has control over the actions of the non-state actor, but also:

> …and most importantly, within the context of an international and regional human rights treaty-based regime, State liability would also extend to instances where the State has failed in its obligations to 'secure' or to 'ensure' the right contained in the instruments by not rendering unlawful actions by private persons that violate them.[70]

The European Court of Human Rights' jurisprudence has established State liability where criminal law failed to provide means whereby a sexual attack upon a mentally disabled women could be the subject of criminal prosecution, or instances where the law permitted an employer to dismiss his employee for refusal to join a trade union, or where the State failed in providing effective protection to a nine-year old child from beatings from his stepfather within a family setting.[71] Such views notes Rehman, consolidated upon case law that had emerged in the Inter-American and African human rights systems. In the *Velasquez Rodriguez case*, the Inter-American Court of Human Rights noted:

> An illegal act which violates human rights and which is directly not imputable to a State (for example, because it is the act of a private person or because the person involved has

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[68] Id., 526.

[69] Rehman 2010, 13.

[70] Ibid. Article 2(1) of the ICCPR provides that "Each State Party to the present Covenant undertakes to respect and to ensure to all individuals within its territory and subject to its jurisdiction the rights recognized in the present Covenant." Article 2(1) of the ICESCR provides that State parties commit themselves to undertaking steps "with a view to achieving rights recognized in the ICESCR.

[71] Rehman 2010, 13. See, respectively, *X and Y v. The Netherlands*, Application No. 8975/80 (Judgement of 26 March 1985); *Young, James and Webster v. the United Kingdom* (1982) 4 E.H.R.R. 38; *A. v. United Kingdom*, Application No. 25599/94 (Judgement of 23 September 1998), footnotes 55, 56, 57 in Rehman, Id., 13.

> not been identified) can lead to international responsibility of the State, not because of the act itself, but because of the lack of diligence to prevent the violation to or to respond to it as required by the convention.[72]

In the African system, the African Commission, pursuant to the African Charter on Human and People's Rights of 1981, has held that a State that neglects to ensure rights provided under the Charter thereby violates the provisions of the Charter "even if the State or its agents are not the immediate cause of violation [on the basis] that the government had responsibility to secure the safety and liberty of its citizens, and to conduct investigations into murders."[73] It thereby established that States must undertake positive steps to ensure protection from human rights violations that take place in the confines of private or personal life. The break-down of the private/public divide is further extended by "the recognition by international human rights instruments of the duties upon individuals or other non-state actors."[74] Rehman has pointed out that human rights instruments are moving toward a participatory approach that involves non-governmental actors and takes the views and life experiences of the affected as the principal point of departure."[75]

The post-war human rights treaties have had an important impact on the character of international law, according to Steiner, Alston and Goodman, in that they have changed the relationship between states and international law, as well as each other which has "influenced some basic concepts and doctrines, such as the vital doctrine of sources…"[76] The basic duties of states now run towards its internal social and political order but "other states—independently or as members of one or another of the many international human rights organizations—become involved in the process of attempting to assure the observance by delinquent states of those duties."[77] In relation to the traditional view of customary international law as being the product of state practice (*usus*) undertaken with the necessary *opinio juris*, they note the participation of a multitude of actors-States, non-governmental organizations, and other non-state actors—who contributed to discussions on what 'is' and what "ought to be". They ask "Do those who understand the UDHR, or important parts of it, as authoritative international law, as much so as a treaty, rely on the traditional criteria of customary law to support their understanding? Do General Assembly Resolutions approved with large majorities occupy a special status? Are different

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[72] Velasquez Rodrigez case Judgement of 29 July 1988, Inter. Am. Ct. H.R. (Ser. C) No. 4 (1988), para 172. See also *Commission Nationale des Droits de l'Homme et des Liberties v. Chad*, Communication No. 74/92, in the African Human Rights system.

[73] Rehman 2010, 14.

[74] Id., 14.

[75] Id., 14–15.

[76] Steinert and Alston 2007, 160.

[77] Id., 161.

criteria for the formation of custom developing, and become widely accepted?"[78] Anthea Roberts has noted the "deductive process" for custom formation today:

> [T]hat begins with general statements of rules rather than particular instances of practice. This approach emphasizes *opinio juris* rather than state practice because it relies primarily on statements rather than actions. Modern custom can develop quickly because it is deduced from multilateral treaties and declarations by international fora such as the General Assembly, which can declare existing customs, crystallize emerging customs, and generate customs.[79]

Modern custom derives norms primarily from abstract statements of *opinio juris*—working from theory to practice. While the ICJ has held that only *lex lata* (what the law is) can contribute to the formation of custom, "modern custom seems to be based on normative statements of *lex ferenda* [what the law should be] cloaked as *lex lata*."[80] Dinah Shelton has noted that such norms are increasingly found, in the present complex international system, in soft-law instruments. Moreover, non-state actors increasingly contribute to elaborating such norms. A case in point is the drafting of the International Bill of Human Rights, which benefited from the inclusion of norms adopted by non-state actors. They were included "because they are usually intended to impact on state behavior or to circumvent state policies. In addition, with increasing globalization, transnational entities that make their own rules prepare and enter into normative instruments that look much the same as state-adopted norms."[81] While international law is created through treaty and custom and soft law is not legally binding *per se*, Shelton has noted that "the line between law and non-law may appear blurred as states may comply with rules and principles contained in soft-law instruments as well. Thus, "soft law instruments may be increasingly utilized because it responds to the needs of the new international system." Indeed, soft law:

> [A]llows for more active participation of non-state actors. Where states once created and applied international norms through processes that lacked transparency, participation and accountability, non-state actors have become a significant source of power alongside, if not outside, state control.[82]

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[78] Ibid.

[79] Roberts 2001, "Traditional and Modern Approaches to Customary International Law: A Reconciliation," 95 American Journal of International Law, 757, in Steinert et al. 2007, 162–165. Robert sites the Military and Paramilitary Activities in and against Nicaragua case, which "paid lip service to the traditional test for custom but derived customs of non-use of force and non-intervention from statements such as General Assembly resolutions. The Court did not make a serious inquiry into state practice, holding that it was sufficient for conduct to be generally consistent with statement of rules, provided that instances of inconsistent practice had been treated as breaches of the rule concerned rather than as generating a new rule." (Id., quoted in Steinert et al., Ibid., 163). See Case Concerning Military and Paramilitary Activities in and Against Nicaragua (Nicaragua v. United States of America) Merits. Judgment of 27 June 1986. International Court of Justice, Reports of Judgments, Advisory Opinions and Orders. http://www.icj-cij.org/docket/files/70/6503.pdf.

[80] Ibid., 163.

[81] Shelton 2000, 165.

[82] Id., 167.

The norm-creating impact of soft-law and non-state codes such as the OECD Guidelines, the Ruggie Principles and the SA8000 standards, are therefore not to be underestimated. However, they all need to be reinforced when it comes to the equitable application of international intellectual property laws.

7.7 Elements for a Set of Principles on Business, Intellectual Property and Human Rights

Mindful of the foregoing discussion of the human rights dimensions of intellectual property issues in the preceding chapters and of the responsibilities of IBOs in promoting and respecting fundamental human rights, we would submit that there is urgent need for an additional set of Principles for the guidance of business enterprises with regard to the social, equitable, and the human rights dimensions of intellectual property issues.

In its "World Intellectual Property Declaration" the Policy Advisory Commission of the WIPO had recognized that the term "intellectual property rights" meant in essence those rights enshrined in Article 27 of the Universal Declaration of Human Rights, adopted by the UN in 1948.[83] The World Intellectual Property Declaration noted that intellectual property is relevant to, *inter alia*, the right to education and to addressing problems faced by developing countries. It also noted that intellectual property rights "are an essential and integral part of any legal framework that intends to regulate on an equitable basis the civil behavior of creators and users, and so provide universal protection for the interests of all."[84] It recalled Article 29 of the Universal Declaration of Human Rights, which recognized that everyone has duties to the community in which he or she lives and consequently it was held that intellectual property rights should be developed to provide an appropriate balance between the protection of creators and the interests of users of intellectual property.

Adaptation of the intellectual property regime to suit public policy imperatives is much needed. In a statement titled "Public Policy on Intellectual Property" on its website related in relation to intellectual property and development, the WIPO Secretariat states that while IP is good for economic growth, "There is not a single, uniform approach to IP that could be cut and pasted from one country to another**…**"[85] While there are harmonized rules and processes, "WIPO Member States can still resort to existing flexibilities so as to promote the implementation of public policies and encourage the strategic use of IP." Most of these flexibilities

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[83] Policy Advisory Commission, "World Intellectual Property Declaration," 26 June 2000. WIPO Publication No. 836(E).

[84] Ibid.

[85] WIPO 2012, "Public Policy on IP," http://www.wipo.int/ip-development/en/policy/ip_policy.html.

were developed in consultation with members and "All of them suggest a new approach to IP, by means of what could be designated as "creative thinking." Such flexibilities themselves "should not be seen as a straightjacket, a format that could horizontally be applied to all developing countries. Some of them are convenient for the purpose of special public policies but not for others, and therefore they would not be of interest to Members that might have elected different priorities."[86]

Taking the view of international human rights as a "global public good," a set of principles to guide business on the human rights dimensions of intellectual property might include the following:

(1) The application of international intellectual property norms should be respectful of fundamental human rights such as the right to life, the right to health, to food, and to education.
(2) In asserting intellectual property rights business should be mindful of a duty of solidarity to humanity as regards the implementation of the right to development.
(3) The principle of equity should be a central pillar of the future international intellectual property regime.
(4) Businesses should be respectful of TK in different parts of the world.
(5) Businesses should respect the principle of fair and equitable benefit-sharing for the commercial use of all innovations and TK in particular;
(6) Businesses should respect customary uses of TK and associated biological resources: customary uses shall not be restrained through legal protection of TK from non-customary uses by outsiders.

7.8 Conclusion

This chapter has highlighted the engagement of a leading business alliance, the ICC, in protecting and defending intellectual property rights. It was seen that thus far there has been a reluctance to 'upset the IP apple cart', that is little or no interest displayed in situations in which the application of international norms on intellectual property can have an adverse impact on the realization of basic human rights such as the rights to food, health, or education. The ICC has argued that the existing IP regime is sufficient but has not recognized that human security concerns, which are grounded in human rights and the right to development, need to be incorporated into that regime.

Our review of the 'Ruggie Principles' on Business and Human Rights concluded that whatever other value they may have elsewhere, they have little relevance to the intellectual property area. A review of the human rights literature in Chap. 5, noted the adverse impact of the application of intellectual property norms on basic human rights. This chapter has thus concluded that additional guiding principles are needed in this area and offered some initial thoughts toward the development of such a set of principles. It was submitted that the application of international intellectual property norms should be respectful of fundamental

[86] Id.

human rights such as the right to life, the right to health, to food, and to education. In asserting intellectual property rights, business should be mindful of a duty of solidarity to humanity as regards the implementation of the right to development.

In this vein, IBOs should be respectful of traditional knowledge in different parts of the world. This is an area in need of urgent study and it is commended to the attention of the community of international and human rights lawyers. In relation to TK of indigenous peoples, discussed in the next chapter, the ICC has argued for a cautious approach to international negotiations aimed at creating a *sui generis* system. While the ICC supports major objectives of the Convention on Biological Diversity—such as creating conditions to facilitate access to genetic resources for uses by other Parties; access through prior informed consent from the Party—it has argued, for example, that "disclosure of source or origin in patent applications does not help to achieve these objectives or make the measures work better."[87] The ICC has stated that:

> Business shares a common interest with indigenous and local communities in greater transparency, predictability, and a balance of benefits against costs of proposed ABS regulations at both the national and international level. Business underscores its continuing commitment to commercialization of GR and associated traditional knowledge (TK) only with the prior informed consent (PIC) of relevant stakeholders and on mutually agreed terms (MAT).[88]

It has argued that in the context of CBD objectives achieving these goals requires using the existing IP regime.

The ICC was concerned with obligations undertaken by parties to the Nagoya Protocol to the CBD and it has undertaken a consultation in December 2011 with its members on the same. A core objective of the Protocol, concluded in 2010, is the "fair and equitable sharing of benefits arising from the utilization of genetic resources".[89] The Protocol recognized, *inter alia*, the "importance of genetic resources to food security, public health, biodiversity conservation, and the mitigation of and adaptation to climate change," the potential role of access and benefit-sharing to contribute to the conservation and sustainable use of biological diversity, poverty eradication and environmental sustainability and thereby contributing to achieving the Millennium Development Goals, and "the importance of promoting equity and fairness in negotiation of mutually agreed terms between

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[87] ICC 2011, "Patent disclosure requirements relating to genetic resources: will they work?" Document No. 450/1065—9 May 2011, 1. Available at http://www.iccwbo.org. Accessed on 3 June 2012.

[88] ICC Policy Brief 2009, "Nature, traditional knowledge and capacity building," Submission to the Secretariat of the Convention on Biological Diversity for the 8th Ad Hoc Open Ended Working Group on Access and Benefit-Sharing, Montreal, 9–15 November 2009, Document No. 450/1052 and No. 213/72—18 September 2009.

[89] Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity, 29 October 2010. Available at http://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf. Accessed on 1 June 2012.

providers and users of genetic resources."[90] Under Article 3, "This Protocol shall apply to genetic resources within the scope of Article 15 of the Convention and to the benefits arising from the utilization of such resources. This Protocol shall also apply to traditional knowledge associated with genetic resources within the scope of the Convention and to the benefits arising from the utilization of such knowledge." Article 5 stipulates that "In accordance with domestic law, each Party shall take measures, as appropriate, with the aim of ensuring that traditional knowledge associated with genetic resources that is held by indigenous and local communities is accessed with the prior and informed consent or approval and involvement of these indigenous and local communities, and that mutually agreed terms have been established."[91] Article 12 provides that in implementing their obligations under the Protocol, Parties shall (1) take into consideration indigenous and local communities' customary laws, community protocols and procedures, as applicable, with respect to traditional knowledge associated with genetic resources, (2) involve indigenous and local communities in establishing mechanisms to inform potential users of traditional knowledge associated with genetic resources about their obligations, (3) support, as appropriate, the development by indigenous and local communities, including women within these communities, of community protocols in relation to access to traditional knowledge associated with genetic resources and the fair and equitable sharing of benefits arising out of the utilization of such knowledge, minimum requirements for mutually agreed terms to secure the fair and equitable sharing of benefits arising from the utilization of traditional knowledge associated with genetic resources, and model contractual clauses for benefit-sharing arising from the utilization of traditional knowledge associated with genetic resources, and (4) as far as possible, not restrict the customary use and exchange of genetic resources and associated traditional knowledge within and amongst indigenous and local communities in accordance with the objectives of the Convention. Article 15 on domestic legislative and regulatory requirements to ensure access and benefit-sharing, provides that:

1. Each Party shall take appropriate, effective and proportionate legislative, administrative or policy measures to provide that genetic resources utilized within its jurisdiction have been accessed in accordance with prior informed consent and that mutually agreed terms have been established, as required by the domestic access and benefit-sharing legislation or regulatory requirements of the other Party.
2. Parties shall take appropriate, effective and proportionate measures to address situations of non-compliance with measures adopted in accordance with paragraph 1above.
3. Parties shall, as far as possible and as appropriate, cooperate in cases of alleged violation of domestic access and benefit-sharing legislation or regulatory requirements referred to in paragraph 1 above.[92]

The protocol provides for the possibility of creating a "Global Multilateral Benefit-Sharing Mechanism" under Article 10 that would address "the fair and

[90] Nagoya Protocol 2010.

[91] Ibid.

[92] Ibid.

equitable sharing of benefits derived from the utilization of genetic resources and traditional knowledge associated with genetic resources that occur in transboundary situations or for which it is not possible to grant or obtain prior informed consent."[93]

The survey sent by the ICC raised a number of concerns, including the following: (1) lack of legal certainty regarding the key definitions and the circumstances in which users and providers have obligations and the scope of the regime; (2) the "negative economic impact" that "can be expected from additional administrative requirements related to access to, and subsequent use of GRs, as companies will have to deploy more financial, personal and time resources into these activities"; (3) the "reality of lengthy supply chains and the fact that several different participants may be involved in the process of creating value from genetic resources" and the need to implement Article 15 in a way that recognized the reality of lengthy supply chains for many sectors; (4) the need for a harmonized ABS system across the EU eliminate legal and possible administrative hurdles that may affect business operations, and (5) the need for an effective monitoring (checkpoint) system as envisioned by Article 17.[94]

[93] Ibid.

[94] ICC 2011, Public Consultation on the Implementation and Ratification of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity, 29 December 2011. Available at http://www.iccwbo.org/uploadedFiles/ICC/policy/intellectual_property/Statements/Nagoya%20Prot%20EU%20Quest_ICC%20Subm%2029_12_11.pdf. Accessed on 3 June 2012.

Chapter 8
The Protection of Traditional Knowledge in Africa, Asia, and Latin America

The protection of indigenous knowledge or TK of indigenous peoples is a critical aspect of the protection of indigenous peoples' rights. This chapter examines the processes and principles that have steered the elaboration of a sui generis system for the protection of the TK of indigenous peoples in recent years.

8.1 Indigenous Peoples and Knowledge in International Affairs

One of the great issues of justice of our times is the validation and vindication of the rights of indigenous people under international law, the protection of their culture and lifestyles and the safeguarding of their intellectual property heritage. The traditional knowledge of Indigenous peoples is a domain that cuts across various areas of public policy including preservation of biodiversity, health, and culture. They implicate various international regulatory mechanisms including human rights, intellectual property rights, plant variety rights, and biodiversity. The protection of genetic resources, traditional knowledge and folklore, which are intimately linked to the well-being of indigenous peoples in particular, has been at the forefront of global public policy for well over two decades.[1] There are an estimated 370 million indigenous people in over seventy countries worldwide. They have retained social, cultural, economic, and political characteristics that are distinct from those of the dominant groups in their respective societies. They have fought strenuously for the recognition of their identities, nationally and internationally.

[1] The Decade of the Worlds' Indigenous People, was announced in GA resolution 48/163 of 21 December 1993 and began from 10 December 1994.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9_8,

There has been widespread recognition that local, 'traditional knowledge' (TK) or 'indigenous knowledge' (IK) constitutes part of the cultural and economic wealth of both developing and developed countries.[2] Greater awareness is forthcoming about the contributions that such knowledge can make to the process of scientific advancement and technological change. TK systems exist in diverse fields including food and agriculture, biodiversity conservation, nutrition, and medicine. Traditional medicines (TM) still constitute the most important source of healing for much of the world's population living in poverty and distanced from urban centers with sophisticated health systems. In this vein, the South Center has called attention to the fact that 85–90 % of the basic livelihood needs of the world's poor are based on direct use of biological resources (and related traditional knowledge), for food, medicine, shelter, transport, and so on.[3] Even in a highly urbanized environment like Singapore, "Traditional medicines are often used for preventive and rejuvenating purposes…" although it is seldom included in studies on that country's health system.[4]

This chapter first sets out the efforts of the international community to validate the rights of indigenous people under international law. It then briefly examines developing country and indigenous people's perspectives on the IP regime in relation to TK. Thereafter, it highlights the area of traditional medicines and the potential of such inherited knowledge to contribute to the health and wealth of nations. This is followed by a discussion of efforts to find adequate international protection mechanisms for TK and TM.

8.2 Recognition of the Rights of Indigenous People Under International Law

One of the great chapters of the UN since its establishment more than sixty years ago relates to its efforts to bring indigenous peoples into the mainstream of international relations, to study and analyze their situation and problems in different parts of the world, to study ways and means of promoting their rights, and to establish norms and institutions for the promotion and the protection of their rights.[5] Even before the creation of the UN, indigenous people had approached the League of Nations in 1928. This was followed by the Bolivian Government's attempts on behalf of indigenous peoples in 1948, which unfortunately failed to materialize into action. Convention 107 of the International Labour Organization

[2] See Wendland 2002 for a discussion of the definition of traditional knowledge and related terms such as indigenous knowledge. See also Mugabe 1998. Mugabe notes that TK is broader than IK, which is narrower in scope but subsumed in the former.

[3] South Centre 1993.

[4] Chen and Wang 1997, 15.

[5] See generally Morgan 2011; Ivison and Patton 2000.

(ILO) of 1957 was the first effort ever made to tackle in a comprehensive manner the need for the protection of indigenous peoples. This was subsequently revised and led to Convention (No. 169) concerning Indigenous and Tribal Peoples in Independent Countries, which entered into force on 5 September 1991.

Following the recognition of the right of peoples to self-determination in common Article 1 of the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights, a turning point was reached in 1970 when the UN mandated a study on *Indigenous Rights*.[6] It was, however, not until the 1980s that a forum for discussion was launched.

The beginning of this process was recognition in the UN Sub Commission on the Prevention of Discrimination and the Protection of Minorities of the importance of studying the situation of indigenous peoples worldwide.[7] The Sub Commission, in 1971, entrusted one of its 26 members, Mr. Jose Martinez Cobo, as Special Rapporteur to carry out a worldwide study of the situation of indigenous peoples.[8]

Mr. Martinez Cobo, during a decade, commissioned from the UN Secretariat over 80 country monographs on the factual situation of indigenous peoples in different parts of the world and submitted a comprehensive report on the Human Rights of indigenous peoples. In his report, he advanced recommendations for the drafting of a declaration on the rights of indigenous peoples. The study addressed a wide range of human rights issues affecting indigenous peoples including education, health, housing, and heritage.

As Mr. Martinez Cobos' study was approaching its end, indigenous peoples began to organize meetings in Geneva to bring attention to their cause. One such assembly took place in the mid-1970s. It called for the establishment of a dedicated body at the UN to work on the protection of the rights of indigenous peoples around the world. This call went largely un-noticed. However, around this period a few indigenous representatives appeared before the annual sessions of the Commission on Human Rights to speak about the plight of indigenous peoples. This special plea moved officials in the UN Human Rights Secretariat and, in 1980, the international forum on human rights coordinated by B.G. Ramcharan organized with the support of the then Director of the Division of Human Rights of the UN Secretariat, Mr. Theo van Boven, a roundtable discussion on options for the protection of the rights of indigenous peoples. The key presenter at the

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[6] For a history of the consideration of Indigenous Peoples at the UN see article by Erica Daes at <www.uit.no/ssweb/dok/series/n02/en/102daes.htm>.

[7] It is noteworthy that the International Labor Organization (ILO) was the first international body to address indigenous issues in a comprehensive manner. ILO is responsible for two treaties relating exclusively to indigenous peoples: Indigenous and Tribal Populations Convention, 957 (No.107) and the Indigenous Peoples Convention, 1989 (No. 169). No. 107 proved problematic due to patronizing language and its integrationist approach, which advocated an assimilationist approach. No. 169, a revision of 107, took the approach that cultures and institutions of the indigenous peoples must be respected and sought to promote respect for their right to continued existence within their national polities.

[8] Study of the Problem of Discrimination Against Indigenous Populations, (1986). UN document E/CN.4/Sub.2/1986/7, and Add. 1–4, Vol. I, 10–12.

roundtable was Ms. Roxanne Dunbar-Ortiz, an indigenous rights activist. From this roundtable, the Director of the Human Rights Division, with the strong encouragement of his special assistant Ramcharan, decided to make a call for the establishment of a working group on indigenous populations. This was the main focus of his address to the Sub-Commission at its annual session in 1980.[9]

Following consideration and adoption by the Commission on Human Rights and the Economic and Social Council (ECOSOC), the Working Group on indigenous peoples met in Geneva for the first time in August 1981.[10] Some 300 representatives of indigenous peoples from all parts of the world participated in this historic first session. Over the past three decades, the working group has continued to meet annually and to give emphasis to gathering information on the situation of indigenous peoples globally. The working group was also entrusted with the mandate to develop norms for the protection of indigenous peoples and to advance recommendations to governments for the protection of their rights.

In 1993, the Working Group on Indigenous Populations submitted a draft declaration to the Sub Commission on the Promotion and Protection of Human Rights (its name had been changed to this). The Sub Commission later adopted the draft declaration in 1994, and submitted it to the Commission on Human Rights. The Commission established a working group of its own to consider the draft declaration. Unfortunately, for several years work was deadlocked in the working group regarding this draft declaration due largely to the fact that leading governments were not prepared to give blanket recognition to rights of indigenous peoples to self-determination or to recognize their land or collective rights.

At one stage, a desire began to emerge in indigenous circles for a forum in the UN that dealt not only with human rights issues but with the broad range of environmental, developmental, and cultural issues affecting indigenous populations. This led to calls for the establishment, as a subsidiary body of the ECOSOC, of a permanent forum on indigenous issues. This forum was finally established in 2000 and met for the first time at UN headquarters in New York in the summer of 2002.[11] The Permanent Forum is an advisory body to the UN Economic and Social Council. It meets ten days per year and has thus far held over ten sessions.

The study by Mr. Martinez Cobo, the Working Group on Indigenous issues, the working group on a draft declaration, and the Permanent Forum have been the key building blocks within the UN in the past four decades to advance the human rights

[9] Addressing that body the Director of the Division of Human Rightsmade a stirring call for the establishment of a working group. With the support of the Director his special assistant prepared a draft resolution on the establishment of a working group and discussed it with leading members of the Sub-Commission. Governments with indigenous populations were sensitive about the initiative and some members of the sub-Commission reflected this sense of caution. The principle sponsor of the resolution was the Norwegian member of the Sub-Commission, Mr. A. Eide. Cooperation between him and the Secretariat was close and indigenous activists such as Ms. Dunbar-Ortiz helped bring about the passage of the resolution—which was a great success for the indigenous peoples.

[10] ECOSOC Resolution 1982/34.

[11] United Nations, E/RES/2000/22.

of indigenous peoples. In the course of their work, they have, *inter alia*, highlighted the need for the protection of the intellectual property rights of indigenous peoples.

Following on from the work of Mr. Martinez Cobo, cultural heritage and intellectual property have been issues of interest to the Working Group. In 1992, the Working Group and the WIPO held a Technical Conference on Indigenous peoples at which participants recommended that the UN develop more effective measures to protect the intellectual and cultural property rights of indigenous peoples.[12] A 1993 report by Erica Daes, Chairperson of the Working Group, on the protection of cultural and intellectual property, noted that the term:

> 'indigenous' embraces the notion of a distinct and separate culture and way of life, based on long-held traditions and knowledge which are connected, fundamentally, to a specific territory. Indigenous peoples cannot survive, or exercise their fundamental human rights as distinct nations, societies and peoples, without the ability to conserve, revive, develop, and teach the wisdom they have inherited from their ancestors.[13]

The Chairperson was "compelled to the conclusion" that the distinction between cultural and intellectual property, from the indigenous viewpoint, was an artificial one. Indeed,

> Industrialized societies tend to distinguish between art and science, or between creative inspiration and logical analysis. Indigenous peoples regard all products of the human mind and heart as interrelated, and as flowing from the same source: the relationship between the people and their land, their kinship with other living creatures that share the land, and with the spirit world. Since the ultimate source of knowledge and creativity is the land itself, all of the art and science of a specific people are manifestations of the same underlying relationship, and can be considered as manifestations of the people as a whole.[14]

It is not a coincidence that Article 8(j) of the 1992 Convention on Biological Diversity (CBD) adopted at the Rio Earth Summit, created legal obligations for States party to respect, preserve, and maintain knowledge, innovations and practices of indigenous people related to the conservation and sustainable use of biodiversity. The protection of cultural and intellectual property "is connected fundamentally with the realization of the territorial rights and self determination of indigenous peoples".[15] The Chairpersons' report noted that the Working Group had received news from "indigenous representatives from every continent about the priority and urgency they attach to the protection of their spiritual and cultural life, arts, and scientific and medical knowledge".[16]

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[12] Wendland 2002; "WIPO and Indigenous Peoples," Leaflet No.12, <www.sdnpbd.org/sdi/international_day/Indigenous-people/2004/indigenous_people/document/wipo_ip.pdf>.

[13] United Nations 1993, Study on the Protection of the Cultural and Intellectual Property of Indigenous Peoples, by Erica-Daes, Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities and Chairperson of the Working Group on Indigenous Populations, 45th Session, E/CN.4/Sub.2/1993/28, para 1.

[14] Ibid., para 21.

[15] Ibid.

[16] Id., para 3.

In December 1995, to give impetus to the Decade for Indigenous People, the UN General Assembly adopted a Program of activities aimed at strengthening international cooperation for the solution of problems faced by indigenous people in such areas as human rights, the environment, development, health, culture, and education. Among the specific actions to be taken were: (i) "the promotion and protection of the rights of indigenous people and their empowerment to make choices which enable them to retain their cultural identity while participating in political, economic and social life, with full respect for their cultural values, languages, traditions and forms of social organization" and (ii) a request for specialized agencies of the UN system and other international and national agencies, as well as communities and private enterprises, "to devote special attention to development activities of benefit to indigenous peoples".[17]

"The Declaration on the Rights of Indigenous Peoples of 2007 (Annex C), recognized the need to respect and promote the inherent rights of indigenous peoples" derived from their political, economic and social structures and from their cultures, spiritual traditions, histories and philosophies, especially their rights to their lands, territories, and resources. It affirmed that "indigenous individuals are entitled without discrimination to all human rights recognized in international law", and that they also possessed collective rights "which are indispensable for their existence, well-being and integral development as peoples."[18] Article 1 of the Declaration stipulated the right of indigenous peoples "to the full enjoyment, as a collective or as individuals, of all human rights and fundamental freedoms" recognized in the UN Charter and in international human rights conventions. Article 23 stipulated that they have the right to determine and develop priorities and strategies for exercising their right to development. This included the right to be actively involved in developing and determining health, housing and other economic and social programs affecting them and, as far as possible, to administer such programs through their own institutions. Article 24 provided that they have the right to their traditional medicines and to maintain their health practices, including the conservation of their vital medicinal plants, animals, and minerals. They had the right of access, without any discrimination, to all social and health services, and the equal right to the enjoyment of the highest attainable standard of physical and mental health. Under Article 31 they had the right to:

> to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts.

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[17] Report of the Secretary General on the preliminary review by the Coordinator of the International Decade of the World's Indigenous People on the activities of the United Nations System in relation to the decade, E/2004/82, para 2.

[18] United Nations Declaration on the Rights of Indigenous Peoples, Adopted by General Assembly Resolution 61/295 on 13 September 2007, Communicated to WIPO. WIPO/GRTKF/IC/12/INF/6, 15 February 2008.

They also had the right to "maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions." Finally, Article 41 exhorted the organs and specialized agencies of the United Nations system and other intergovernmental organizations to contribute to the full realization of the provisions of the Declaration and to ensure the participation of indigenous peoples on issues affecting them.

WIPO had already begun work on these issues and the report by the Coordinator of the UN Decade for Indigenous Peoples noted that WIPO's response "has been dramatic" as there is an entire division as part of the regular budget which is responsible for traditional knowledge and related issues.[19] The Permanent Forum has maintained a keen interest in traditional knowledge, soliciting information from all relevant parts of the UN system, notably WIPO.[20] The WIPO has focused the areas of intellectual property and genetic resources, traditional knowledge and traditional cultural expressions, reflecting the major concern for these areas in developing countries in particular, though it should be said that, similar concerns exist in developed countries such as Australia, Canada, New Zealand and the USA, each with aboriginal or indigenous communities.

8.3 Developing Country and Indigenous Perspectives on IP and Traditional Knowledge

In the context of the Uruguay Round discussions on the international trade system in the late 1980s, SAARC governments had emphasized that "the development dimension must be taken into account in the negotiations on new issues, particularly services and intellectual property rights."[21] In the Declaration of the 10th SAARC Summit in Dhaka, the governments had noted that "contemporary developments in intellectual property and patent law, moreover, heightened the need for vigilance against encroachment on the regional bio-diversity heritage by external entities."[22]

In this vein, the Indian Government passed the Biological Diversity Act, 2002 on 5 February 2003, which began the process of integrating the Convention on Biological Diversity into Indian law. Public outrage had erupted in India as foreign firms had tried to patent neem, basmati, and turmeric. The public outrage led to initiatives in India, including the documentation of traditional knowledge (TK), the preparation of biodiversity registers and the exploration of legislation to protect and regulate access to biodiversity and traditional knowledge. Rajesh Sagar

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[19] Id., para 58.

[20] See United Nations, Outcomes achieved in response to the first session of the Forum, Note by the secretariat of the Forum. E/C.19/2003/3, especially paras 35–40.

[21] Islamabad Declaration, 31 December 1988, http://www.saarc.org.

[22] Declaration of the 10th SAARC Summit, Colombo, 31 July 1998. http://www.saarc.org.

has noted that India's genetic wealth of some 47,000 species of plants and some 81,000 species of animals needed an appropriate legislative framework for their protection, conservation, access, and judicious utilization.[23] With South Asia's rich tradition in Ayurvedic medicine, regional governments became interested in taking preventive action consistent with various international instruments like the 2003 Convention to Safeguard the Intangible Cultural Heritage which encouraged the creation of inventories and databases of TMK by signatory nations. Sita Reddy has noted that advocates of professionalizing Ayurvedic medicine had moved:

> from nationalist preoccupations with therapeutic *practice*—and the reform of this practice through educational standards or credentialization that dominated more than half a century's struggle—to now waging global contests over *knowledge* itself: the pharmacopeia, texts, the source, origins, taxonomy, and epistemology.[24]

Sri Lanka also introduced legislation in 2003, in relation to the protection of plant genetic resources in order to bring its patent legislation in compliance with TRIPS, while at the same time reconciling this with the country's moral and ethical values that frowned upon the extension of patent rights to biotechnological inventions and with the interests of local agriculture in mind.[25]

On 17 and 18 November 2003, the WIPO and the South Asian Association for Regional Cooperation (SAARC) convened in New Delhi, in cooperation with the Ministry of Human Resource Development of the Government of India, an expert workshop on intellectual property, traditional knowledge, and genetic resources which shed much light on South Asian perspective on these issues according to the "Summary of the discussion and consultations".[26] According to the summary, participants considered that the challenge for policy makers was to search for ways to preserve TK and the traditional ways of life, value, and legal structures they embodied, while promoting the use of TK for public benefit and for further innovation, and also while protecting TK against misappropriation and illegitimate uses. The Summary recalled that the SAARC Forum for Intellectual Property Cooperation (Thimpu, October 2002) had emphasized the need to develop a consensus on legal and policy mechanisms for the protection, conservation, promotion, and use of traditional knowledge.[27] What was envisaged was the development of a coordinated program for regional action, addressing the practical work items set out in the Thimpu declaration, which would identify steps to clarify and enhance

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[23] Sagar 2005, pp. 382–400. Under Article 1 of the CBD the parties envisaged three principal obligations: conservation of biological diversity, sustainable use of biological diversity and fair and equitable sharing of benefits arising out of the utilization of genetic resources (including appropriate access to genetic resources and transfer of relevant technologies. Subsequently India also introduced Bills to update laws on biodiversity, patents and plant varieties. See generally, Philip Cullet 2001, 211–230.

[24] Reddy 2006, 161–188.

[25] Kariyawasam 2005, 169–186.

[26] WIPO.SAARC/GRTK/DEL/03/xx. C:\winnt\apsdoc\nettemp\1616 $asqsaarc-grtk-del-03-summary.doc.

[27] On the protection of Traditional Knowledge (TK) see Sinjela and Ramcharan 2005.

the legal and policy framework, including a model law for the region; the creation of practical mechanisms, such as protocols for academic researchers, guidelines for TK documentation, and a toolkit for protection of IP interests when documenting TK; and common awareness and capacity—building programs focused on TK holders and local and indigenous communities. The expert workshop also recommended cooperation in the area of folklore and traditional cultural expressions TCE.

Participants considered that policy planning should address a set of interrelated needs: the legal and policy need to define and articulate existing IP principles, rules and practices, and establish new norms or standards where these are needed; the practical need to make effective use of existing IP rights and create operational systems so that IP rights relating to TK could be recognized, administered and enforced for the benefit of TK holders; and to document, record and codify TK and customary laws and protocols as the basis for protection; the capacity-building need to develop awareness, skills and necessary resources among the TK holders, their representatives, and policy makers.

Participants at the expert workshop considered that while traditional knowledge is generally conceived in a holistic way, integral to a traditional community and its way of life and value systems, specific forms of protection may be defined for: protection of content, substance or concept of knowledge, and culture, e.g., traditional know-how about the medicinal use of a plant, or traditional ecological management practices; protection of form, expression or representation of traditional cultures, e.g. song, performance, oral narrative, designs; protection of reputation and distinctive character of names, signs, words, symbols, indications, patterns and styles associated with traditional culture, and to prevent misleading, deceptive and offensive use.

The expert workshop discussed various forms of *sui generis* protection that could be developed for traditional knowledge, and participants considered that a system of *sui generis* protection of TK or TCEs may rest on various legal foundations; for example, the creation of distinct IP rights in TK or TCE subject matter, rights to exclude others from doing certain specified unauthorized acts; a more general remedy against unfair commercial practices, extending such established concepts as misappropriation, unjust enrichment, slavish imitation or misleading or confusing the consumer; a right to be compensated for commercial use of protected material, without absolute rights over it, using the concepts of equitable remuneration or equitable benefit-sharing; a right to set binding contractual or licensing conditions, based for example, on the principle of prior informed consent relating to the use of protected material.

As regards the tools that may be used for TK protection, participants in the expert workshop considered that a comprehensive approach to TK protection would need to draw on a range of existing and new legal tools and doctrines, including *sui generis* elements. Relevant policy and legal tools that could be used included the following: the IP rights approach: the grant of exclusive property rights in the protected TK; repression of unfair competition: TKs which may not be protectable through exclusive IP rights may be protected through the

repression of unfair competition by extension of IP principles; access regulation and benefit-sharing: An access and benefit-sharing approach, as set out in the Bonn Guidelines, could be applied to TK, including capacity building, revenue sharing (lump sum and royalty based), and technology transfer; compensatory liability regimes: TK holders should be entitled to compensatory contribution from TK users who use tradition-based know-how for industrial and commercial applications during a specified period of time. These liability rules should reward TK holders for the conservation and development efforts invested by the communities in the TK elements, without endowing exclusive property rights to control such uses.

In a particularly rich section of the summary of the expert workshop, participants advanced the following basic principles of TK protection:

- A principle of prior informed consent: Traditional knowledge should not be collected, used or commercialized without the prior informed consent of the traditional knowledge holders;
- A principle of exceptions for educational and customary uses;
- A principle of indication of source: Use and publication of traditional knowledge should indicate the source of the knowledge;
- A principle that any false, misleading, or culturally offensive references to traditional knowledge, and any false or misleading indications of linkage with or endorsement by TK holders should be legally suppressed;
- A principle of *ordre public* and morality should be respected;
- A principle of fair and equitable benefit-sharing for the commercial use of TK;
- A principle of holistic recognition: A system of traditional knowledge protection should respect and be in harmony with the rights relating to associated genetic resources, expressions of folklore, and other valid intellectual property rights;
- A principle of social equity: the protection of traditional knowledge should be undertaken in a manner conducive to social and economic welfare, and to a balance of rights and obligations; (Emphasis added)
- A principle that IP issues arising in the fields of TK and GR should be dealt with in conjunction;
- A principle of safeguard and promoting customary uses of TK and associated biological resources: customary uses shall not be restrained through legal protection of TK from non-customary uses by outsiders.

Participants in the expert workshop considered that the following priority objectives should guide the development of TK protection: to evolve mechanisms for scientifically re-validating the TK, wherever possible; to create an appropriate system for access to TK; to ensure fair and equitable sharing with TK holders (tribes, communities included) of benefits arising from the use of TK and associated genetic resources; to promote respect, preservation, wider application, and development of TK and associated genetic resources; to provide mechanisms for the enforcement of rights of TK holders; to prevent misappropriation and misuse of TK and associated genetic resources; to enhance scientific capacity at the national and community levels; to promote the transfer of technologies which

make use of TK and associated genetic resources; and to promote and recognizer innovation based on TK. (Emphasis added).

At the Dhaka Declaration following the 13th SAARC Summit of 13 September 2005, Member States agreed to launch a regional initiative with regard to basic healthcare services and sanitation and called **for** a SAARC Plan of Action for cooperation in medical expertise and pharmaceuticals, as well as traditional medicine, and "availing affordable pharmaceuticals produced in the region**…**and production of affordable medicines. They also agreed that steps should be taken to promote traditional medicine and to protect the intellectual property rights related to them as a matter of regional priority."[28]

By the eighth session of the IGC GRTKF in 2005, a wealth of knowledge had been accumulated about Genetic Resources, Traditional Knowledge and Folklore (GRTKF) in many countries and about national policies and laws. The delegation of Norway called attention to "tensions related to the interface between IP and GRTKF" which were "not good incentives for the conservation and sustainable use of genetic resources."[29] It therefore called for a "balanced approach based on clear analysis of real gaps in international and national frameworks" as opposed to "the construction of overly complex structures covering everything under the sun in detail."[30]

The Indian delegation acknowledged the considerable work done, but was concerned that "it had not been possible to achieve substantially what the committee had set out to do, namely, to create a set of internationally binding instruments to provide protection to these forms of IP."[31] There would always be "a need to create a set of internationally acceptable norms and standards as the first step." The principles linking benefit-sharing and equity with access must form part of the deliberations. Absent any form of prior informed consent from the holders of TK, TCEs or GR, no form of IP would be equitable."[32]

The Republic of South Africa commended the IGC for serving as a guiding force in formulating an indigenous knowledge systems policy in South Africa. "The main drivers of the indigenous knowledge systems policy had been: the affirmation of African cultural values in the face of globalization; practical measures for the development of services provided by IK holders and practitioners including traditional healers; the contribution of indigenous knowledge to the economy; and interfacing indigenous with other knowledge systems."[33]

India was keen that the work going forward should be in the direction of creating an internationally binding instrument to provide such protection. India, the delegation noted:

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[28] Dhaka Declaration, Thirteenth SAARC Summit, 13 November 2005.

[29] Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGCGRTKF) 2005 Eighth Session, Geneva, 6–10 June 2005, WIPO/GRTKF/IC/8/15 Prov 2., DATE: 5 October 2005, para 27.

[30] Id., para 27.

[31] Id., para 30.

[32] Ibid.

[33] IGCGRTKF 2005, para 19.

> was one of the countries of the world which had an historical and civilizational continuity. Over the millennia, many forms of TK had evolved which were codified and in the public domain. This disclosed TK was also being subject to misappropriation, even though there did not exist a single community or a collection of communities which held the right to this knowledge. The Delegation was keen to give recognition as positive rights to codified forms of TK. So far, the efforts of the Committee had focused almost exclusively on non-codified community-held TK. This excluded a wide range of knowledge systems which were formal, non-patentable or copyrightable and non-community based. In the absence of any protection for these forms of knowledge internationally, piracy and misappropriation were only likely to increase. India had to struggle to get the patents on the wound-healing properties of turmeric plant and the fungicidal properties of the neem plant, to name a few, revoked in various patent offices, even though these properties had been known to Indians for ages and had also been codified in various ancient texts of Indian systems of medicines. The system of Yoga was an ancient Indian system of living in which the physical postures were but a small part of the overall concept of being. But today India was also watching with consternation the efforts to copyright some yogic postures and also attach a trademark to Yoga.[34]

India pressed for the norms and standards at the earliest, to prevent such usurping of TK. It argued that post-grant opposition to patents and other forms of IPRs were not only cumbersome but also expensive to follow across international borders. The large scale on which misappropriation and piracy of TK, TCEs and GR took place made it that much more difficult for a country such as India to fight each and every such misappropriation. The Delegation recalled its statement at the seventh session that the extent of the problem could be gauged from the result of a study conducted by a task force of Indian experts on the data bank of the USPTO, UKPO, and EPO in the year 2000. The study had found 4,896 references to medicinal plants and assessed that 80 % of these plants were of Indian origin. This number had increased substantially to more than 15,000 in a similar study in 2003. Similarly, within a sample study of 762 randomly selected US granted patents with direct relationship to medicinal plants in terms of their full text, 374 or 49 % were found to be based on TK.[35] These figures underscored the need for an internationally binding instrument. An adequate role might be prescribed for a national

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[34] Id., para 30.

[35] The Peruvian delegation had highlighted at the 2003 session, the problem of biopiracy. Peru produced a document ("Cases of Biopiracy") WIPO/GRTKF/8/12) detailing instances in which biopiracy allegedly occurred using information on genetic and TK related resources found in patent documents worldwide. The claims in this document are comprehensively challenged by IFPMA subsequently. See The Biotechnology Industry Organization (Bio) And The International Federation Of Pharmaceutical Manufacturers And Associations (IFPMA), Policies, Measures And Experiences Regarding Intellectual Property And Genetic Resources: Submission. Analysis of the Examples Of "Potential Cases Of Biopiracy" submitted by Peru in WIPO/GRTKF/8/12," Sixteenth Session, Geneva, May 3–7, 2010 WIPO/GRTKF/IC/16/INF/21, 19 February 2010. Bio and IFPMA concluded that "The Peru paper identifies a total of 144 distinct patent families based on their comprehensive search of patents in the Japanese, U.S. and other patent databases. This reflects a total of 144 examples of patents over a roughly 25–30 year period. During this same time period, the U.S. issued more than 803,630 patents in the chemical sector. The 144 patent families identified by Peru thus represents roughly 0.018 % of the total number of "chemical" (including biotechnology) patents that were issued by the PTO in that same time period." (P.6) .

authority to handle such cases where no single community held rights to a particular kind of TK or folklore. It was essential to recognize that national authorities do need to be created to ensure the evolution and stabilization of a system of benefit-sharing. It would also be able to create some form of equality of power in the process of negotiation between the holders of TK and the potential users. The Delegation gave an example of the immediacy of the problem. The biotech industry was one of the fastest growing sectors of the world economy. A large part of the R&D in this industry was based on existing GR and related TK. In this context, it became incumbent on the world community to focus on the need to prevent any misappropriation of the TK and piracy of GR. The Committee would do well to recognize the obligation that this industry had toward the holders of the rights to the GR and the related TK. India's laws on the conventional forms of IP like the patent law and the plant variety law, as well as the biodiversity law and the initiative on a TK Digital Library, had all been developed with due regard to the issue of disclosure not only of source and geographical origin of biological material but also of any non-codified, even oral, and form of TK with any community in the country.[36]

The representative of the International Federation of Pharmaceutical Manufacturers Associations (IFPMA) expressed concern that there appeared to be provisions in some WIPO documents for an unlimited term of protection for TK. Existing forms of IP were limited in term, which provided the incentive for continued research and development into new innovations. In addition, IFPMA was concerned that the scope of activities that were viewed as misappropriation gave the impression that any use of TK, even if it was in the public domain and even if the user was a TK right holder, would constitute misappropriation. In IFPMA's view, some draft provisions left insufficient flexibility for various different forms of TK and, as a result, might have a chilling effect on investment in the development of new products, the research required for that development, and, as a consequence, continued innovation. Indeed, not only did the scope of protection threaten existing forms of IP, but it also might threaten the general practice of knowledge-sharing that had benefited all societies for centuries.[37]

A study on TK in Indonesia drew attention to its rich GRTKF heritage found in its 17,508 islands hosting more than 500 ethnic groups with their own uniqueness. It stood as the world's third highest in cultural diversity after Papua New Guinea and India. Indonesia noted that it had 90 different types of ecosystems, spanning from the ice fields in the highest mountain in Indonesia to the deep sea eco-systems. The representative noted that "Traditional wisdom is a means of interaction with other communities and I think this is what is now being undermined by the logic of economy which in a brutal way spreads all over our aspects of life."[38] He continued:

> Traditional knowledge is dependent on and fairly highly related to the communities physical as well as social environment including genetic resources and within its eco-system.

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[36] IGCGRTKF 2005, para 30.

[37] Id., para 37.

[38] Id., para 4.

> And I think this is our common understanding that traditional knowledge gives better traditional cultural expression of community in utilizing its resources.[39]

Customary laws governing the local culture, governing the use of the forest primarily as a place of living, and religious ceremonies were not adequately adopted within the legal system. He noted Indonesia's:

> quite serious problems and misappropriation in relation to the fact that the current agreement does not accommodate the social condition and traditional cultural community in Indonesia in general. In the IPR regime what is acknowledged is only intellectual property of individual or group, and in generality, I think, intellectual property belongs to community as well."[40]

Echoing these general points, Mrs. Elisabeth Mulenje Chombo Nkomeshya, Cheftainess Mukamambo II, Traditional Chief, Food Technology Research Unit, National Institute for Scientific and Industrial Research of Zambia noted that TK systems:

> are functional entities and institutions that serve as custodians of specialized areas of TK and indigenous innovations. These include traditional administration authorities, traditional natural resource managers, traditional health providers, storytellers, singers, dancers, etc. In Zambia we view TK as being a body of knowledge that has always been vital to our day to day life while indigenous innovations is seen as a way for generating new or improved methods of using TK.[41]

She noted that Zambia's communities expected the integration of indigenous knowledge and technology into national development. This entailed the acceptance, recognition and protection of knowledge and innovation derived from TK systems, and TK. In addition, it required developing innovative mechanisms for rewarding custodians of knowledge and innovations derived from TK. "This must be based on fair and equitable sharing of benefits arising from the use of TK." The principle of advanced informed agreement is also very important."[42]

Mr. Johnson Ole Kaunga, Honorary Project Advisor for the Maasai Cultural Heritage in Kenya, highlighted the case of the Masaai in Kenya at the 9th session of the IGC. The Masaai's cultural identity was "critically intertwined with the land, nature and livestock. This is what creates the foundations on what informs their traditional expressions, knowledge, skills and practices."[43] The Maasai, he continued, over time developed indigenous knowledge, practices, and skills through their continued and sustainable interaction with nature. Some of these skills included

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[39] Id., para 5.

[40] Eighth Session, Geneva, 6–10 June 2005 WIPO panel on, "indigenous and local communities' concerns and experiences in promoting, sustaining and safeguarding their traditional knowledge, Traditional cultural expressions and genetic Resources" experiences from Indonesia WIPO/GRTKF/IC/8/INF/6(g), DATE: 6 June 2005.

[41] Eighth Session, Geneva, 6–10 June 2005, WIPO Panel On, "Indigenous And Local Communities' Concerns And Experiences In Promoting, Sustaining And Safeguarding Their Traditional Knowledge, Traditional Cultural Expressions And Genetic Resources" Experiences From Zambia, WIPO/GRTKF/IC/8/INF/6(c) ORIGINAL: 6 June 2005, para 2.

[42] Id., para 12.

[43] Ibid.

but were not limited to: Indigenous Technical and Traditional knowledge on livestock management, including plants that have been and continue to be used by the community in the treatment of livestock ailment; indigenous knowledge and skills in the management of human health for which herbal plants are used for the preservation of Milk—"Olorien" *Olea Africana/Africa Olive*; and certain plants were also used for special ceremonies and ritual and for treatment of certain ailments. The Maasai life was marked and concluded with specific Traditions, rituals and ceremonies depending on seasons, age, and communal self organization. In addition, performance arts/ethnomusicology formed an important part of the Maasai community. Different age sets, women, girls and children had their own songs, riddles, folklore, and performance art is used to mark important ceremonies and also used as part of communal entertainment. The Maasai culture and identity had enabled them to acquire skills in indigenous environmental conservation and natural resource management skills such as deffered grazing and burning of the grass and vegetations to allow regenerations. The Maasai identity was strengthened and nourished with Artifacts made of beads, tree roots etc. Symbols of authority and leadership among the Maasai community were: the three-legged stool, Club(Orinka) and Maasai stick—used in specific ceremonies and rituals. The Masaai's Indigenous spirituality was also part and parcel of the Maasai community forms. The Rituals were performed under specific trees species for thanksgiving, to pray for rains or at times to pray for barren women to enable them to bear children. The Maasai named different areas and places according to their experiences in these areas such as Nairobi, a cold place, Enkare Nanyoikie (Nanyuki)—a red water based on the fact that during rainy seasons the water turned red due to reddish clay that was washed into the river. He argued that these names have since been corrupted and actually have been used as a strategy to dispossess the Maasai of their ancestral lands through the systematic replacing of Maasai names with anglicized ones, thus killing the linkage of the place and the original owners.

An indigenous representative and member of the Mexican Delegation, Mr. Angel Lara, called for a legally binding document, greater participation from indigenous peoples in these events so that their voices could be heard and so that everything linked to TK at different levels, national and international, would be done through consultation with indigenous peoples, thus respecting their autonomy and self-determination. "As the legitimate owners and holders of such rich knowledge, 'indigenous peoples' voices should be heard and consultations should be recognized as an individual and collective human right."[44]

Peru expressed the belief that "the traditional knowledge of indigenous peoples, as a significant sphere of human creativity, cannot be left out of the intellectual property system."[45] They had a legitimate interest and an expectation of legal recognition that was "no less significant than that which, at one time, warranted the

[44] Id., para 141.

[45] IGCGRTKF 2005, Patent System and the Fight Against Biopiracy—The Peruvian Experience. Document submitted by Peru, Eighth Session, Geneva, 6–10 June 2005, WIPO/GRTKF/IC/8/12, May 30, 2005, para 1.

recognition of new subjects of intellectual property protection (plant varieties, biological material, layout-designs of integrated circuits, software, databases, and so forth)."[46] National and international recognition of traditional knowledge was of crucial importance to many developing countries, and especially Peru, "whose geographical setting places it among the ten countries with the most extensive biodiversity in the world, which are also known as 'mega-diverse countries' because of their range of ecosystems, species, genetic resources and indigenous cultures with valuable knowledge."[47]

One of the most eloquent and incisive submissions to the IGC outlined the concerns of indigenous groups in North America, which had complex, advanced societies prior to the arrival of European colonizers.[48] Throughout North America and South America, they noted, Indigenous farmers had a profound understanding of genetics enabling them to experiment with new strains of potatoes. There had been major advances in the realm of health and herbal medicines had been developed throughout the continents of the Americas. The submission continued:

> Shamans and traditional healers practiced spiritual, herbal, and psychological techniques, including the placebo effect. Indigenous herbal specialists around the world gathered plants and studied and developed natural medicines that continue to surpass by far advances in herbology by non-Indigenous peoples.[49]

Indigenous knowledge was not only "technical" or empirical in nature, but also harbored "integrative insights, wisdom, ideas, perceptions and innovative capabilities that pertain to ecological, biological, geographical, and other physical phenomena." It had the capacity for "total systems understanding and management." The submission lamented the fact that these:

> high capacity, time-tested Indigenous systems have been devalued and diminished by having Eurocentric perceptions and institutions imposed upon them. In the process, many of the systems have been de-based through misrepresentation, misappropriation, unauthorized

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[46] Ibid.

[47] Ibid.

[48] The report noted that "In the area of governance, complex political systems exist among Indigenous nations and include chieftainships, monarchies, and evidence of universal rights and democracy prior to any such concepts in Europe. The Haudenausaunee People of the Longhouse practice a democratic form of government and formed the League of the Six Nations Confederacy that would later influence the development of American and European democracy. Oral history among the People of the Longhouse place the origin of the league at about 900 b.c.7 Other united nations structures along the northwest coast, eastern seaboard and southern and northeast plains of North America developed between 2,500 and 1,500 years ago and far predate any such structures in Europe. Greg Young-Ing 2006, "Competing Jurisdictions over Traditional Knowledge in the Northern Americas," WIPO panel on, "indigenous and local communities' concerns and experiences in promoting, sustaining and safeguarding their traditional knowledge, traditional cultural expressions and genetic resources," WIPO/GRTKF/IC/10/INF/5, November 30, 3. See also: Peston Hardison 2009, "Experiences from the United States of America," WIPO Panel on Indigenous and Local Communities' Concerns and experiences in promoting, sustaining and safeguarding their traditional knowledge, Traditional Cultural Expressions and Genetic Resources, Fifteenth Session, December 7–11, 2009, Geneva, WIPO/GRTKF/IC/15/INF/5(a), December 7, 2009.

[49] Id., 3.

> use and the separating of the content from its accompanying regulatory regime (i.e., Customary Laws).[50]

The report recorded customary laws of the pre-colonial period that were subsequently superseded by the imposition of the IPR system on Indigenous peoples and their knowledge systems. Customary laws were "intimately intertwined and connected with TK to form what are whole and complete, integrated and complex Indigenous knowledge systems that have existed throughout the world for thousands of years." Customary Laws around the use of TK varied significantly but included such regulations as: certain plant harvesting, songs, dances, stories, and dramatic performances could only be performed/recited and were owned by certain individuals, families, or clan members in certain settings and/or certain seasons and/or for certain Indigenous internal cultural reasons; crests, motifs, designs and symbols, and herbal and medicinal techniques were owned by certain individuals, families or clan members; artistic aspects of TK, such as songs, dances, stories dramatic performances, and herbal and medicinal techniques, could only be shared in certain settings or spiritual ceremonies with individuals who had earned, inherited and/or gone through a cultural and/or educational process; art forms and techniques, and herbal and medicinal techniques, cannot be practiced, and/or certain motifs could not be used until the emerging trainee has apprenticed under a master of the technique; and certain ceremonial art and herbal and medicinal techniques could only be shared for specific internal Indigenous cultural and/or spiritual reasons and within specific Indigenous cultural contexts.

The submission argued that neither the common law nor international treaties had placed Indigenous Customary Law on equal footing with *other* sources of law. This had made TK particularly vulnerable to "continued destruction without substantive legal protection. Indigenous jurisprudence and law should protect Indigenous knowledge." In relation to Eurocentric law, Indigenous jurisprudence of each heritage should be seen as an issue of conflict of laws and comparative jurisprudence. It argued that Indigenous law and protocols should prevail over Eurocentric patent, trademark or copyrights law. It continued:

> One of the greatest ironies of the *status quo* in the interface between European and Indigenous knowledge management systems is that Indigenous systems predate European systems by thousands of years. This point can be highlighted by the historical reality that when Christopher Columbus landed in the Americas hundreds of integrated knowledge systems complete with regulatory regimes had been functioning on the Continent for generations, while no such regulatory regimes were in existence in Europe. What would now be termed "piracy," "unauthorized use" and "copyright infringement" was common practice in 16th century Europe. In the period of time leading up to mid-16th century, European authors' works were produced and sold without permission …, and inventors began to boycott the trade fair circuit based around Frankfurt because they would commonly have their ideas misappropriated.[51]

The main problems with TK protection in the IPR system were: (1) That expressions of TK often cannot qualify for protection because they were too old and are,

[50] Id., 4.

[51] Id., 6.

therefore, supposedly in the Public Domain; (2) That the "author" of the material was often not identifiable and there is thus no "rights holder" in the usual sense of the term; and, (3) That TK was owned "collectively" by Indigenous groups for cultural claims and not by individuals or corporations for economic claims.

The submission also called attention to "The Public Domain Problem".[52] In relation to this it noted the following. First, under the IPR system, knowledge and creative ideas that were not "protected" or whose period of protection has expired are in the Public Domain. For the most part, Indigenous peoples have not used IPRs to protect their knowledge; and so TK is often treated as if it were in the Public Domain—without regard for Customary Laws. Second, a key problem for TK is that the concept of the Public Domain under prevailing IPR systems was based on the premise that "the author/creator deserves recognition and compensation for his/her work because it is the product of his/her genius; but, because the author/creator is a member/product of society, that society must eventually be able to benefit from that genius."[53] Consequently, all knowledge and creative ideas under this system must eventually enter the Public Domain after a lapse of a specified period of time. On the other hand, the customary laws of indigenous peoples:

> dictates that certain aspects of TK are not intended for external access and use in any form. Examples of this include, sacred ceremonial masks, songs and dances, various forms of shamanic art, sacred stories, prayers, songs, ceremonies, art objects with strong spiritual significance such as scrolls, petroglyphs, and decorated staffs, rattles, blankets, medicine bundles and clothing adornments, and various sacred symbols, designs, crests, medicines and motifs. However, the present reality is that TK is, or will be, in the Public Domain i.e., the IPR system overrides Customary Law.[54]

The greatest number of misappropriations of TK was occurring through patents. The report noted that thousands of patents on TK had been licensed to corporations and individuals worldwide. Many of these controversial patent licenses "pit small Indigenous communities against large national and multinational corporations."[55]

The submission concluded that these were pressing problems and that the IPR system and other 'Eurocentric' concepts did not offer a solution to some of the problems. There was thus a need for a *sui generis* system. While there were instances of Indigenous people using the IPR system to protect their TK the reality was that "there are many more cases of non-Indigenous people using the IPR system to take ownership over TK using copyright, trademark and especially patents. In some such cases this had created a ridiculous situation whereby Indigenous peoples cannot legally access their own knowledge." The report called for an "intellectual property-like" system which could be adapted to suit TK needs:

> The TK/IPR interface forces us to re-evaluate Intellectual Property fundamentals. The central question in this debate is, can Intellectual Property be a truly universal system recognizing

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[52] For a thorough exploration of the public domain concept see WIPO 2010b.

[53] Young-Ing 2006, 7.

[54] Id., 7.

[55] Id., 10.

> various forms of traditional creations and innovations, and grant some protection to collective rights holders?[56]
>
> The Indigenous humanities and visual arts are integral to the renewal, revitalization of Indigenous knowledge … yet they are exploited unabated by appropriators who often can use the IPR system to protect themselves. Intellectual Property was conceived and developed independently of the TK system and later imposed upon the TK system through the colonization process. The IPR system never took into account Indigenous cultural protocols, or the intrinsic value of TK, yet its economic institutions now exploit TK while Indigenous peoples remain the most economically deprived population in the world.[57]

8.4 Traditional Medicine: Enhancing the Health and Wealth of Indigenous Communities

As is evident from the preceding parts of this book, one of the most important contemporary international public policy issues is access to medicine, in particular for the poor of the planet. The ancestral, traditional medicinal (TM) of indigenous peoples, has provided the poor of the planet with affordable remedies for centuries. Ownership of such knowledge, often by non-indigenous IBOs, runs counter to not only the open, communal nature of such knowledge but also to the human right to health. The monopolization of such TK through IP rights also has a bearing on the identities of IGPs, their way of life, which is itself very often intimately linked to the preservation of biodiversity and the critical need to develop environmentally sustainable models of economic development that can accommodate such concerns.

TM, an important part of TK, refers to medicines used by local, tribal, and indigenous communities. Such medicine is often herbal and sometimes combined with spiritual elements, such as those practiced by the *shaman* in tribal communities.[58] TM has been refined over centuries of practice by communities who have inherited knowledge from their ancestors. For example, Felix, a member of the Arawak indigenous community of Guyana who worked in the Shanklands resort on the banks of Essequibo River, conveyed to this author his impressive knowledge of his community's medicinal uses of various plants and trees in the tropical rainforest. Using the native names of trees, he related the use of the '*yarula'* tree for preventing and curing malaria, the use of the '*kakaballi'* tree for treating diarrhea and the use of the '*capadulla'* tree as a local 'viagra'.[59] While relying on textbooks for the Latin names, Felix's knowledge came from his father, the shaman in his community and from inherited knowledge among his people. Thus, often such knowledge was held communally and did not 'belong' to any single person or entity. Equally often, such

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[56] Id., 18.

[57] Id., 19.

[58] Shaman refers to the person in indigenous societies who had (magical) healing powers and who acted as a bridge between the material and spiritual worlds.

[59] These were related to the author during a trip to Guyana, 2–8 August 2004.

knowledge cross-cuts communities as well as territorial boundaries. These aspects have implications for intellectual property protection, which we will consider below.

The type of TM differs from community to community depending on the type of healing system that is historically prevalent. Until recently, non-western healing systems and medicines were disregarded by western health systems, which insist on the development of medicines and healing techniques based on scientific proof and testing. Centuries-old healing systems of the world, such as Chinese traditional medicine and Indian Ayurveda, were given scant attention as the 'scientific' approach was allegedly missing. In Chinese medicine, for example, "disease is viewed as a disharmony of the various elements of the body and the personality of the patient. Chinese therapeutic thought concerns the entire organism's balance, rather than being devoted to clearly localizing and defining the nature of the illness" as in western medicine.[60] The argument that non-western medicine is not based on scientific evidence may well ignore the centuries of trial and error, which has actually gone into making a particular medicine or remedy appropriate to a given community.

Western science has grudgingly accepted alternative healing systems. However, they have readily sought after TK/IK, which could lead to the production of new drugs, "especially since the cost of putting new drugs on the market is becoming very high".[61] Erica Daes noted in her 1993 report, cited above, that studies found that "using traditional knowledge increased the efficiency of screening plants for medical properties by more than 400 percent".[62] Already by 1993, estimates of the total world sales of products derived from traditional medicines ran as high as US$ 43 billion.[63] However, only a tiny fraction of the profits was returned to the indigenous peoples and local communities. For example, it was estimated in the early 1990s, "that less than 0.001 percent of profits from drugs developed from natural products and traditional knowledge accrue to the traditional people who provided technical leads for research".[64]

Attempts by western governments and drug producing companies to harness such TK and TM for their own benefit have led to phenomena such as 'biopiracy' (theft of genetic resources by 'bioprospectors'). Concern has arisen for the preservation of biological diversity and genetic resources.[65] The United States National Cancer Institute had already, by 1960, began a global program to collect and study naturally occurring substances and had tested some 35,000 plant species and a larger number of microorganisms by 1981. This process intensified with the advent of research to combat AIDS. Pharmaceutical companies, necessarily driven by profit, have become increasingly aware of the potential economic rewards of TK/TM. Among the major US pharmaceutical companies engaged in screening plant species were Merck and Co., Smith-Kline Beecham, Monsanto, Sterling, and Bristol Myers. But this creates

60 Ubaldo 2001, 23.

61 Sahai 2003, 169.

62 United Nations 1993, para 90.

63 Ibid., para 93.

64 Mugabe 1998.

65 See Mahop 2010.

a conflict with the holders of TK/TM. The problem was stated thus by former Filipino President, Fidel Ramos at a ceremony for the signing of a Traditional and Alternative Health Care Law (R.A. 8423) in Manila on 9 December 1998: "We have looked forward to other nations for new technologies and cures, even for ordinary ailments. Indeed, many other nations have been exploiting the potentials of our own resources, claiming them as their own discoveries without giving due credit to us, and in addition to making tremendous profits at our own expense".[66] The problem was recognized by Mrs. Daes in her report in 1993, namely that 'collectors' or bio-prospectors, "do not ordinarily have any formal contractual arrangements… with the indigenous peoples upon whose knowledge of ecology they may rely".[67] Indigenous people have also objected to alleged appropriation of their bodily substances which is taking place in the context of the Human Genome Diversity Project.[68]

Popular examples of attempts to appropriate TK from other communities included the following. One is a US patent on quinoa, granted to researchers of the Colorado State University and a US plant patent on *ayahuasca* or *yagé*, a sacred and medicinal plant of the Amazon region and knowledge developed and used by local indigenous communities. Attention was drawn to quinoa, *ayahuasca* and other cases by Antonio Jacanimijoy, General Coordinator of the Coordinating Body for Indigenous Peoples' Organizations of the Amazon Basin (COICA) at a 1998 WIPO 'Roundtable on Intellectual Property and Indigenous Peoples'.[69] An indigenous representative called attention to the *ayahuasca* at the 17th session of the Working Group on Indigenous Populations in 1999.[70] Jacanimijoy noted "it is scandalous that it should be possible for a person to acquire a patent for a plant that we have known and made use of for many years… and it has to be admitted that it is a serious affront to our peoples for a person to appropriate a sacred symbol that belongs to us all".[71]

Other examples come from India—the neem tree and turmeric—Peru and South Africa. India's Council for Scientific and Industrial Research (CSIR) requested a re-examination of United States patent No 5-401-5041 granted for the wound healing properties of turmeric. The US Patent and Trademark Office (USPTO) revoked the patent after ascertaining that the three criteria for patentability were not satisfied, i.e., "there was no novelty, the 'invention' having been used in India for centuries".[72] In Peru, maca, a plant domesticated by ancient Peruvians with medicinal qualities, was subject to a number of patents in the USA. Peru sought to challenge the patents, a process which proved difficult for them.[73] In 2000, a patent granted

[66] In Ubaldo 2001, 8.

[67] United Nations 1993, para 95.

[68] Davis 1996–1997.

[69] Jacanimijoy 1998.

[70] United Nations, E/CN.4/Sub.2/1999/19, 12 August 1999.

[71] Jacanimijoy 1998.

[72] Sahai 2003, 168.

[73] See Peru's submission to the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, 5th Session, GRTKF/IC/5/13.

to W R Grace Company and the US Department of Agriculture on neem (EPO patent No. 436257) was revoked by the European Patent Office (EPO) "on the grounds of its use having been known in India".[74] An important use of the neem tree is as a pesticide. Neem has more than 60 valuable compounds, one of which, azadirachtin, the Grace company claimed in its 1992 application that it could extract through a novel process. This may have been untrue, as "the idea that any of this is novel is born of ignorance".[75] Another example from South Africa of a product victimized by attempted appropriation was the hoodia plant (effective in reducing appetite leading to weight loss) used for centuries by an indigenous community in South Africa. Mobilization by the community and concerned civil society actors led to a benefit-sharing scheme between those wishing to exploit the plant commercially and the community which gained recognition and some financial and moral rewards.[76] As the Economist notes in a discussion on current debates about IP, "the developing world, home to a rich array of the world's plants, animals and micro-organisms, is a potential treasure trove of starting material for new drugs and crops, which could do the poor much good".[77]

Such attempts to appropriate knowledge by pharmaceutical companies are understandably and logically motivated by a desire for profit making. Indeed, western companies and health authorities in general have begun to explore 'alternative' systems of medicine given the potentially massive commercial benefits, despite fierce opposition to such initiatives and the fact that their practitioners are often dubbed as 'quacks'. Attitudes in Western countries have changed toward traditional medicine. At Vancouver Hospital for example, Canada's second largest, the Tzu Chi Institute for Complementary and Alternative Medicine, now closed, had become interested in alternative medicine by the mid 1990s.[78] The idea stemmed from Dr. Wah Jun Tze, professor of pediatrics at the University of British Columbia, who was a frequent visitor to his native China and became impressed with the fact that the Chinese health care system could keep 1.2 billion people in reasonably good health with little funding. Despite adamant opposition from a few of his colleagues, "accusing him of introducing quackery", most were open to the idea which was boosted by a CAD $4.5 million endowment from the Buddhist Tzu Chi Foundation of Taiwan. The idea was also boosted by "recognition of the recent widespread change in Canadian attitudes".[79] It has been reported that some 20 % of Canadians used some form of alternative medicine.[80]

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74 Ibid.

75 Ibid.

76 Wynberg et al. 2009.

77 The Economist, 21 June 2001, <www.economist.com>.

78 See Richardson 2003.

79 The Economist, "Eastern Promise," 5 November 1998, http://www.economist.com/node/175225.

80 Ibid.

Trade in medicines between the West and China, for example, was not all one way as Traditional Chinese Medicine—acupuncture, herbal mixtures and other remedies—have gained in popularity. Total sales of herbal medicines in the United States grew to about US$ 4.4 billion by 2006.[81] Indeed, "putting traditional medicine on a scientific footing is vital to its continued success in the West," especially in the face of institutional resistance from major actors such as the Food and Drug Administration (FDA) of the United States. Nevertheless, while reluctant to change its strict regulation of herbal supplements, traditional firms could start making medical claims for their products and earn margins that other drugs enjoy, "so long as they pay the roughly $100 million it costs to conduct clinical trials the FDA requires".[82] The Vancouver Institute had taken up the challenge, like many places around the world, including China, the Philippines and Vietnam, to replace mockery with scientific method.

What mechanisms exist to balance the insatiable appetite of pharmaceutical companies for profit from such TK/TM and the interests (financial and moral) of the local or indigenous holders of such knowledge and resources? The use of the international intellectual property system has been offered as a possible solution, but inherent problems in the system make the task complicated, as we shall now see.

8.5 Non-Applicability, Adapation, or *Sui generis* System?

Can IP serve the protection of TK, including TM? Diverse groups have advocated three different approaches—non-applicability, adaptation, or *sui generis* system. As noted above, some groups have argued that traditional IP is unsuited for the protection of TK.[83] For Mugabe, IP is "based on capitalist principles of economic monopoly".[84] Some, such as COICA, have taken a very hard stance that IP is "racist" and "colonialist" in a statement in Santa Cruz de la Sierra, Bolivia in September 1994.[85]

Some have argued that IP clearly has to be adapted to the concerns of TK/TM holders. If it cannot be adapted then new systems of protection of the property of TK holders must be found. For example, Professor Michael Blakeney has noted that "[w]estern patent systems grew out of a particular model of innovation at a particular time in history".[86] The IP system, as it has developed to today, has assigned specific rights to individuals or corporate entities for well-defined developments for prescribed periods of time. This model does not fit neatly with the sort of collective ownership of rights as practiced in many communities, where the

[81] HerbalGram 2006, 71.

[82] Ibid.

[83] See generally Wendland 2002.

[84] Mugabe 1998, 12.

[85] Blakeney 1997, 302.

[86] The Economist, Eastern promise, 5 Nov 1998, http://www.economist.com/node/175225.

'invention' was made a long time before and its origins are not easily attributable to one individual or entity.

Consequently, a variety of national or *sui generis* approaches have been explored in various countries. One such example was in Colombia, where a benefit-sharing scheme has been tried by the Sustainable Biotrade Programme of the Alexander von Humboldt Institute (which seeks to protect various TK). The project involved a local association, *Centro de Investigaciones y Servicios Comunitarios* (CISEC), whose members include several chiefs of the Paez del Cauca indigenous community and a plant pharmacology laboratory called Labfarve. These two parties have agreed to a joint project for the commercial development of two plants with medicinal properties.[87] Humboldt assisted the project by devising guidelines for the protection of TK relating to the use of medicinal plants provided to Labfarve and "to ensure that benefits derived from the use of these plants are shared in the fairest possible and most equitable way possible".[88] Benefits included not only financial remuneration but also education, training, and health provision. Moreover, the community's participation in the traditional medicinal use of the plants was recognized by means of labeling. Medicines on the market could carry a label indicating the participation by the Paez Community. Other national or *sui generis* initiatives have been extensively surveyed at the WIPO.[89]

The above example cited was purely procedural and involved a consultative process between the parties and nothing has been said thus far of the legal principles concerned with conventional and TK specific IP protection. This is discussed further below. There were many questions that needed to be answered. A contemporary patent examiner in highly developed IP systems is required to evaluate several questions at least: Does the claimed invention satisfy the three patentability criteria (novelty, inventive step, industrial applicability)? *Who* is the inventor of knowledge that is passed on for generations? Is the claimed invention 'novel' given that it has been around for generations and possibly widely diffused through oral channels of 'publication'? With regard to novelty, Blakeney has noted that it is assessed by reference to prior technological art and is considered to be destroyed by prior publication. Therefore, "a problem with patent claims of indigenous peoples in relation to traditional medical remedies is that it has been the practice of ethno-botanists and ethno-pharmacologists to publish accounts of the uses of plants by indigenous peoples. This may have the effect of destroying the novelty of therapeutic claims."[90] Other questions which arise concern the communal nature of knowledge versus notions of individual or joint ownership and rights, communal versus individual exploitation, and moral rights to knowledge. These questions have posed considerable difficulties and anticipate the next discussion on the efforts to seek adequate protection systems at the international level.

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87 Salgar 2003, 184.

88 Ibid., 185.

89 See WIPO document WIPO/GRTKF/IC/5/INF/4.

90 Blakeney 1997, 299.

8.6 TK and TM at the International Level

Focus on IP aspects of traditional knowledge, folklore and genetic resources, is a relatively recent phenomenon. Various initiatives have evolved at the international level, notably the work of the ILO and the UN cited above. Various other initiatives include the CBD emanating from the Earth Summit in 1992, and conferences of various indigenous peoples.[91]

While all are important, the coordinating work of WIPO may be further developed. Work on 'expressions of folklore' began as early as 1978 in cooperation with UNESCO. A concrete outcome of this work was the adoption in 1982 of the 'Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions' (the Model Provisions). Most recently, WIPO and UNESCO conducted four Regional Consultations on the Protection of Expressions of Folklore, each of which adopted resolutions or recommendations with proposals for future work. In addition, it is worth noting that the WPPT of 1996 already makes explicit reference to expressions of folklore.

WIPO began its work on traditional knowledge, innovations, and creativity in the 1998–1999 biennium. In 1998, WIPO launched a new set of activities to explore the relationship between (a) access to genetic resources and benefit-sharing, (b) the protection of traditional knowledge related to biodiversity, agriculture, medicine and other such technical fields, and (c) the protection of traditional cultural expressions. Two Roundtable meetings were convened regarding the protection of traditional knowledge and nine fact-finding missions (FFMs) on traditional knowledge, innovations, and creativity were undertaken. The objective of the FFMs was "to identify and explore the intellectual property needs and expectations of new beneficiaries, including the holders of indigenous knowledge and innovations". A draft Report on all the fact-finding missions was made available for public comment in paper form and on the WIPO website. Comments received were taken into account in producing a revised Report on the Intellectual Property Needs and Expectations of Traditional Knowledge Holders ('the FFM Report'), which was published in 2001. From 9–11 November 2000, WIPO organized an Inter-Regional Meeting in Chiang Rai, Thailand, which addressed intellectual property issues within all the three themes of genetic resources, traditional knowledge and folklore. Twenty eight Member States attended the Meeting and adopted 'A Policy and Action Agenda for the Future' which welcomed the decision of the Member States of WIPO to establish "… the Intergovernmental Committee" and recommended, among other things, that WIPO should facilitate, support and contribute to the work of the Committee by continuing to conduct the exploratory activities and practical pilot projects and studies on these issues of the kind undertaken by WIPO thus far. Following extensive discussions on intellectual property and genetic resources at WIPO between September 1999 and September 2000, the General Assembly of WIPO approved a proposal for the establishment of the Intergovernmental Committee and for a

[91] For a summary of these see Blakeney, ibid.

basic substantive framework. At the Twenty-Sixth (12th Extraordinary) Session of WIPO's General Assembly, held from 25 September to 3 October 2000, Member States decided to establish a special body to discuss intellectual property issues related to genetic resources, traditional knowledge, and folklore.

An Intergovernmental Committee was also created by WIPO's Member States after a number of fact-finding studies undertaken by WIPO in 1998 and 1999. The WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC-GRTKF) is a forum where governments have been discussing matters relevant to three primary themes. These themes concern intellectual property issues that have arisen in the context of: (i) access to genetic resources and benefit-sharing; (ii) the protection of traditional knowledge, innovations, and creativity; and (iii) the protection of expressions of folklore. The Intergovernmental Committee was established by the WIPO General Assembly, at its twenty-sixth session, held in Geneva from 26 September to 3 October 2000. The Intergovernmental Committee held its first session in Geneva, from 30 April to 3 May 2001.

In all of these areas, indigenous peoples and local communities have been consulted and involved. In this regard, it is propitious that WIPO launched its exploration into 'Traditional Knowledge', as opposed to 'folklore' as it had done in its early work, for as noted by Mugabe, TK covers a wide set of areas, including IK.[92] By the end of 2002, over 85 *ad hoc* non-governmental organization observers had been admitted to WIPO's IGC-GRTKF. The WIPO General Assembly has called "for steps to enhance the involvement of indigenous and local communities in the Committee's work, including cooperation through the Permanent Forum".[93]

The question is whether the existing laws, national and international, governing intellectual property allow for the effective protection of traditional knowledge and folklore in particular. If the laws are not appropriate then is there a need for a *sui generis* system. On the latter point, a *sui generis* system must be in function of the needs and demands of the TK holders. As Kongolo and Shyllon note, the fact is that knowledge that is claimed to have been 'invented' and hence 'patented' and converted into intellectual property is often an existing innovation in traditional or indigenous knowledge systems. With respect to the use of traditional medicinal plants, they posit four main issues for consideration: (1) whether the contribution of traditional knowledge to a final product is the sort of contribution that would allow one or more traditional persons to be considered joint inventor; (2) whether publication of information concerning indigenous plant use would bar the availability of a patent, (3) how to address the problems of compensation in the exploitation of herbal knowledge, and (4) whether developing countries should recognize through national legislation the rights of traditional flows from industrialized countries.[94]

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92 Mugabe, supra note 2.

93 United Nations, E/C.19/2003/14, 12 March 2004, para 17.

94 Kongolo and Shyllon 2004, 260.

Any system of protection must recognize the customary laws under which the knowledge evolved. In this connection, WIPO has noted, in the context of the work of the IGC, that:

> the use of private property rights for TK protection should thus be carefully balanced with other policy measures to reflect the characteristics of the protected TK, the stakeholder interests involved, the customary uses, and custodianship patterns. Most countries which have implemented TK protection have therefore supplemented a limited use of private property rights with a combination of other measures.[95]

Examples of *sui generis* initiatives include the combination of the grant of exclusive rights with access regulation in Brazil; combination of defensive protection of native insignia with repression of unfair competition in native Indian products in the United States; and combination of exclusive property rights, access regulation, and unfair competition law to create tailored TK protection measures in Costa Rica and Portugal. "By learning from such national experiences, the combined or comprehensive approach would thus join different legal doctrines and policy tools which have been identified by Member States and have been proven effective in their jurisdictions in order to achieve an appropriate form of protection."[96]

Thus a 'bundle of rights and methods' was deemed better suited for the protection of TK. This combined approach "would result in the availability of TK protection through a bundle of rights at the national level, which would include the use of existing IP rights, *sui generis* measures, and non-IP tools, such as access regulation and contractual agreements".[97]

8.7 Key Legal Issues for the Protection of TK/TM

Core principles and legal doctrines that were to underwrite the protection of TK were offered in 2003.[98] The principles and doctrines enumerated below have emerged from extensive discussions within the IGC on national experiences of TK protection.

8.7.1 Core Principles

First, a comprehensive and combined approach was a starting point. It was recognized that a comprehensive and TK specific approach must be taken using existing

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[95] WIPO 2003, Traditional Knowledge: Policy and Legal Options, WIPO/GRTKF/IC/6/4, 12 December 2003, para 11. The international dimension of protection is addressed in-depth in document WIPO/GRTKF/IC/6/6. Defensive protection of TK is covered only briefly, since documents WIPO/GRTKF/IC/5/6 and WIPO/GRTKF/IC/6/8 cover this more extensively.

[96] Id.

[97] Id.

[98] Id., para 22.

IP mechanisms, the repression of unfair competition, the grant of exclusive *sui generis* rights and/or the application of prior informed consent requirements linked to access regimes. It has been noted that a "bundle of rights" and methods might be applied for protection. Such a combined approach is not foreign to conventional IP law. For example ornamental or visually distinctive aspects of products can be protected by a combination of copyright, individual, or unfair competition law.

Second, the repression of unfair competition, including appropriation and mistake of distinctive traditional characteristics. This entailed the suppression of any false, misleading or culturally offensive references to TK in the commercial arena, and any false or misleading indications or linkage with or endorsement of TK holders.

Third, the principle of recognition of rights of TK holders, pertaining to conventional IP rights arising from innovation and intellectual creativity contained in TK elements, as well as to *sui generis* exclusive rights that may be available for TK. Aggrieved TK holders should be able to seek remedies for misuse of TK and possibly to gain remuneration and benefit-sharing.

Fourth, the principle of prior informed consent (PIC) entailed confirming that TK, held by a traditional community should not be accessed, recorded, used, or commercialized without the prior informed consent of TK holders.

Fifth, the principle of equity and benefit-sharing, entailed protecting TK in a manner conducive to social and economic welfare, balancing rights and obligations, and the equitable sharing of benefits. *"A broad principle of equity is central to IP law, and is also implied in non-IP international legal instruments"*[99] (Emphasis added).

Sixth, the principle of regulatory diversity, including sectoral distinctions, entailed that a comprehensive use of TK protection "may need to reflect distinct policy objectives in specific sectors, and may need to be integrated with several regulatory systems at the national level".[100] Distinct measures have been taken in some countries to regulate traditional medicine, traditional agricultural practices, TK associated with genetic resources, and tradition-based industries.[101]

Seventh, a principle of adapting the form of protection to the nature of TK. Whatever law is adopted, that law may be shaped or guided by the particular characteristics of the TK. TK may be disclosed or undisclosed, attributable or un-attributable, collectively or individually held, codified or uncodified, and may be defined and bounded by diverse forms of customary laws and protocols.[102]

Eighth, a principle of effective and appropriate remedies entails "making available effective and expeditious remedies such as injunctions and penalties, or mechanisms for payment of user fees or other compensation where there is outright prohibition on third party use".[103]

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[99] Id.

[100] Id., para 23.

[101] Ibid.

[102] Id., para 24.

[103] Id., para 25.

Ninth, a principle of safeguarding customary uses entails the encouragement of the use of TK and associated genetic resources, which "should not be restrained by the formal legal protection of TK, nor by other IP rights".[104]

Tenth, the principle of consistency with access and benefit-sharing frameworks for associated genetic resources entails adopting measures which regulate access to genetic resources, and benefit-sharing. Legal protection of TK associated with genetic resources should be coordinated with policy frameworks for associated genetic resources, including conservation, sustainable use, and benefit-sharing.[105]

Related principles governing procedural and consultative process might be considered including the principle of full and effective participation of TK holders and the principle of coordination with other relevant fora and processes.[106]

These principles clearly are geared toward affording maximum flexibility to TK holders, legislators and policy makers. The development of a bundle or menu of legal and policy options, "flexibility can be achieved by drawing selectively on general legal doctrines in order to tailor the form of protection to specific needs, TK subject matter and the legal systems of a given jurisdiction".[107]

8.7.2 Legal Doctrines and Policy Tools

Various doctrines have been used as policy tools for TK protection in national law. Their selective use could build a sufficiently versatile doctrinal basis for TK protection. The major doctrines are as follows.

The first is the *grant of exclusive property rights for TK*. Such rights may be communally or collectively held. This is for TK that is distinct and has a clear owner. Existing IP rights have been used to protect TK or TK-related subject matter. For example, practitioners of traditional medicine have protected their innovations by using patent rights under patent systems. An example is China, which granted 4,479 patents for Traditional Chinese Medicine (TCM) in 2002.[108] Where existing exclusive IP rights are deemed to be insufficient to take into account the specificities of TK, *sui generis* rights have been called for. Difficulties have arisen in this regard: meeting requirements of novelty or originality, and inventive step or non-obviousness; requirements in many IP laws for protected subject matter to be fixed in material form; and the frequently informal nature of TK and the customary laws and protocols that define ownership; concern that protection systems should correspond to a positive duty to preserve and maintain TK, and not merely provide means to prevent unauthorized use; perceived tension between individualistic

[104] Id., para 26.

[105] Id., para 27.

[106] Id., paras 28–30.

[107] Id., para 31.

[108] See WIPO/GRTKF/IC/6/4, para 38.

notions of IP rights and the sense of collective ownership of TK; and limitations on the term of protection in IP systems (20 years in the case of patents).[109]

The second is the application of the principle of prior informed consent. This enables a regulatory framework so as to control the use of TK by third parties and ensure a flow of benefits to the knowledge holders, in ways consistent with the collective nature of TK.

The third is the compensatory liability approach, which would entitle TK holders to compensatory contributions from TK users who borrowed traditional know-how for industrial applications of their own during a specified period of time. This would ensure that TK holders gain a share of the economic and moral rewards resulting from exploitation of such knowledge and at the same time contribute to ensuring access to such knowledge.

The fourth is repression of unfair competition. The law of unfair competition includes a wide range of remedies, including repression of misleading and deceptive trade practices, unjust enrichment, passing off, and taking of unfair commercial advantage.

The fifth is recognition of customary laws and protocols, "which functions as a cross-cutting interface with local legal systems in all the above-mentioned tools".[110] An African Model Law[111] and the *sui generis* laws of Peru[112] and the Philippines[113] incorporate customary laws by reference to such laws.

8.7.3 Strategies and Interim Measures

At the national level, several steps were deemed vital in the search for a functioning and effective TK protection system:

(i) Policy objectives have to be clearly defined for any *sui generis* system. In the case of TK and TM, for example, the following objectives could be considered:

- to create an appropriate system for access to TK
- to ensure fair and equitable benefit-sharing for TK
- to promote respect, preservation, wider application, and development of TK
- to provide mechanisms for the enforcement of rights of TK holders; and
- to improve the quality of TK-based products and remove low quality traditional medicine.

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[109] WIPO 2003, para 21.

[110] Id., para 45.

[111] African Model Law for Protection of the Rights of Local Communities, Farmers and Breeders and the regulation of access to Biological Resources, 2000.

[112] See "Efforts at Protecting Traditional Knowledge: The Experience of Peru," document prepared for WIPO Roundtable on Intellectual Property and Traditional Knowledge, Geneva, 1–2 November 1999. See also WIPO, Intellectual Property Needs and Expectations of Traditional Knowledge Holders. WIPO Report on Fact-finding Missions on Intellectual Property and Traditional Knowledge (1998–1999) Report of Fact Finding missions of the WIPO, Publication No. 768.

[113] Philippines Executive Order, No. 247 1995, Section 2(a).

(ii) The scope of the subject matter has to be defined and eligible for TK protection. The use of appropriate terms and criteria for eligibility has to be clearly spelled out.
(iii) Formal requirements for acquisition of rights need to be established. For example, TK protection may be automatic (as in copyright protection which is automatic upon creation of the work) or a formal step may be required, such as registering the TK before protection becomes effective (as in the case of a trademark).
(iv) Substantive criteria for eligibility must be established. For example, in Panama's *sui generis* law, only elements of TK that remain 'traditional', that is intrinsically linked to the community that has originated them, would be protected under the *sui generis* system.[114]
(v) The nature of rights in TK conferred depends on the legal doctrine or combination of doctrines used for protection
(vi) The scope of rights will determine the degree of control, which the right holder will be able to exercise. Potential rights may include prevention of unauthorized access to protected TK, unauthorized commercial use of such TK, third-party claims over protected TK, and so on.
(vii) Determination of the custodians or beneficiaries. Does an individual or the community own the TK? Is TK understood in the national context to refer to a collective product? This may then dictate the granting of collective rights and not to individuals. On the other hand, distinctive right holders may not be necessary, as collective marks and certification marks may be protected on behalf of a group of beneficiaries.
(viii) Expiration and loss of rights. The duration of rights, normally a key issue, may be problematic, as *sui generis* systems sometimes do not contain expiration and loss of rights provisions. Article 23 of the African Model Law states that community intellectual rights "shall at all times remain inalienable".[115]
(ix) Sanctions and enforcement. Appropriate mechanisms will need to be devised.
(x) Defensive protection. This involves, for example, the publication of TK on a digital database, so as to record that a particular community has been using that knowledge. This may avoid the misguided grant of patents mentioned above.
(xi) Linkages with benefit-sharing schemes. As some TK is closely related to biological and genetic resources, such as when these resources are linked with traditional ways of life. Regulation of access to biological resources may serve as a basis for protection of TK. In this regard, related conventions such as the CBD will have to be closely studied.

Subsequent deliberations led to revised policy objectives and principles for the protection of traditional knowledge, reproduced below, which were considered by the sixteenth session of the IGC in May 2010. The policy objectives for the protection of TK were:

Recognize value

(i) Recognize the holistic nature of traditional knowledge and its intrinsic value, including its social, spiritual, economic, intellectual, scientific, ecological, technological, commercial, educational and cultural value, and acknowledge that traditional knowledge systems are frameworks of ongoing innovation and distinctive intellectual and creative life that are fundamentally important for indigenous and local communities and have equal scientific value as other knowledge systems;

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114 *Ley de Propiedad Intellectual Indigena*, Ley No. 20 (26 June 2000).

115 African Model Law, supra note 77.

Promote Respect

(ii) Promote respect for traditional knowledge systems; for the dignity, cultural integrity, and intellectual and spiritual values of the traditional knowledge holders who conserve and maintain those systems; for the contribution which traditional knowledge has made in sustaining the livelihoods and identities of traditional knowledge holders; and for the contribution which traditional knowledge holders have made to the conservation of the environment, to food security and sustainable agriculture, and to the progress of science and technology;

Meet the actual needs of holders of traditional knowledge

(iii) *B*e guided by the aspirations and expectations expressed directly by traditional knowledge holders, respect their rights as holders and custodians of traditional knowledge, contribute to their welfare and economic, cultural and social benefit, and reward the contribution made by them to their communities and to the progress of science and socially beneficial technology;

Promote conservation and preservation of traditional knowledge

(iv) Promote and support the conservation and preservation of traditional knowledge by respecting, preserving, protecting,and maintaining traditional knowledge systems and providing incentives to the custodians of those knowledge systems to maintain and safeguard their knowledge systems;

Empower holders of traditional knowledge and acknowledge the distinctive nature of traditional knowledge systems

(v) Be undertaken in a manner that empowers traditional knowledge holders to protect their knowledge by fully acknowledging the distinctive nature of traditional knowledge systems and the need to tailor solutions that meet the distinctive nature of such systems, bearing in mind that such solutions should be balanced and equitable, should ensure that conventional intellectual property regimes operate in a manner supportive of the protection of traditional knowledge against misappropriation, and should effectively empower traditional knowledge holders to exercise due rights and authority over their own knowledge.[116]

Support traditional knowledge systems

(vi) Respect and facilitate the continuing customary use, development, exchange, and transmission of traditional knowledge by and between traditional knowledge holders; and support and augment customary custodianship of knowledge and associated genetic resources, and promote the continued development of traditional knowledge systems;

Contribute to safeguarding traditional knowledge

(vii) While recognizing the value of a vibrant public domain, contribute to the preservation and safeguarding of traditional knowledge and the appropriate balance of customary and other means for their development, preservation and transmission, and promote the conservation, maintenance, application, and wider use of traditional knowledge, in accordance with relevant customary practices, norms, laws and understandings of

[116] WIPO, The Protection of Traditional Knowledge: Revised Objectives and Principles. WIPO/GRTKF/IC/16/5 March 22, 2010. IGC GRTKF Sixteenth Session Geneva, May 3–7, 2010, p. 4. See also the Revised Objectives and Principles of 2011. The Protection of Traditional Knowledge: Revised Objectives and Principles. WIPO/GRTKF/IC/18/5, January 10, 2011. Eighteenth Session Geneva, May 9–13, 2011.

traditional knowledge holders, for the primary and direct benefit of traditional knowledge holders in particular, and for the benefit of humanity in general;

Repress unfair and inequitable uses

(viii) Repress the misappropriation of traditional knowledge and other unfair commercial and non-commercial activities, recognizing the need to adapt approaches for the repression of misappropriation of traditional knowledge to national and local needs;

Respect for and cooperation with relevant international agreements and processes

(ix) Take account of, and operate consistently with, other international and regional instruments and processes, in particular regimes that regulate access to and benefit-sharing from genetic resources which are associated with that traditional knowledge;

Promote innovation and creativity

(x) Encourage, reward and protect tradition-based creativity and innovation, and enhance the internal transmission of traditional knowledge within indigenous and traditional communities, including, subject to the consent of the traditional knowledge holders, by integrating such knowledge into educational initiatives among the communities, for the benefit of the holders and custodians of traditional knowledge;

Ensure prior informed consent and exchanges based on mutually agreed terms

(xi) Ensure prior informed consent and exchanges based on mutually agreed terms, in coordination with existing international and national regimes governing access to genetic resources;

Promote equitable benefit-sharing

(xii) Promote the fair and equitable sharing and distribution of monetary and non-monetary benefits arising from the use of traditional knowledge, in consistency with other applicable international regimes, the principle of prior informed consent and including through fair and equitable compensation in special cases where the individual holder is not identifiable or the knowledge has been disclosed;

Promote community development and legitimate trading activities

(xiii) If so desired by the holders of traditional knowledge, promote the use of traditional knowledge for community-based development, recognizing the rights of traditional and local communities over their knowledge; and promote the development of, and the expansion of marketing opportunities for, authentic products of traditional knowledge and associated community industries, where traditional knowledge holders seek such development and opportunities consistent with their right to freely pursue economic development;

Preclude the grant of improper IP rights to unauthorized parties

(xiv) Curtail the grant or exercise of improper intellectual property rights over traditional knowledge and associated genetic resources, by requiring the creation of digital libraries of publicly known traditional knowledge and associated genetic resources, in particular, as a condition for the granting of patent rights, that patent applicants for inventions involving traditional knowledge and associated genetic resources disclose the source and country of origin of those resources, as well as evidence of prior informed consent and benefit-sharing conditions have been complied with in the country of origin;

Enhance transparency and mutual confidence

(xv) Enhance certainty, transparency, mutual respect and understanding in relations between traditional knowledge holders on the one hand, and academic, commercial, educational, governmental and other users of traditional knowledge on the other, including by promoting adherence to ethical codes of conduct and the principles of free and prior informed consent;

Complement protection of traditional cultural expressions

(xvi) Operate consistently with protection of traditional cultural expressions and expressions of folklore, respecting that for many traditional communities their knowledge and cultural expressions form an indivisible part of their holistic identity.

As the work of the IGC evolved, concrete recommendations were brought to the fore on patents in relation to TK. WIPO submitted some recommendations in relation to the integration of traditional knowledge into the patent regime, which captures the concerns of indigenous peoples and the proposals of various parties during IGC debates.[117] It offered some draft recommendations by 2007, as follows:

I. Patent authorities should undertake specific and systemic initiatives to ensure that granted patents are valid in the light of traditional knowledge and genetic resources, and with respect to relevant traditional knowledge systems.
II. Patent authorities should make use of the following recommendations and guidelines in their search and examination processes to achieve this end.
III. Patent authorities should be encouraged to give appropriate priority to recognizing relevant TK and to the practical implications of such recognition in policy development, resource deployment and strategic planning of their operations; to consider the practical implications of TK for search and examination; and to explore practical solutions to enhancing the validity of patents in the light of TK and TK systems.
IV. Patent examiners who work in relevant technical fields such as life sciences and environmental technology should be given training and awareness in TK and TK systems; where possible this should include direct training by TK holders working within a traditional context in the patent authority's country; and
V. Authorities should prepare analyses or issues papers discussing TK systems and TK that are relevant for patentability criteria in their national or regional systems, for the reference or general awareness-raising of examiners working in relevant technological fields.
VI. Patent authorities should take full account of diverse contexts when assessing patent validity, including interpreting documents and publications from the point of view of the relevant traditional context and the teaching that would be apparent to a relevant TK holder; and should set out specific, illustrative means of achieving this, noting that this approach should be undertaken within the existing bounds of the applicable patent law.
VII. Patent authorities and patent examiners should give appropriate consideration to the traditional context when considering the non-obviousness of (or the existence of an inventive step in) subject inventions.
VIII. Patent authorities should consider the implications of the practical context of traditional knowledge and the practitioners and holders of TK for the test of the 'person skilled in the art.'
IX. Where patent authorities have the legal competence to consider questions either of inventorship or of entitlement to apply during examination of the patent, they should consider the implications of *prima facie* evidence that a TK holder may be an unacknowledged inventor, that applicant did not derive the entitlement from a TK holder who was the source of the invention, or that the applicant was otherwise not entitled to apply for or be granted a patent on a TK-based invention.

WIPO noted some practical issues relating to searching for TK as prior art, namely that there was "a relative paucity of information on traditional knowledge

[117] Eleventh Session, Geneva, 3–12 July 2007 Recognition Of Traditional Knowledge Within The Patent System, WIPO/GRTKF/IC/11/7, 6 June 2007.

within the existing patent system". There were some exceptions, such as the coverage of innovations within the field of Traditional Chinese Medicine which are available in the Chinese patent literature.[118] It continued:

X. Patent authorities are encouraged to incorporate into standard office procedures the systematic search of existing public domain sources of TK and information on genetic resources, including the databases and journals notified to the Committee.
XI. Patent authorities are encouraged to train search and examination staff on the context of TK and sensitivities about its use and handling, so as to ensure that patent procedures do not contribute to the unauthorized dissemination and use of TK.
XII. Patent authorities are encouraged to promote awareness and sharing of information amongst each other regarding useful sources of traditional knowledge for the purposes of patent procedure, to the extent this can be done in line with the express needs and interests of traditional knowledge holders concerned.
XIII Advisory or consultative mechanisms may be developed to provide systematic advice to patent authorities on TK and TK systems that are relevant to their operations.
XIV Patent authorities should share information on useful sources of public domain TK and information on GR that are relevant to specific areas of technology (e.g., medical, agricultural, and ecological management), with due regard to concerns that this should not facilitate illegitimate access to or use of TK.
XV No procedures should be undertaken that would accelerate or facilitate the public dissemination of TK that is not disclosed with the consent of TK holders.
XVI Formal or informal cooperation should be undertaken to seek opinions, search or examination reports, or background information concerning specific TK-related applications from those offices with a recognized expertise in specific knowledge systems or traditions, from offices which have established a search or examination unit concentrating on a particular TK system or sector of TK, and from relevant consultative or advisory committees.

With regard to examining specific disclosure requirements for GBMR/TK it continued:

61. In addition to general patentability criteria, a number of national laws now contain specific provisions requiring the applicant to make specific disclosures relating to genetic or biological materials or resources.[119]
XVII Without prejudice to the work of international forums on such issues, and without prejudging policy choices in this area, attention may be given to sharing experience with (i) specific search and examination guidelines relevant to GBMR/TK invention, and (ii) practical implementation of specific disclosure measures, from the point of view of search and examination.

Greater efficiency in the work of the IGC was brought about by the creation of an Inter-sessional Working Group (IWG). The second session of the IWG established six open-ended drafting groups on: (1) Scope of Subject Matter; (2) Beneficiaries (including the question of transboundary TK); (3) Scope of Protection; (4) Exceptions and Limitations, and Remedies and Enforcement

[118] Ibid.

[119] See also EC proposals on "Disclosure Of Origin Or Source Of Genetic Resources And Associated Traditional Knowledge In Patent Applications," WIPO/GRTKF/IC/8/11, May 17, 2005.

(including the question of dispute resolution); (5) Administration of Rights, Duration of Protection, and Formalities; (6) Transitional Measures, Consistency with the General Legal Framework, and International and Regional Protection. The IWG has contributed to substantial progress toward the conclusion of an agreement on traditional knowledge and other areas. The IGC, after a decade of deliberations, has produced separate draft articles on TK, GR and Cultural Expressions. Agreement is more imminent on draft articles on TK (see Annex D).[120]

Article 1 of the draft articles addresses the critical issue of the subject matter of protection and specifically definition of traditional knowledge. It reads as follows:

> Definition of traditional knowledge
>
> *Option 1*
> 1.1 Traditional knowledge means knowledge including know-how, skills, innovations, practices, and learning which is collectively generated, preserved, and transmitted in a [traditional] and intergenerational [context] within an indigenous or local community [resulting from intellectual activity in a traditional context including the know-how, skills, innovations, practices, and learning that form part of the traditional knowledge systems of an [indigenous people or local community1].]
>
> *Option 2*
> 1.1
>
> (a) Traditional knowledge is dynamic and evolving. It is the result of the [intellectual activities] in [diverse traditional contexts], including scientific knowledge, skills, competencies, innovations, practices, and teachings in a collective framework including codified knowledge systems, continuously developed, evolved and widely used, following any changes in the environment, geographical conditions, and other factors [of [indigenous peoples or [and] local communities]]; *Indigenous knowledge of indigenous peoples and indigenous nations must be protected under the principles of the right to self-determination and the right to development.*[emphasis added]
> (b) Traditional knowledge is part of a collective, ancestral, territorial, spiritual, cultural, intellectual, and material heritage;
> (c) Traditional knowledge is transmitted from generation to generation in diverse forms and is inalienable, indivisible, and imprescriptible;
> (d) Traditional knowledge is intrinsically linked to biodiversity natural resources and sustains cultural, social and human diversity embodied in traditional lifestyles.

A representative of the Indian Council of South America (CISA)[121] had asked for the insertion into Article 1.1 (a) of the following text: "Indigenous knowledge of indigenous peoples and indigenous nations must be protected under the principles of the right to self-determination and the right to development."[122]

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[120] Nineteenth Session; Geneva, 18–22 July 2011, "The Protection of Traditional Knowledge: Draft Articles, WIPO/GRTKF/IC/19/5, MAY 20, 2011.

[121] *Consejo Indio de Sud America.*

[122] Report of the 19th Session of IGC; Eighteenth Session, May 9–13 2011, Geneva, WIPO/GRTKF/IGC/18/11, 29 July 2011, para 71.

A representative of the Australia-based Foundation for Aboriginal and Islander Research Action (FAIRA) proposed a new Article 10.3 regarding "Consistency with the General Legal Framework,"[123] Article 10 read as follows:

> Option 1
> [10.1 Protection under this instrument shall take account of, and operate consistently with, other international [and regional and national] instruments [and processes] [, in particular the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity].]
>
> Option 2
> [10.1 [Protection under this instrument should leave intact] and should in no way affect the rights or the protection provided for in international legal instruments [, in particular the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity].]
> [10.2 Nothing in this instrument may be construed as diminishing or extinguishing the rights that indigenous peoples or local communities [or nations]/beneficiaries have now or may acquire in the future.]
>
> Alternative
> 10.2 In accordance with Article 45 of the United Nations Declaration on the Rights of Indigenous Peoples, nothing in this instrument may be construed as diminishing or extinguishing the rights that indigenous peoples have now or may acquire in the future.[124]

FAIRA proposed the addition of 10.3 as follows: "The provisions set forth in this instrument shall be interpreted in accordance with the principles of justice, democracy, respect for human rights, equality, non-discrimination, good governance and good faith."[125]

During panel discussions on indigenous peoples collective rights and intellectual property at the 18th session of the IGC, Professor James Anaya, United Nations Special Rapporteur on the Rights of Indigenous Peoples, stressed that "there is a wide international recognition of Indigenous Peoples collective rights, in particular in the United Nations Declaration on the Rights of Indigenous Peoples of 2007, which also recognizes the right of Indigenous Peoples to self-determination." In addition, a number of UN treaty-monitoring bodies, such as the United Nations Human Rights Committee, the United Nations Committee on the Elimination of Racial Discrimination and the United Nations Committee on Economic, Social and Cultural rights, were taking Indigenous Peoples' rights into consideration. He pointed to a number of regional bodies, including the Inter-American Commission on Human Rights and the African Commission on Human and Peoples' Rights, which had examined collective rights related to lands and resources. The Special Rapporteur called attention to the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization adopted in October 2010 but not yet ratified. Article 7 of this Protocol calls states parties to ensure that traditional knowledge

123 Ibid.

124 Ibid.

125 Ibid.

associated with genetic resources held by Indigenous and local communities is accessed with the prior informed consent of these communities, and that mutually agreed terms have been established.

8.8 Conclusion

There is no clearer example of the human security concerns occasioned by the intellectual property regime than the existential threats to indigenous communities, most of whom are in developing countries. This concern was punctuated at the18th session of the IGC by calls from the representative of CISA, commenting on draft articles of a future agreement on Traditional Knowledge, for the insertion into draft Article 1.1(a). They have addressed their plight through the UN and its specialized agencies.

As communities all over the world have awakened to the breadth and wealth of TK and TM and to their criticality to the survival of indigenous peoples in particular, policy makers, legislators, and TK holders are actively seeking ways of finding equitable ways of sharing in the benefits of TK and TM. At the start of WIPO's activities on TK issues, Antonio Jacanimijoy noted that "[w]e cannot continue to operate and promote an intellectual property system that recognizes the contributions of some but not of others. A system founded in this way is based on injustice, and as such is unsustainable and in need of change. We consider it vitally important to develop systems of protection and compensation for forms of innovation that are not covered by traditional patent system."[126] At the same time, Lars Anders Baer, then Vice-President of the SAAMI Council, Jokkmokk, Sweden, argued that indigenous peoples are not opposed to change and new developments. Citing the fears that traditional legal concepts, including in the field of intellectual property, are often "seen as a threat to business interests, development and national prosperity", he has noted that the contrary is true. But change and new developments should be fostered "on clear condition that it take place in accordance to our needs and desires, and is not imposed on us".[127]

Wendland has noted succinctly that what holders of TK want includes the right to control disclosure and use of their knowledge, the right to benefit commercially from their knowledge, the right to be acknowledged as the source of knowledge and the right to prevent derogatory, offensive and fallacious use of their knowledge and folklore and cultural symbols.[128] A world in which Indigenous peoples' interests were not taken into account, after well-document historical injustices,[129] would be an unjust world.

In the next chapter we look further at the quest for justice through the Development Agenda.

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126 Jacanimijoy, supra note 21.

127 SAAMI Council.

128 Wendland 2002, 1.

129 Keal 2003.

Part III
WIPO and Human Security

Chapter 9
The Development Agenda of WIPO

WIPO has recognized that the organization has a role to play in human security, specifically in enhancing the development of its Member States. Whereas it has traditionally seen its role as a technical-legal one to assist Member States to apply existing IP laws, WIPO has embraced a development-oriented agenda and work plan that recognizes the human security concerns of the vast majority of its membership and the need for a more flexible and balanced IP regime.

9.1 WIPO, Development, and Human Security

WIPO has a role to play in the ultimate enjoyment of human security by nations and individuals alike by pursuing an agenda that seeks to restore a balance in the IP regime. Scholarship on the influence of international organizations in global governance has pointed to their role in shaping the rules of international society.[1] WIPO's membership has made a call loud and clear for the organization to regain a leadership position in the field of intellectual property and to address the developmental concerns of the majority of its membership. Following accusations by many commentators for essentially pursuing a harmonization agenda under the TRIPS agreement, it has been moved to heed the call for restoring balance by adopting the Development Agenda (Annex E). Understanding how it may do so requires us to briefly outline its history, its decision-making structure, procedural aspects of its norm-setting activities, and the role of industry in its norm-setting activities, and the fostering of a 'harmonization' agenda that essentially, according to critics, served a TRIPS Plus agenda.

[1] Barnett and Duvall 2005.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9_9,

WIPO's role in the international intellectual property regime has been two-fold since its creation in 1967 under the WIPO convention. First, from the beginning of its operations in 1970, under its long-serving first Director-General, Arpad Bogsch, the organization was seen as a legal-technical organization that would assist countries to 'implement' IPR treaties following the prevailing utilitarian arguments for their enforcement. The second Director-General, Kamil Idris, described the organization's role as one of "demystifying" intellectual property. These two views are summarized by Christopher May as essentially a socialization role for the WIPO. As the organization expanded and as more countries responded to the requirements of the TRIPS Agreement under the WTO, WIPO's role was one of ensuring that Member States were properly informed, trained, and assisted in implementing the various treaties. This socialization function is being challenged as many countries look to WIPO to integrate the developmental concerns of many of its Member States. May has noted that developing country Member States' demand to integrate a development agenda in every aspect of the organization's work indicates that the organization is not merely a legal–technical one but a more overtly political one. In this second view, the WIPO is a political institution where national interests are played out. As a specialized agency of the UN its work in the area of intellectual property must be seen in the larger context of the UN Charter. Article 55 of the latter stipulates that in order to create conditions of stability and well being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote "higher standards of living, full employment, and conditions of economic and social progress and development", "solutions of international economic, social, health, and related problems; and international cultural and educational co-operation" and "universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion."

9.2 WIPO and Global IP Governance

Scholarship on global governance has shown that, while, strictly speaking, it is the Member States who make the rule of international society, international organizations exercise a powerful influence on the framing of those rules through various mechanisms. They have the 'power' to progressively develop international law. Barnett et al., drawing on theories of international relations, have argued that IOs exercise 'power' through generating or serving as a transmission belt for ideas that ultimately influence the making of rules that govern the world. Such ideas may emanate from civil society organizations and also from the academic community. IOs, working within their constitutional frameworks, utilize a variety of techniques to codify existing rules and to progressively generate rules in new areas. WIPO is no exception to this process.

9.2.1 Origins and Evolution of WIPO

WIPO was established by the WIPO Convention concluded in Stockholm in July 1967. Its antecedent, the BIRPI, was created through the union of the International Bureaus created under the Berne Convention for the Protection of Literary and Artistic Works (1883) and under the Paris Convention for the Protection of Industrial Property (1886), which was created in 1893. The underlying principles of these two multilateral intellectual property agreements were non-discrimination, national treatment, and the right of priority (protection to the first to invent or create, rather than the first to file or reproduce).[2] Commonalities between the two treaty systems soon led to a unified system, BIRPI.

Whereas the expanding membership had met periodically since the creation of BIRPI in 1893 to discuss and revise the IPR treaties, deepening commercial relations between states after the creation of the GATT in 1948, heralded the need for a more formal institutional framework for interstate coordination.[3] In addition, by the 1950 and 1960s, the conferences organized by the **BIRPI** "often included delegations that were sharply critical of the manner in which patents and other intellectual properties were being utilised in the international system."[4] Developing country criticisms "would surface repeatedly and effectively be sidelined **at the WIPO** for the next 30 years."[5] BIRPI was effectively an international agency operated by the Swiss government and was replaced by a full-fledged international organization, the WIPO when the WIPO Convention came into force in 1970. Membership of WIPO has expanded from 51 signatories to the WIPO Convention in 1968 to 184 today.[6]

BIRPI's work was driven since 1963 by Arpad Bogsch, who became the first Director General of WIPO. Bogsch would secure WIPO's status as a specialized agency of the UN in 1974, with an obligation to follow any recommendations of the UN and work with other agencies to develop resources to tackle problems identified by the WIPO and the other specialized agencies (Article 5 of Agreement

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[2] May 2006, p. 436.

[3] See the following works for a history of WIPO May, 2006 and 2007

[4] May 2006, p. 436.

[5] Id., p. 436.

[6] The signatories were Algeria, Austria, Belgium, Bulgaria, Byelorussian Soviet Socialist Republic, Cameroon, Central African Republic, Congo-Kinshasa, Denmark, Ecuador, Finland, France, Gabon, Germany (Federal Republic), Greece, Holy See, Hungary, Iceland, Indonesia, Iran, Ireland, Israel, Italy, Ivory Coast, Japan, Kenya, Liechtenstein, Luxembourg, Madagascar, Mexico, Monaco, Morocco, Netherlands, Niger, Norway, Peru, Philippines, Poland, Portugal, Rumania, Senegal, South Africa, Spain, Sweden, Switzerland, Tunisia, Ukrainian Soviet Socialist Republic, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United States of America, Yugoslavia. "WIPO Notification 1, Convention establishing the World Intellectual Property Organization,". For a list of the 184 current contracting parties, see http://www.wipo.int http://www.wipo.int/treaties/en/notifications/convention/treaty_convention_1.html.

with the UN). As a specialized agency, the Bureaux "and specifically Bogsch believed that working inside the UN system would also encourage more developing countries to join the organization and enable the internal administration of the organization to benefit from the advantages available to UN agencies."[7] Widening the membership prompted concerns for the promotional role that WIPO was to play. The Mandate from the Member States was "to promote the protection of IP throughout the world through cooperation among states and in collaboration with other international organizations."[8] May has noted that being a Specialized Agency of the UN entailed other commitments related to information and documents (Article 6), the provision of statistics (Article 7), and technical assistance (Article 9), and also set out its diplomatic status within the UN (Article 17) that extended considerable diplomatic benefits to the organization's staff.

To accomplish these tasks, the WIPO has a General Assembly, which is the main decision-making body, a Conference to discuss matters of general interest in the field of intellectual property, a Coordination Committee "to give advice to the organs of the Unions, the General Assembly, the Conference, and the Director General, on all administrative, financial and other matters of common interest" and an International Bureau located in Geneva, Switzerland. In addition, Assemblies of the Member States of each of the Unions, (e.g. the PCT Union Assembly; the Madrid Union Assembly, etc.) were established by the respective WIPO-administered treaties. *Ad hoc* standing committees of experts are established by the General Assembly for a given purpose such as whether there is a need for a new treaty or not, or whether to revise a treaty.[9] Upon achieving sufficient progress toward treaty adoption, the General Assembly can decide to convene a Diplomatic Conference consisting of a high-level meeting of Member States to finalize negotiations on a new treaty. There are also permanent committees, with mandates to periodically revise and update classification systems under various treaties.[10] Any of the Governing Bodies can constitute committees as required, such as the Committee on Development and Intellectual Property or the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC).[11] Working Groups can be established by Standing Committees or other bodies to examine a particular question in more detail. WIPO has established four regional offices in Brazil, Japan, the USA, and Singapore that provide support services in respect of the Patent Cooperation Treaty (PCT), Madrid and Hague systems, arbitration and mediation, collective management, research, development, capacity building, and UN system-wide cooperation, in coordination with the

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[7] May 2006, p. 437.

[8] WIPO, http://www.wipo.int.

[9] The ad hoc committees are Standing Committee on the Law of Patents (SCP); Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications (SCT); Standing Committee on Copyright (SCCR); Standing Committee on Information Technologies (SCIT).

[10] The Locarno, Nice, Strasbourg and Vienna Agreements.

[11] Other committees include the Program and Budge Committee; and the Advisory Committee on Enforcement (ACE).

relevant sectors in the Headquarters. WIPO is unique among the family of UN organizations in that it is largely self-financed from the various services that it provides. Some 250 NGOs and IGOs currently have official observer status at WIPO meetings.

9.2.2 Socialization Role

The legal–technical role of WIPO is enshrined in Articles 3 and 4 of the WIPO Convention. Article 3 states that the objectives of the Organization are: "(i) to promote the protection of intellectual property throughout the world through cooperation among States and, where appropriate, in collaboration with any other international organization;" and "(ii) to ensure administrative cooperation among the Unions." Article 4 states that, in order to attain the objectives described in Article 3, the Organization shall promote the development of measures designed to facilitate the efficient protection of intellectual property throughout the world and to harmonize national legislation in this field; perform the administrative tasks of the Paris Union, the Special Unions established in relation with that Union, and the Berne Union; may agree to assume, or participate in, the administration of any other international agreement designed to promote the protection of intellectual property; shall encourage the conclusion of international agreements designed to promote the protection of intellectual property; shall offer its cooperation to States requesting legal–technical assistance in the field of intellectual property; shall assemble and disseminate information concerning the protection of intellectual property, carry out and promote studies in this field, and publish the results of such studies; shall maintain services facilitating the international protection of intellectual property and, where appropriate, provide for registration in this field and the publication of the data concerning the registrations; and shall take all other appropriate action.[12]

This socialization role came under heavy criticism for a variety of reasons, which were succinctly summarized by Musungu and Dutfield in 2003. The authors were prompted to write critical piece on TRIPs and WIPO due to several concerns. First, they were concerned with the diminished role of WIPO given its historical role in globalizing intellectual property. They pointed to the fact that the overwhelming majority of the literature on intellectual property and development issues by then had been devoted to the TRIPS Agreement. They feared that TRIPS plus agreements would take away flexibilities within TRIPS. The emphasis on harmonization was unlikely to be in the interest of developing countries, especially "given the stance of the International Bureau of WIPO and the disproportionate influence of industry groups in the negotiations."[13] They noted the "dangers in

[12] WIPO Convention, http://www.wipo.int/treaties/en/convention/trtdocs_wo029.html#article_1.

[13] Musungu and Dutfield 2003, 1.

WIPO's technical assistance activities overemphasizing the benefits of intellectual property over the costs and the need to use TRIPS flexibilities."[14] They were concerned with "dangers that the International Bureau might, through technical assistance activities, exercise undue influence over the representatives of developing countries." Second, they were concerned with a perception that WIPO's mandate—as contained in its founding convention—is limited to the promotion of intellectual property and does not embrace development objectives. Third, they criticized efforts of WIPO that were allegedly aimed at 'harmonising' patent law standards and at providing technical assistance on the same to developing countries.[15] They concluded that to properly construe the mandate of WIPO in the context of its agreement with the UN a number of elements were needed: (1) increased participation and influence of developing countries, civil society, and other development organizations in WIPO processes as a counterweight to developed countries and business interests that currently dominate WIPO's processes; (2) ensure that the International Bureau served the interests of all WIPO members and did not succumb to threats of withdrawal by industry players; and, (3) separate the norm-setting functions of the International Bureau from its technical assistance activities. They were particularly concerned that: (1) The influence of international business organizations and norm-setting in the area of IP be recalibrated to better serve all stakeholders; (2) A decision-making structure be developed to take heed of the concerns of a good part of its membership; (3) Access by civil society actors to decision-making processes and normative activities within WIPO be enhanced; (4) WIPO's perceived subservience on IP matters be reversed (as most of the academic literature on IP focused on the TRIPS agreement) and (5) WIPO's unwitting 'participation' in the harmonization agenda under the TRIPS agreement be circumscribed. May has argued that one should be wary of [WIPO'S] own depiction of itself as merely a technical agency; rather, it is a highly politicised organisation.

9.2.3 Political Role

There have been loud calls for the modernization of the world intellectual property regime from one which allegedly 'plunders' and serves as a 'colonizing' instrument that removes the fundamentals of life from the public sphere[16] to one

[14] Id., 1.

[15] Id., 2.

[16] Shiva 2001. Andreas Rahmatan has argued that intellectual property fulfills a neo-colonial role in that, as part of the enforceable international trade regime, it safeguards economic penetration and control. Rahmatan 2009.

more attuned to the needs of humanity in the twenty-first century.[17] Different points of view have been in contention in the discussion. Some have advocated strict compliance with the treaties and the socialization of countries into the rules of the international intellectual property and other agreements constituting this regime.[18] It is generally recognized that scientific and technological developments can contribute to enhancing the welfare of humanity and that those who invest talent, time, and money in developing new products should be compensated for their investment.

Some have claimed that the key international treaties were negotiated in different historical epochs and are not infused with a twenty-first century ethic of equity and caring for the poor and the disadvantaged. It is argued that the intellectual property regime should help advance the implementation of the Millennium Development Goals enunciated in 2000 by global leaders at the highest level. May has noted that, whereas the first long-serving Director General of the WIPO saw the organization's task as that of "keeping the institution of intellectual property useful" in changing circumstances and whereas the second Director General saw the WIPO's task as that of "demystification", this program of socialization has begun to meet some resistance, most obviously through the WIPO's Development Agenda at the WIPO, which is explored further below.[19] In 2007, WIPO agreed to embark on discussion of a development agenda.

There have been claims that developed countries have used their weight and bargaining advantages to obtain from developing countries concessions that are not in the interests of their peoples and that the end result is fundamental inequity.

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[17] See, for example, in respect of the USA, Financial Times, "Patent Problems. Congress must take the chance to act on patent reforms," 22 August, 2011, 6: "At present, too many patents are issued for ideas that fail the tests of being genuinely new, useful and non-obvious. And once flawed patents have been issued, they are too difficult to challenge. To improve quality, the issuing process should be opened to wider scrutiny. Anyone with a valid interest should be able to challenge an application before it receives the imprimatur of the patent officers…Once issued, courts need more power to reconsider the quality of all patents, not be forced to defer almost automatically—as at present—to the expertise of the overworked examiners who approved them in the first place."

[18] "An efficient and equitable intellectual property system can help all countries realize their intellectual property's potential…" WIPO 1999, 3. See also, WIPO, Vision and Strategic Direction of the World Intellectual Property Organization, WIPO Publication No. 487E, ISBN 92-805-0974-2 (1999), 45. "WIPO will need to progressively develop new approaches and instruments for protecting creativity, innovation and knowledge not so far sufficiently covered by the existing means of protection, such as traditional knowledge and folklore…Furthermore, various types of intellectual property rights are being used in a new framework…in order to safeguard the rights of intellectual property owners and to balance those rights with the legitimate interests of the public. Possible conflicts must be addressed… Moreover, the body of intellectual property law must be codified as a resource on which all Member States can rely. This will also provide a basis to determine which areas must be strengthened, which balances must be maintained, which new balances must be achieved, and which new avenues should be explored in shaping the international legal framework for the protection of intellectual property." Id., p. 46.

[19] May 2007.

For example, Rahmatian has argued that "TRIPS grew out of the endeavors by the Western industrialized world to safeguard and enforce their own Western intellectual property rights, based on Western concepts, in the non-Western, and typically developing, countries."[20] Michael Carolan has argued that patents help to "lock-in" global inequalities.[21] For example, he has argued that in mirroring Western philosophical assumptions, patent law tends to see the world in a very Western way, such as by valuing abstract, disembodied (published) knowledge over oral and embodied forms. For Carolan, TRIPS represented an attempt by global capitalism to reconcile any apparent contradictions that may threaten the dominant political economy. It did so, "by masking history" and "It does this by saying that the developing world *needs* strong international intellectual property protections if they hope to follow the trajectory of the developed West…. Rather than reduce global inequalities between nations, TRIPS helps solidify those divisions."[22]

There have been strong voices in the human rights movement which claim that the existing international intellectual property regime is hampering efforts to realize basic human rights such as the rights to food, to health, and to education. The UN Committee on Economic, Social and Cultural Rights considers that fundamental human rights should take precedence over intellectual property rights and that scientific and technological developments should be put to the service of basic human rights.

The UK Commission on Intellectual Property Rights observed already in 2002 that "WIPO…should give explicit recognition to both the benefits and costs of IP protection and the corresponding need to adjust domestic regimes in developing countries to ensure that the costs do not outweigh the benefits."[23]

Armstrong and others have advanced the view that the beginning of the twenty-first century foreshadowed a new phase in global intellectual property governance, characterized neither by universal expansion nor reduction of standards, but rather by contextual 'calibration'. A 'systemic calibration' was taking place, based on a cognizance of the positive *and* negative implications of intellectual property for broad areas of public policy. In essence:

> [A] newly emerging intellectual property paradigm is based on a richer understanding of the concept of development. While development was once defined as mainly an issue of economic growth, there is now a more nuanced view, a view that emphasises the connections between development and human freedom… WIPO's new' development agenda', formally adopted in 2007, is premised on promoting a more holistic appreciation of the real relationships among intellectual property and economic, social, cultural and human development.[24]

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[20] Rahmatan 2009, 43.

[21] Carolan 2008, 295–310.

[22] Carolan 2008, 308.

[23] Commission on Intellectual Property Rights 2002, 159. Armstrong 2010, xxiii.

[24] Armstrong et al. 2010, 4.

9.3 The Development Agenda

The Agreement with the UN of 1974, states that WIPO's role is to be seen within the framework of the competence and responsibilities of the UN and its organs, particularly UNCTAD, the UN Development Programme (UNDP), and the UN Industrial Development Organisation (UNIDO) as well as the UN Educational, Scientific and Cultural Organisation (UNESCO). Musungu and Dutfield have argued that the intention was clearly that its mandate should be construed in the context of the development objectives of the specified UN agencies as well as the broader objectives of achieving international cooperation in solving problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and fundamental freedoms. At the least, WIPO was obliged to carry out its mandate "taking into account" development objectives on the basis of recommendations, studies, outcomes and conclusions of UNCTAD, UNDP, UNIDO, and UNESCO as well as ECOSOC, the UN General Assembly and the Security Council.[25]

During the October 2004, General Assembly of the WIPO, as a result of an informal initiative by Brazil and Argentina, and with support from a group of states known as the "Group of Friends of Development", it was unanimously agreed that intellectual property could only be "promoted" to the extent that such promotion also served the developmental aims of the wider UN system.[26] The Development Agenda quotes from the Doha Development Agenda that was launched during the WTO's fourth Ministerial Conference in November 2001 and thus "links the Agenda to a wider range of proposals and actions that have 'all placed development at the heart of their concerns'."[27] This initial statement was then followed by seven agenda items: (1) The 'development dimension' has been increasingly recognized across the institutions of global governance and, through the Doha Development Agenda, has specifically been introduced into the realm of the global governance of IPRs; (2) As the WIPO is a specialized agency of the United Nations, it is already mandated to 'take into account the broader development goals that the UN has set for itself, in particular the Millennium Development Goals, and this should be reflected more clearly in the perspectives and practices of the WIPO itself; (3) Recognizing the crucial norm-setting activities of the WIPO, the WIPO must not only recognize and include the need for national flexibilities in supporting developmental aims, but also must better recognize the public-regarding dimension of intellectual property; (4) Because technological transfer is a key element to development and because, despite claims to the contrary, the international IPR system has not fostered extensive transfers of technology, a new subsidiary body of the WIPO needs to be established to look at what

[25] WIPO 2010, 19.

[26] May 2007, 76.

[27] May 2007, 441.

measures could be taken to reduce the barriers to transfer of both technology and scientific research; (5) The Advisory Committee on Enforcement (set up by the WIPO in 2002) 'should be guided by a balanced approach to intellectual property enforcement' and not merely focus on the interests of rights' holders and curbing infringement. Rather, equity and the issue of anti-competitive practices must be included in the committee's work; (6) Technical assistance needs to be better tailored to the individual country's needs and also needs to be more focused on balancing the costs and benefits of protecting intellectual property; such support must also focus on how developing countries can maximize the benefits of the existing flexibilities in the TRIPS agreement; and (7) The WIPO itself must serve all sectors of society, as well as the interests of all its members. Too often the WIPO has conflated user groups and other nongovernmental organizations, and thus has not fully recognized the public-regarding dimension of the protection of IPRs.[28] Some countries saw this as an attempt to weaken the intellectual property regime, possibly under the flawed assumption that IP alone could bring about development. The Agenda, however, attempted to reorient the work of the WIPO toward developmental concerns.

Upon adoption of the WIPO Development Agenda in 2007, the General Assembly adopted a list of 45 recommendations which provided, *inter alia*, that norm-setting activities shall be inclusive and member driven, shall take into account different levels of development, and shall be a participatory process, which takes into consideration the interests and priorities of all WIPO Member States and the viewpoints of other stakeholders, including accredited intergovernmental organizations (IGOs) and NGOs. During the last session of WIPO's Committee on Development and Intellectual Property (CDIP) in 2011, the Asian Group and Latin American Group called for continued progress toward integrating development in the work of the WIPO. The African Group reiterated its proposal made at the Fifth Session of the CDIP in 2010, to invite the UN *Special Rapporteurs* on the Right to Food, the Right to Health, and the Right to Education to the CDIP for an interactive dialog with them on those particular issues. The African Group "noted with deep concern that the report presented at the time did not adequately assess the impact of WIPO's work on the MDGs, and requested WIPO to revise the report to include concrete activities with measurable indicators to help achieve the MDGs."[29] The discussion of WIPO's development agenda in the CDIP have so far not made much headway, it is unclear where the development paradigm will take us.

In a communication dated 26 August 2011, the Secretariat received a Note Verbale from Nepal on behalf of LDC countries requesting WIPO to add an item to the draft agenda of the 49th series of Meetings of the Assemblies of the Member

[28] Id., 441–442.

[29] WIPO, Sixth Session, Geneva, November 22 to 26, 2010 CDIP/6/13 CPID, http://www.wipo.int/edocs/mdocs/mdocs/en/cdip_6/cdip_6_13.pdf.

States of WIPO.[30] It requested the introduction of the Istanbul Program of Action for the Least Developed Countries for the Decade 2011–2020 into the WIPO's programs.[31] The Ambassador of Nepal paid tribute to the Director General's "close personal attention to the problems of LDCs" and for WIPO's assistance to LDCs by hosting a preparatory conference in view of the impending UN LDCs IV conference.[32] At the start of the 49th General Assembly in 2011, the Delegation of South Africa, speaking on behalf of the African Group, also commended the efforts of the Director General to prioritize development activities in WIPO, as evidenced by the 21.3 % increase in development expenditure in the proposed Program and Budget for the 2012–2013 biennium, and by the allocation of financial resources to Development Agenda projects from the regular WIPO budget.

At the Start of the 49th General Assembly of WIPO, the new Chair of the Assembly, Ambassador Uglješa Ugi Zvekić of Serbia, called attention to the Development Agenda, stating:

> As a cross-cutting subject, we will review the mainstreaming of developmental matters in the work of the Organization and, in particular, we will discuss the implementation of the Development Agenda recommendations. In this context, I would like to invite and encourage all delegations to work in a constructive and open spirit and to be able to show generous flexibility when required. I will need the support and cooperation of all of you as essential elements of the consensus building exercise to guide us to the end of these Assemblies.[33]

He went on to say that:

> Intellectual property has a profound impact on national policy matters. We are aware of its importance on cultural and technological developments; its role in the larger global challenges is as relevant. We will be considering and deciding in the next days the direction of key areas in a manner that may improve the conditions of our citizens across the world. The stakes are high and this Organization requires our engagement. We will only be able to provide it in a consensual manner if we are all able to show cooperative approach to finding solutions to the issues that face us independently of their complexity or sensitivity. The higher interest needs us to adopt a constructive attitude and to show leadership in our negotiations.[34]

At the 49th General Assembly in 2011, the Delegation of Egypt, speaking on behalf of the Arab Group, stated in relation to the Development Agenda that "There was a need to go beyond traditional technical assistance activities and

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[30] WIPO, Istanbul Declaration and Programme Of Action (IPOA) for the Least Developed Countries (LDCs) for the Decade 2011–2020, A/49/17, Assemblies of the Member States of WIPO, 49th Series of Meetings, Geneva, 26 September to 5 October 2011.

[31] See Istanbul Declaration (A/CONF.219/L.1) and the Program of Action for the Least Developed Countries for the Decade 2011–2020 (A/CONF.219/3/REV.1).

[32] WIPO, "Istanbul Declaration and Programme Of Action (IPOA) for the Least Developed Countries (LDCs) for the Decade 2011–2020, A/49/17, Assemblies of the Member States of WIPO, 49th Series of Meetings, Geneva, 26 September 5 October 2011.

[33] WIPO 2011a., para 15.

[34] Id.

embark on value-added projects that took into consideration varying development levels and specific economic and social conditions."

During the same discussion, India expressed its satisfaction with the progress in implementing the Development Agenda. For India:

> The Development Agenda was an encouraging framework that called for a conceptual paradigm shift by placing IP in the larger context of socio-economic development, instead of seeing IP as an end in itself. It replaced the one-sided simplistic notion: IP was good, more IP was even better; with a more advanced and calibrated view that IP was good when it served as a tool to enhance economic growth and social development and was tailored to suit a country's needs and situation. India was also happy to note the new focus on exploring how IP could contribute to finding solutions for pressing global challenges in the areas of health, food security and climate change. WIPO's approach to such important issues was viewed as very encouraging.[35]

The Delegation of South Africa referred to the Development Agenda as a "watershed moment in WIPO," which has guided WIPO's development work "ensuring that countries at different levels of development, in particular developing countries and LDCs, benefited from the IP system." For South Africa, speaking on behalf of the Asian Group,

> WIPO's central mandate to advance the work of the Development Agenda could not be overemphasized, in particular its response to the challenges of climate change, energy security, food security, and public health. South Africa commended the work done to mainstream the Development Agenda into WIPO's activities and encouraged that further such work be done.[36]

The African Group, represented by the Republic of South Africa, recognized "the role WIPO could play in promoting the understanding and adoption of intellectual property policies and laws in Member States in respect of their different levels of development, as well as enhancing the flexibility of public policies in the area of IP."[37] Technical assistance, capacity-building activities, and development-oriented norm-setting were important if Africa was to benefit from the intellectual property system.

The Asian Group, represented by Pakistan, pointed out that, as the world became increasingly interlinked, "WIPO had to play an effective yet prudent role at the global level."[38] The Asian Group "welcomed the establishment of the Global Challenges Division at WIPO and its threefold focus: health, climate change and food security, all issues of utmost importance to the Asian region." While initial progress in mainstreaming the development dimension across all areas of WIPO's work was appreciable, advancing that mainstreaming process required the resumption of the CDIP following the suspension of its seventh session. The Asian group

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[35] WIPO, draft general report, Assemblies of the Member States of WIPO, 49th Series of Meetings, Geneva, 26 September to 5 October 2011, A/49/18 Prov, para 37.

[36] Id., para 69.

[37] WIPO 2011a., para 23.

[38] Id, para 24.

felt that "It was important to highlight that, as a United Nations organization, WIPO had a responsibility to promote and implement South–South cooperation, as a complement to North–South cooperation, and the Delegation reiterated the need for the international community to support the efforts of the developing countries to expand South–South cooperation."[39]

The GRULAC expressed appreciation for the leadership of the Director General of WIPO and "thanked the Director General for demonstrating his commitment to the issues of special interest for that region, and said that it was confident that his commitment would continue." Since the adoption of the Development Agenda and the creation of the CDIP, GRULAC had supported WIPO in its work to integrate the development dimension throughout the Organization, and "it should carry out such work as a specialized United Nations agency, so as to contribute to the achievement of the Millennium Development Goals."[40]

The Arab Group "considered that more needed to be done to ensure that IP was used to support development in developing countries. In order to improve development work, there was a need to promote creativity, facilitate transfer of and access to technology, and ensure that protective IP policies did not hamper development efforts nor restrict public policy space or flexibilities that were available to developing countries." It advanced the view that in its norm-setting activities, "WIPO should ensure that such IP norms supported development objectives and took into consideration flexibilities that helped developing countries in setting up their development strategies."[41]

ASEAN stated that cooperation between ASEAN and WIPO continued to broaden and intensify, adapting to the changing needs of individual ASEAN countries. For ASEAN, the activities of WIPO reflected the mainstreaming of IP development in the region and, more importantly, WIPO's assistance in placing IP at the core of national development plans to support growth. ASEAN appreciated the WIPO Office's work in advising on the international registration systems, arbitration and mediation and collective management of rights, which had been useful and beneficial for ASEAN. ASEAN welcomed the areas identified for cooperation with WIPO, notably technology innovation support offices and copyright exceptions and limitations for the visually impaired and persons with disabilities.

The DAG, represented by India, welcomed the Secretariat's efforts to assist Member States "in developing appropriate national IP strategies designed to contribute to national growth and development, as well as the establishment of embryonic technology and innovation support centers in some developing countries which might one day serve as national hubs for innovation."[42] Such attempts to promote home-grown innovation helped to "democratize and globalize IP ownership and enabled developing countries to become stakeholders in the international

[39] Ibid.

[40] Ibid., para 26.

[41] Id., para 29.

[42] Id., para 31.

IP system." Those same nations could, in turn, contribute to global technological innovation, economic growth and activity, but they urgently required help in preparing country–specific IP strategies that utilized available flexibility and promoted development." The DAG commended WIPO "for moving in the direction of a balanced and inclusive global discourse on intellectual property that was supportive of development objectives and considerations. "The Group hoped that WIPO would continue its work of "contextualizing IP, using it as a means to promote innovation, growth and development everywhere."

The LDCS, represented by Nepal, noted WIPO's "valuable contributions" to the United Nations' Least Developed Countries fourth conference in Istanbul, as well as the initiatives launched in the LDCs which provided technical assistance to generate IP awareness, modernization, and capacity building of national IP Offices. The Delegation felt that the needs of LDCs required going beyond a simple project-based approach to "address the structural weaknesses inherent in LDCs with a view to improving their poor IP infrastructure and stated that technical assistance and capacity building for LDCs were vital, and that the needs assessment of the LDCs should be coordinated effectively to ensure their full compliance with their pressing requirements and priorities."[43] The LDCs referred to the conference outcome document of the Fourth United Nations Conference on the Least Developed Countries in Istanbul in May, 2011, which had adopted a program of action for the LDCs for the decade 2011–2020, and identified a number of priority areas for action that included precisely defined actions to be taken by the LDCs themselves with their development partners, multilateral organizations, and other stakeholders. "The imminent challenge was to ensure the effective and unfailing implementation of the program of action to augment the developmental level in LDCs and enable half of 48 LDCs to graduate from the Least Developed Countries category by 2020."[44] The LDCs indicated that priority areas for action where WIPO could contribute within its mandate, included: productive capacity, agriculture, food security, and rural development, women and social development, trade, technology, addressing multiple crises and other emerging challenges as the major priorities underpinning the Istanbul Program of Action. The LDCs drew attention to paragraph 153 of the Istanbul Program of Action "which invited the Governing Bodies of the United Nations Funds and Programs and all the multilateral organizations to contribute to the implementation of the program of work and to integrate it into their respective programs as appropriate."[45] It underlined "the need to have an equitable and efficient intellectual property regime based on modern information and technology in which there was increased participation from LDCs."[46] That required building human, institutional, and physical infrastructure

[43] Id., para 32.

[44] Ibid.

[45] Ibid.

[46] Ibid.

including in the field of technology to harness the innovative and creative potential of the people in LDCs.

The EU, represented by Poland, considered WIPO "a crucial player in creating a secure environment for investing in IP and in fostering innovation."[47] It, therefore, reiterated its support for WIPO's mission in that regard. The Delegation expressed the EU's "continuing support for WIPO's global goals and reaffirmed its commitment to the appropriate implementation of the Development Agenda recommendations."[48] The EU regretted that the last session of the CDIP, and, consequently, the whole process of implementation, had been suspended due to a lack of consensus regarding a single issue. The EU hoped that that problem could be solved in the next session, in a manner acceptable to all parties and proceeding "on the basis of consensus" which it deemed "essential to ensuring that all Member States were included in the process."[49] The EU believed it would be feasible for all to agree on a coordination mechanism for the Development Agenda, and on which WIPO bodies should report to the General Assembly annually on the mainstreaming and implementation of Development Agenda recommendations throughout the Organization.

The Delegation of Brazil stated that the Development Agenda (DA) "had filled a major gap by promoting the extension of the benefits of the intellectual property (IP) system to large population groups and to developing regions."[50] However, despite the good results obtained to date, the task of implementing the Development Agenda had yet to be completed. It was important to make progress in that regard in the long term, "as well as to promote cultural change in the functioning of the Organization."[51]

China commented that WIPO "had always been working to promote development and improvement of IP systems worldwide, and China had received strong support from WIPO under its successive Directors-General in its efforts to establish and develop its IP system."[52] The Delegation thanked WIPO for its long-standing support, and looked forward to deeper cooperation in the years ahead. The Delegation "commended WIPO for its efforts to raise its capacity and international profile, and supported WIPO *as the most universal, representative and authoritative UN specialized agency in the IP field*, to play an important role as the coordinator of global IP affairs, so that together with its Member States, WIPO would meet their common challenges and promote a balanced development of the international IP system."[53] China noted, last but not least, that:

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47 Id., para 53.

48 Ibid.

49 Ibid.

50 Id., para 45.

51 Id.

52 Id., para 28.

53 Ibid.

> [It] believed that the ongoing discussions in the Committee on Development and Intellectual Property (CDIP) would not only have a lasting impact on developing countries, but also benefit developed countries, whose interests were closely entwined with those of developing countries in an era of globalisation. It expressed its hope that WIPO would assist with the speedy and efficient implementation of the adopted recommendations, thus bringing tangible benefits to developing countries, especially the least developed ones. China concluded by pledging its full support to the work of the Assembly and other WIPO committees, assuring that as a responsible developing country, China would actively participate in the discussions under various important agenda items.[54]

China was ready to have an open and candid exchange of views with other parties "on various global challenges and IP-related issues of common interest. It wished to have more engagement and cooperation with other Member States and join efforts to advance the global IP system."[55]

India noted that it was "a strong believer in multilateralism and it remained committed to supporting WIPO's crucial role as a UN agency which was mandated to promote IP as a means of achieving economic development."[56] The Republic of South Africa felt that the adoption of the Development Agenda "marked a watershed moment in WIPO" that was guiding WIPO's development work toward ensuring "that countries at different levels of development, in particular developing countries and LDCs, benefited from the IP system."[57] Moreover, "WIPO's central mandate to advance the work of the Development Agenda could not be overemphasized, in particular its response to the challenges of climate change, energy security, food security and public health."[58]

WIPO has responded to such calls, and the reactions by Member States illustrate the fact that, under the Current Director General, Dr. Francis Gurry, WIPO is mindful that:

> as the leading intergovernmental forum for addressing the intersection between IP, innovation and global public policy issues this implies proactive and substantive engagement with other UN, intergovernmental, and non-governmental organizations in order to contribute to the search for shared solutions to the major challenges facing humanity, including climate change, food security, public health, the protection of biodiversity and meeting the Millennium Development Goals (MDGs). The most immediate impact of many of these global problems is borne by developing and least developed countries, and the programs under this Strategic Goal will be closely involved in the realization of development objectives and Development Agenda recommendations.[59]

The Director General has articulated a strategic vision for WIPO, discussed in detail below, which integrates developing country concerns in all aspects of the organizations work.

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[54] Ibid.

[55] Ibid.

[56] Id., para 37.

[57] Ibid.

[58] Ibid.

[59] Medium Term Strategic Plan for WIPO 2010–2015, September 16, 2010, A/48/3, proposed at the 48th Series of Meetings, Geneva, September 20–29, 2010.

9.4 WIPO's Strategic Development Vision

Under Francis Gurry's leadership WIPO has responded to calls from Developing countries for the mainstreaming of developmental concerns. WIPO has developed a Strategic Realignment Program (SRP) a principal objective of which is "to be a responsive, efficient organization, equipped to provide global leadership on IP issues and to achieve its Strategic Goals."[60] In pursuit of its mission of promoting innovation and creativity through a balanced and effective international intellectual property system, WIPO is mindful of the highly dynamic and changing environment in which challenges included:

> addressing the stress on patent and copyright systems as a result of rapid technological change, globalization, and increased demand, reducing the knowledge gap between developed and developing countries, and ensuring that the IP system continues to serve effectively its fundamental purpose of encouraging creativity and innovation in all countries. The Strategic Realignment Program (SRP) was launched in order to equip the Organization to address the challenges.[61]

In addressing the 49th General Assembly in 2011, Gurry highlighted major challenges that will dramatically impact the intellectual property regime in the coming years. Among these was "the enhancement of the capacity of the least developed and developing countries to participate in and use the IP system for encouraging innovation and cultural creativity". He noted that "This will continue to be an area of special focus for the Secretariat."[62] While some achievements had been made, "we are aware that there is room for more improvement and we look forward to working with the Member States to effect that improvement."[63]

WIPO's activities have been guided thus far by nine strategic goals that were adopted by Member States in the Revised Program and Budget for the 2008–2009 Biennium. They are: (1) balanced evolution of the international normative framework for IP; (2) provision of premier global IP services; (3) facilitating the use of IP for development; (4) coordination and development of global IP infrastructure; (5) world reference source for IP information and analysis; (6) international cooperation on building respect for IP; (7) addressing IP in relation to global policy issues; (8) a responsive communications interface between WIPO, its member states and all stakeholders; (9) and an efficient administrative and financial support structure to enable WIPO to deliver its programs. The SRP provided the basis for the Medium Term Strategic Plan (MTSP) proposed at the WIPO General Assembly in September 2010.[64] In the MTSP, it is noted that Strategic Goals I–VII deal

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[60] Id., p. 244.

[61] Ibid.

[62] Address by the Director General, WIPO Assemblies 2011, September 26, 2011. http://www.wipo.int/about-wipo/en/dgo/speeches/a_49_dg_speech.html. Accessed on 1 May 2012.

[63] WIPO 2011a, p. 6.

[64] WIPO 2010c., Medium Term Strategic Plan for WIPO 2010–2015, September 16, 2010, A/48/3, proposed at the 49th Series of Meetings, Geneva, September 20–29, 2010.

with the substantive business of the Organization. Strategic Goals VIII and IX are the enabling goals, aimed at providing sound management and governance and effective two way communications to support the achievement of the substantive goals and ensure accountability to Member States.

9.4.1 Balanced Evolution of the International Normative Framework for IP

A major objective facing WIPO is the promotion of "balanced multilateral solutions to ensure that the international normative architecture remains relevant, that it serves its purpose of encouraging innovation and creativity worldwide; and that it facilitates participation by all countries in the benefits of technological and cultural advances."[65] The MTSP has noted that the 45 recommendations of the WIPO Development Agenda are incorporated in WIPO's work conducted under all nine Strategic Goals. This is reflected in the narrative throughout the MTSP.

In his foreword to the MTSP, the Director General, notes a number of contemporary challenges to the international intellectual property regime that have a bearing on the Development Agenda. The key challenges are the increasing demand for international protection; the changing geographic composition of demand, necessitating different language skills within the Secretariat, and enhanced use of technology in translation services; the transition to an electronic environment for the movement of data around the systems; and the need for assistance to developing countries in participating in that electronic environment. They are briefly highlighted hereafter insofar as they have a bearing on the development agenda. The first was the set of changes that are described by the term "the knowledge economy", chiefly the increased value of the share of knowledge in production. Knowledge-intensive and technology-intensive industries are estimated to have accounted for 30 % of global economic output or some US$ 15.7 trillion in 2007. A second set of changes was geographic. The locus of technology production was shifting. The top five patent offices in terms of numbers of applications received are now, in order, the patent offices of the United States of America, Japan, China, the Republic of Korea, and the European Patent Office. A third trend of change was the internationalization of science and technology production which has many implications. They included the capacity of countries, in terms of both the technical infrastructure and the human capacity to participate in the growing collaboration in knowledge production, as well as the strategic approach and regulatory environment that countries might wish to adopt to attract R&D investment. A fourth trend of change, was "open innovation" or the tendency for firms to look outside themselves to satisfy their innovation needs (through traditional means, such as licensing, subcontracting, R&D contracts or joint ventures) or through

[65] WIPO 2010c, p. 11.

newer means (such as the use of problem solvers on the Internet or open source cooperation). A fifth set of changes were those that related to the impact of digital technology and the Internet on the production, distribution, and consumption of cultural works. The impact was profound and signaled a fundamental challenge for the institution of copyright. The objective of the latter was to provide a market-based mechanism that extracted some value from cultural transactions in order to help creators to lead a dignified economic existence while ensuring the widest possible availability of affordable creative content. The question was not so much the objective of the system, but the means of achieving that objective amid the convergence of the digital environment. A sixth area of change was the emphasis that was being placed on the use of IP rights after their grant. The latter area has attracted great attention in the fields of transfer of technology, competition law, health, the environment, collective management of copyright, the intersection of the finance system, and IP (the valuation of intangibles, securitization, insurance and so forth) and the role of IP in development. It reflected an acknowledgement that IP is a market-based mechanism. As such, the grant of IP titles was one side of the story and the capacity to use IP rights constituted the other. This has implications for many of the Strategic Goals of the Organization (Goal I (Balanced Evolution of the International Normative Framework for IP), Goal III (Facilitating the Use of IP for Development), Goal IV (Coordination and Development of Global IP Infrastructure), Goal V (World Reference Source for IP Information and Analysis), Goal VI (International Cooperation on Building Respect for IP), and Goal VII (Addressing IP in relation to Global Policy Issues). The final area of change concerned the knowledge gap, the digital divide and poverty reduction. The MDGs foresaw positive change in all these areas. As the Organization's Development Agenda made clear, the focus on development pervades all substantive Strategic Goals, not just Strategic Goal III (Facilitating the Use of IP for Development).

In all areas of the Organization's work, the Director General noted that progress must be made on improving the participation of the developing, least developed, and transition countries in the international IP system and in the social and economic benefit of innovation and creativity. This, in turn, would be reflected in a positive contribution to the achievement of the MDGs. In addition to the "pervasive focus of development" in all of the substantive Strategic Goals, the demand for development-related services from the Organization has an important impact on the enabling Strategic Goals VIII (A Responsive Communications Interface between WIPO, its Member States and all Stakeholders) and IX (An Efficient Administrative and Financial Support Structure to enable WIPO to deliver its Programs). In particular, it seemed clear to the Director General that the opportunities for growth in WIPO's Global IP Systems, which were the source of 93 % of the income of the Organization, were limited. The rate of growth in those Systems was much more modest than the rate of growth in demand for development-related services from the Organization. Therefore, in the medium term, and building on existing funding arrangements, consideration would need to be given to increased use of extra-budgetary sources for financing

the new growth in demand that exceeds the growth in revenue. This would not be in any way to replace the central role of WIPO's regular budget funding for these activities, but rather to increase WIPO's overall capacity to respond to Member State needs.[66]

In order to achieve a balanced IP system (Strategic Goal 1), specific objectives were listed in relation to the following areas. In the area of Patents, there was a need "to ensure that countries at different levels of development, while respecting their international obligations, adopt patent law and policies that are appropriate to their development needs, and are able to make informed policy choices regarding use of the flexibilities available under international agreements."[67] Strategies to be pursued with the Standing Committee on the Law of Patents (SCP) included: continuing to support Member States through balanced studies on current and emerging patent-related issues, providing informed analysis of policy options and a trusted forum for debate; and strengthening efforts to deepen understanding of the role of, and the principles underpinning, the patent system, including the use of flexibilities provided for in the system, and the challenges it faces.[68] In the area of copyright, it was noted that technological and market-driven changes had occasioned severe stress on the current system. It was necessary to address new questions on how to promote, protect, and reward creativity, while ensuring access to protected works and works in the public domain. Strategies to be pursued within the Standing Committee on Copyright and Related Rights (SCCR) included, *inter alia*, continuing to support the work of Member States on copyright limitations and exceptions and exploring the scope for discussion of new issues with important global consequences. In addition a high-level global reflection process was to be initiated on the future of copyright and the financing of culture in the digital environment, the scope and impact of which could not be addressed in a timely and adequate manner through negotiation in a routine standing committee format. The process would include multistakeholder input and fact finding to examine the challenges and opportunities presented by the legal, market, and technological conditions prevailing in developed and developing countries.

In the area of Traditional Knowledge, the first milestone challenge under the mandate of the IGC was to agree and submit the texts of an international legal instrument (or instruments) to the WIPO General Assembly for the Assembly to decide on the convening of a Diplomatic Conference. Strategies for the same included: facilitating the preparation and conduct of international negotiations toward reaching consensus on the text of an international legal instrument or instruments; supporting work on practical mechanisms to contribute toward the protection of TK, TCEs and IP in relation to GRs and/or their appropriate use; and clarify the contribution of IP to the conservation, sustainable use and

[66] Id., pp. 4–6.

[67] Id., p. 12.

[68] Ibid.

equitable benefit sharing in GRs, as components of biodiversity, and of the role of IP in the fair and appropriate use of GRs for economic and technological development. WIPO was to provide assistance for the effective implementation in national and regional legal systems of international instruments that may be adopted. WIPO would have to cooperate with other relevant multilateral fora and international organizations in order to clarify the specific contribution of IP expertise and WIPO's activities to broader international moves toward the enhanced preservation, promotion and protection of TK, TCEs and IP in relation to GRs.[69]

9.4.2 Provision of Premier Global IP Services

In relation to strategic Goal II, Provision of Premier Global IP Services, a key indicator of the organization's work was to be the use of WIPO's global products and services in Member States including developing and least developed countries."[70] In this regard, the MTSP has drawn attention to the following facts. Around 93 % of PCT applications originated in only five jurisdictions, and participation in the PCT as users by the majority of developing countries and least developed countries is at a very low level.[71] Efforts were needed to enhance the stake and ownership of developing countries in the PCT system by facilitating domestic innovation promotion and technological progress. This meant providing technical assistance to enhance the capacities of national Offices in developing countries. The PCT system in particular was to contribute to sufficient disclosure of knowledge that would enable the transfer and dissemination of technology to all Member States. In relation to the Madrid System for Trademarks, it was noted that "[t]he participation of developing and least developed countries and emerging economies is relatively low. Branding offers an under-utilized tool for expanding markets for the products of these countries."[72] WIPO's Arbitration Center, which deals with domain name disputes aimed to expand the service so that its coverage is global and, to this end, to enhance market research, awareness, simplification of procedures and the addition of value; to ensure adequate investment in the renewal and expansion of the use of the services; to increase the participation of developing, least developed and transition countries in the Services and in the benefits that they offer; and to establish clear IT strategies based on the differing stages of development of the IT infrastructure and services in each area.

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69 Ibid.

70 Id., p. 17.

71 Id., p. 18.

72 Id., 19.

9.4.3 Facilitating the Use of IP for Development

In relation to Goal III, that is facilitating the use of IP for development, WIPO has fixed the goal of facilitating the use of IP for social, cultural, and economic development. It envisaged a strong focus on development throughout the Organization, with effective mainstreaming of the Development Agenda principles and recommendations in the work of all relevant Programs. The MTSP aimed at specific outcomes such as an increased number of developing countries, LDCs, and transition economies with balanced policy/legislative frameworks; increased number of developing countries, LDCs and transition economies with strong and responsive IP and IP-related institutions; and a critical mass of human resources with relevant skills in an increased number of developing countries, LDCs, and transition economies. The WIPO Development Agenda occupied the central role in ensuring that all areas of WIPO's activities contributed to this strategic goal.

An overall objective for WIPO was to empower developing countries, LDCs and countries in transition to use the IP system in an informed and effective way, thereby ensuring that it contributes meaningfully to their economic, social, and cultural development. In order to achieve this objective, a number of challenges needed to be addressed. First, IP policy coherence was necessary. IP was a cross-cutting issue, which impacted on areas as diverse as innovation promotion, market regulation, the production, performance, and distribution of cultural works and, in turn, on trade, health, the environment, food security, and access to knowledge. A major challenge was how best to help developing countries, LDCs and countries in transition to achieve coherence between their IP and related policy issues. Their IP policies needed to be either linked with related policies or built into larger national policy issues, such as industrial and innovation policies. Second, finding an appropriate legislative and regulatory framework was necessary for each jurisdiction. An important challenge was to support the efforts of governments to establish a secure and balanced national legal environment, which protects the rights of IP owners and provides incentives to inventors and creators, while facilitating access to knowledge and safeguarding other public policy priorities. Third, it was necessary to develop the right technical infrastructure. Despite some progress in building the same in many national and regional IP institutions further work remained so as to improve their productivity and their capacity to benefit from global public assets and knowledge networks. Fourth, the development of human capital was critical. This was a complex task due to the multiple elements involved in the protection and commercialization of intangibles. A broad range of human capital was required for the effective use of IP, including legal practitioners, trained examiners, administrators of IP services, and experts who can advise on leveraging the system to enhance innovation and improve business competitiveness. Fifth, facilitating the use of IP for development needed to accommodate to diverse countries with widely differing levels of development and different levels of IP infrastructure. In respect of countries with economies in transition, the challenge for WIPO was to provide more specialized assistance to meet their particular

needs. Finally, for *small and medium enterprises, which* represented over 90 % of enterprises in most countries worldwide, it was important to decrease their vulnerabilities in today's highly competitive, increasingly international and knowledge driven, IP intensive environment. It was deemed important to reach out to SMEs in order to increase understanding of the potential of IP as a tool for extracting value from their creativity and inventiveness, and of the potential contribution of active IP asset management to the success of a business.

For WIPO, its *Development Agenda* represented a new, cross-cutting, and unique opportunity to reach beyond WIPO's traditional technical assistance programs and to ensure that the Development Agenda principles and recommendations were integrated into the work of the entire Organization. The principles and Recommendations of the Development Agenda apply not only to activities carried out under Strategic Goal III, but to activities carried out under all nine Strategic Goals of the Organization. This was reflected in the respective narratives throughout the Medium Term Strategic Plan.

9.4.4 Addressing IP in Relation to Global Policy Issues

In relation to Strategic Goal VII, that is addressing IP in relation to global policy issues, WIPO has noted that this:

> Implies proactive and substantive engagement with other UN, intergovernmental, and non-governmental organizations in order to contribute to the search for shared solutions to the major challenges facing humanity, including climate change, food security, public health, the protection of biodiversity and meeting the Millennium Development Goals MDGs. The most immediate impact of many of these global problems is borne by developing and least developed countries, and the programmes under this Strategic Goal will be closely involved in the realization of development objectives and Development Agenda recommendations.[73]

The MTSP recognised that access to technology has historically played an important role in addressing social and environmental challenges. Consequently, rights that restrict use of new technologies engendered controversy. Balance between incentivizing investment in new technologies, on the one hand, and giving access to the social benefit of the new technologies, on the other hand, was a key principle. Increased reliance on technology had rendered the discussion concerning the interface between IP and global public policy issues contentious and difficult. The challenge was to ensure that WIPO contributes its distinctive IP expertise to these crucial policy debates. It was necessary for it to work in partnership with a host of agencies and processes within the United Nations system and in other intergovernmental fora. Successfully addressing this challenge presented an opportunity "to establish WIPO as the first point of reference on the interface

[73] WIPO 2011c., p. 43.

between public policy issues and IP."[74] To achieve this goal, WIPO needed to ensure that its contribution was of the highest quality, that it was "balanced and evidence-based", as well as targeted accurately, taking into consideration "adequately the concerns of its Member States."[75]

This also required a clear understanding of the priorities in terms of WIPO's partnerships and engagement according to where it can have greatest positive impact on the key public policy issues. Key partners among the UN System of organizations included, for example, the WHO on the interface between IP and public health; the UN Framework Convention on Climate Change (UNFCCC), the UN Environment Programme (UNEP), and World Meteorological Organization (WMO) on issues relating to IP, technology and climate change; the CBD on aspects of biodiversity which are relevant in particular for WIPO's work in the area of traditional knowledge and genetic resources; the UN Industrial Development Organization (UNIDO), the UNDP, and the UN Conference on Trade and Development (UNCTAD) on issues relating to IP and development; the International Telecommunications Union (ITU) on addressing IP issues in the context of the information society; the UNESCO for the relationship between IP and culture; as well as the WTO on a number of cross-cutting issues. WIPO must also look at leveraging these and wider networks and partnerships to support the Organization's work through joint activities and resource mobilization (see also Strategic Goal III (Facilitating the Use of IP for Development) and VIII (A Responsive Communications Interface between WIPO, its Member States, and all Stakeholders).

Recognizing the prevalence of the WTO in relation to IP issues in recent times, the MTSP noted that for WIPO to realize its full potential in addressing the interface between IP and global policy issues, "it must ensure the trust of potential partners by providing significant contributions that not only move the debates forward in terms of better understanding of the issues, but also generate confidence as to the impartiality of its contributions."[76] The following strategies would guide WIPO's approach in this area:

(i) Ensuring WIPO's engagement in all relevant public policy process and negotiations (e.g. related to public health, climate change, food security, the digital divide and the MDGs) to provide support to those processes and help establish WIPO as the forum and reference point for Member States on the interface between the international IP system and global public policy issues.
(ii) Developing sound information tools on the basis of patent data in sectors of technology of public policy interest in a form that is useful for practical policy makers (in collaboration with the work undertaken under Strategic Goal IV (Coordination and Development of Global IP Infrastructure) and Strategic Goal V (World Reference Source for IP Information and Analysis)). This would include patent landscaping and other information on the legal status of patents on environmental technologies, and

[74] Id., p. 43.

[75] Ibid.

[76] Id, p. 44.

information on practical ways of ensuring access to, and local development of, such technologies in developing countries.

(iii) Developing partnerships and collaborations for the use of IP as a policy tool to achieve public welfare outcomes by promoting innovation and transfer of key technologies, especially to deal with global challenges such as climate change, food security, public health, etc.

(iv) Developing voluntary innovation structures for these purposes through such mechanisms as: collaborative innovation; more effective and responsible licensing schemes; product development partnerships; patent commons and pooling initiatives; and dispute resolution mechanisms designed to minimize interference with the intended functioning of such structures.

This may include: exploring the development of a comprehensive platform (or platforms) of patent and other proprietary information, including facilitation of technology transfer and partnerships through an open innovation model of access to IP rights, that would accelerate product development in public health, food security, and climate change, as appropriate; and exploring the creation of a partnership hub with a forum where interested parties can learn about available licensing opportunities, as well as available funding.

(v) Offering other support services in response to requests from Member States, such as enhancing the absorptive capacities of recipient States through capacity building, legislative assistance, practical technology licensing models, and arbitration and mediation services.

In addressing the above challenges, WIPO's strategic approach in the medium term will be guided by the following key elements: (i) *Development Agenda*. The implementation strategy for the Development Agenda will continue to be twofold: to adopt a project-based approach where appropriate; and to mainstream the principles of the Development Agenda Recommendations into the work of all Sectors of the Organization through the Program and Budget and work planning processes.[77]

The cross-cutting nature of the Development Agenda required effective coordination, both internally and externally. The MTSP, Program and Budget, and Program Performance Reports provided one element of that coordinating framework, but required further strengthening for the purpose of accountability and improved decision making based on empirical information. Specific measures included: (1) Developing tools to enable the CDIP to fulfill its responsibility for ensuring that the Development Agenda is effectively implemented; (2) Providing assistance in integrating IP policies in national development plans and national innovation strategies based on the needs of the individual Member State; (3) Providing demand-driven assistance in establishing a development-oriented regulatory framework, i.e., legislation which provides for the basic legal framework that defines rights and obligations of the IP owners, as well as provisions to achieve balance between incentives and rewards for innovators and access to new knowledge by users, such as through the full use of flexibilities and nationally appropriate effective enforcement mechanisms; (4) *Developing institutional and technical infrastructure*. IP offices aimed at implementing their plans to evolve into more development-linked and service-oriented authorities, able to help spur domestic innovative activity and eventually entrepreneurial

[77] Ibid.

and economic progress; (5) Capacity building, with WIPO continuing to provide assistance to improve the capacities of institutions to deliver IP services, either through automation and improved business processes, or through building human resource capacity through educational and training programs. The WIPO Academy would play a central role in delivering human resource training and capacity building

9.4.5 International Cooperation on Building Respect for IP

Finally, in relation to Strategic Goal VI, International Cooperation on Building Respect for Intellectual Property, WIPO hoped to increase international cooperation with Member States, NGOs, IGOs, and the private sector; engaged in balanced policy dialog within the auspices of the WIPO Advisory Committee on Enforcement (ACE) and take into account development-oriented concerns. It acknowledged that a major concern was that of fighting piracy and counterfeiting. Toward this end, "A balanced, development-oriented approach, in consonance with Recommendation 45 of the Development Agenda, and going beyond purely operational law enforcement, will also need to guide the Secretariat's work in the context of its assistance to Member States."[78] The WIPO Secretariat would "build extensively on, and further engage in, close cooperation with the many other international initiatives to ensure balance and transparency; to enhance the efficacy of the various endeavors; and to avoid a duplication of work."[79] Some 250 NGOs and IGOs currently have official observer status at WIPO meetings.[80] A voluntary fund was established for enabling the participation of indigenous peoples in the deliberations of the IGC on GRTKF.[81]

9.5 Conclusion

It is clear from this brief outline of the MTSP that WIPO has heeded the call of its membership for the integration of development-oriented policies in all aspects of its work. It appears too that it seeks to wrestle back its status as the premier IP institution. Recalling the discussion in Chap. 6, WIPO has been set on a course

[78] Id, p. 39.

[79] Ibid.

[80] WIPO, "Observers, NGOs and IGOs," « http://www.wipo.int/members/en/admission/observers.html. 3 February 2012.

[81] See http://www.wipo.int/tk/en/ngoparticipation/voluntary_fund/index.html.

that will see it interact more frequently with related agencies in the UN system including with the human rights community. As it explains the role of IP in advancing human security concerns it may also take part, institutionally, in the modernization of the IP system. The WIPO secretariat is endeavoring in good faith to strive for policies and strategies that could help develop consensuses among its membership and constituencies on the very complex policy issues facing the organization. It would be helpful to the organization to call upon well-meaning actors to help think through some of the policy and normative issues. In the next chapter, we suggest the establishment within WIPO of an International Equity Panel. In the conclusion to this book, we also suggest that the WIPO Director General empanel an international commission on Intellectual Property and Human Security. Such a commission could help in the development of further policy and strategic consensuses within the organization.

Chapter 10
Proposal for an International Equity Panel in WIPO

In this chapter the case is made for the establishment within WIPO of an international equity panel which could contribute substantively to the development of a more equitable international IP regime.

10.1 The Right to Benefit from Scientific and Technological Progress

Throughout this work so far we have seen a recurring theme that while intellectual property laws can help advance development, the regime must be modernized so as to provide for contextualized policies and strategies in each country tailored to its phase of development and the needs of its people. We have also seen repeated complaints about unfairness in the application of international intellectual property laws and persistent calls for a fairer and more equitable regime. The Director-General of WIPO has been endeavoring in good faith to offer policies and strategies that could help take the Organization forward. However, there is need for a friendly voice that can help in the distillation of common ground, new principles, and new approaches and strategies. The establishment of an international equity panel within the world intellectual property regime could help reconcile the contending claims for the strict implementation of the intellectual property regimes, on the one hand, and the demands for equity and justice on the other. Before presenting the idea and contours of an international equity panel, we first recall some of the viewpoints in the ongoing debate.

As discussed earlier, Article 27 of the Universal Declaration of Human Rights declares that everyone has the right to share in scientific advance and its benefits and that everyone has the right to the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which he or she is the author. The ordering of the provision puts the right to share in

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9_10,

scientific advance and its benefits first. Following up on the Universal Declaration, the International Covenant on Economic, Social and Cultural Rights provided in its Article 1 for the right of everyone: (a) to take part in cultural life; (b) to enjoy the benefits of scientific progress and its applications; (c) to benefit from the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which he is the author. To achieve the full realization of this right States were to take all measures including those necessary for the conservation, the development, and the diffusion of science and culture. They undertook to respect the freedom indispensable for scientific research and creative activity and to recognize the benefits to be derived from the encouragement and development of international contacts and cooperation in the scientific and cultural fields.

During the drafting of this article the view was expressed that a provision should be added to the article to the effect that Sates should undertake to ensure the development of science and culture in the interests of progress and democracy and of ensuring peace and cooperation among nations. A proposal for the adoption of a provision for the protection of rights deriving from scientific, literary, or artistic productions was opposed on the grounds that the matter could not adequately be treated in a short provision, that it was properly being dealt with by UNESCO, and more adequately, and that authors' rights had to be considered in the light of the claims of the community and of the world at large.[1]

The CESCR, in its General Comment No 17, which we discussed earlier, noted that human rights are fundamental, inalienable, and universal entitlements belonging to individuals and, under certain circumstances, groups of individuals and communities. Human rights are fundamental as they are inherent to the human person as such, whereas intellectual property rights are first and foremost means by which States seek to provide incentives for inventiveness and creativity, encourage the dissemination of creative and innovative productions, as well as the development of cultural identities, and preserve the integrity of scientific, literary, and artistic productions for the benefit of society as a whole. Intellectual property rights by contrast are generally of a temporary nature, and can be revoked, licensed, or assigned to someone else. Generally they may be allocated, limited in time and scope, traded, amended, and even forfeited, whereas human rights are timeless expressions of fundamental entitlements of the human person. Whereas the human right to benefit from the protection of the moral and material interests resulting from one's scientific, literary, and artistic productions safeguards the personal link between authors and their creations and between peoples, communities, or other groups and their collective cultural heritage, as well as their basic material interests which are necessary to enable authors to enjoy an adequate standard of living, in contrast, intellectual property regimes primarily protect business and corporate interests and investments. Moreover, the scope of protection of the moral and material interests of the author provided for by Article 15, para 1(c) does not

[1] See UN doc. A/2929, 115, paras 53 and 54.

necessarily coincide with what is referred to as intellectual property rights under national legislation or international agreements.

It is therefore important, the Committee emphasised, not to equate intellectual property rights with the human right recognized in Article 15, para 1(c). The human right to benefit from the protection of the moral and material interests of the author is recognized in a number of international instruments. In identical language, Article 27, para 2 of the Universal Declaration of Human Rights provides: Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author. Similarly, this right is recognized in regional human rights instruments, such as Article 13, para 2, of the American Declaration of the Rights and Duties of Man of 1948, Article 14, para 1(c) of the Additional L Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights of 1988 ("Protocol of San Salvador") and, albeit not explicitly, in Article 1 of Protocol 1 to the Convention for the Protection of Human Rights and Fundamental Freedoms of 1952 (European Convention on Human Rights).

The right to benefit from the protection of the moral and material interests resulting from one's scientific, literary, and artistic productions, the Committee added, seeks to encourage the active contribution of creators to the arts and sciences and to the progress of society as a whole. As such, it is intrinsically linked to the other rights recognized in Article 15 of the Covenant, i.e., the right to take part in cultural life (Article 15, para 1(a), the right to enjoy the benefits of scientific research and creative activity (Article 15, para 3).The relationship between these rights and Article 15, para 1 (c), is at the same time mutually reinforcing and reciprocally limitative….As a material safeguard for the freedom of scientific research and creative activity, guaranteed under Article 15, para 3 and Article 15, para 1 (c), also has an economic dimension and is, therefore, closely linked to the rights to the opportunity to gain one's living by work which one freely chooses (Article 6, para 1) and to adequate remuneration (Article 7 (a)), and to the human right to an adequate standard of living (Article 11, para 1). Moreover, the realization of Article 15, para 1(c), is dependent on the enjoyment of other human rights guaranteed in the International Bill of Human Rights and other international and regional instruments, such as the right to own property alone as well as in association with others, the freedom of expression including the freedom to seek, receive and impart information and ideas of all kinds, the right to the full development of the human personality, and rights of cultural participation, including cultural rights or specific groups

The Committee considered that only the "author", namely the creator, whether man or woman, individual or group of individuals, of scientific, literary, or artistic productions, such as, inter alia, writers, and artists, can be the beneficiary of the protection of Article 15…Under the existing international treaty protection regimes, legal entities are included among the holders of intellectual property rights. However, as noted above, their entitlements, because of their different nature, are not protection at the level of human rights.

Although the wording of Article 15, para 1(c), generally referred to the individual creator, the right to benefit from the protection of the moral and material

interests resulting from one's scientific, literary, or artistic productions can, under certain circumstances, also be enjoyed by groups of individuals or by communities.

The Committee has provided important clarifications on terms such as "Any scientific, literary or artistic production", to "Benefit from the protection", "Moral interests", "Material interests", and has indicated the conditions for States parties' compliance with Article 15. The Committee further clarifies issues of: availability, accessibility, quality protection, and non discrimination and equal treatment. It also elaborated on the duty of international cooperation.

The Committee considers that Article 15, para 1(c) of the Covenant entails at least the following core obligations, which are of immediate effect:

> (e) "To strike an adequate balance between the effective protection of the moral and material interests of authors and States parties' obligations in relation to the rights to food, health and education, as well as the rights to take part in cultural life and to enjoy the benefits of scientific progress and its application, or any other right recognized in the Covenant."[2]

The Committee has emphasized that it is particularly incumbent on States' parties and other actors in a position to assist, to provide "international assistance and cooperation, especially economic and technical", which enable developing countries to fulfill their obligations. While only States party to the Covenant are held accountable for compliance with its provisions, they are nevertheless urged to consider regulating the responsibility resting on the private business sector, private research institutions, and other non-State actors to respect the rights recognized in Article 15, para 1 (c) of the Covenant.

The Committee has noted that, as members of international organizations such as WIPO, UNESCO, the FAO, the WHO, and the WTO, States' parties have an obligation to take whatever measures they can to ensure that the policies and decisions of those organizations are in conformity with their obligations under the Covenant, in particular the obligations contained in Article 2, paras 1, 15, 4, 22, and 23 concerning international assistance and protection.

The observations of the Committee on the duty of international cooperation are particularly pertinent. In its General Comment No. 3(1990), the Committee had drawn attention to the obligation of all States' parties to take steps, individually and through international assistance and cooperation, especially economic and technical, towards the full realization of the rights recognized in the Covenant. It adds that in the spirit of Article 56 of the Charter of the United Nations, as well as the specific provisions of the Covenant (Artcles 2, paras 1, 15, and 23), States' parties should recognize the essential role of international cooperation for the achievement of the rights recognized in the Covenant, including the right to benefit from the protection of the moral and material interests resulting from one's

[2] WIPO, "The Intellectual property system helps strike a balance between the interests of the innovator and the public interest" WIPO, What is Intellectual Property. WIPO Publication No.450(E); ISBN 92-805-1155-4, 3.

scientific, literary, and artistic productions, and should comply with their commitment to take joint and separate action to that effect. International cultural and scientific cooperation should be carried out in the common interest of all peoples.

The Committee recalled that, in accordance with Articles 55 and 56 of the Charter of the United Nations, well-established principles of international law, and the provisions of the Covenant itself, international cooperation for development and thus for the realization of economic, social and cultural rights is an obligation of all States' parties and, in particular, of States which are in a position to assist. Bearing in mind the different levels of development of States' parties, it is essential that any system for the protection of the moral and material interests resulting from one's scientific, literary, and artistic productions facilitates and promotes development cooperation, technology transfer, and scientific and cultural cooperation, while at the same time taking due account of the need to preserve biological diversity.[3]

General Comment 17 of the Committee on Economic, Social and Cultural Rights provides a good legal and policy framework for reconciling the rights of authors with those of humanity at large. International human rights jurisprudence on the protection of the right to life also provides a source of guidance.

10.2 Human Rights Imperatives: Life, Food, Health, Education

It was noted above that fundamental human rights imperatives should inform intellectual property polices and laws. Principles of international human rights supervisory bodies that could help guide the development of a modernised regime for the protection of intellectual property rights include European Court of Human Rights pronouncement that Article 2 of the European Convention, imposes an obligation upon the state to do 'all that could have been required of it to prevent the applicant's life being avoidably put at risk'.[4] In addition, there may be a liability under Article 2 where a State places an individual's life at risk by denying him or her medical care that is available to the general public.[5] In *Cyprus v. Turkey* the European Court is interpreted by some as extending the guarantee of the Article 2 obligation to protect life in a way that would be in accord with national health care standards in European states and indirectly provide a partial, but welcome guarantee of the right to health, which is an established human right. The right to life has been interpreted in some national jurisdictions, notably India, to cover the quality of life as well as

[3] CESCR, General Comment 17, E/C.12/GC/17, 12 January 2006. http://daccess-dds-ny.un.org/doc/UNDOC/GEN/G06/400/60/PDF/G0640060.pdf?OpenElement. Accessed on 1 June 2012.

[4] *LCB V. UK*,23413/94 *ECHR, 9 June 1998.*

[5] See on this Harris et al. 2009, 42-48.

mere physical existence. On this basis, rights such as the rights to health[6] and to livelihood[7] have been made indirectly justiciable through the civil right to life.

On the right to food, the UN Special Rapporteur on the Right to Food and others have called attention to the dominant paradigm of agricultural development which favours the strengthening of IP rights in order to promote and reward innovation by the private sector and the provision of improved seed varieties to farmers in order to help them produce higher yields. This model may leave out precisely those who need most to be supported. Profit-driven research serves the needs of the high-value segments of the markets, while neglecting the real needs of the poorest and most marginalized groups. A strong role for public investment in research is therefore required in order to compensate this imbalance.[8]

On health, a recent report of an expert consultation on access to medicines as a fundamental component of the right to health pointed out that IPRs can, in some cases, obstruct access to medicines "by pushing up the price of medicines." The right to health "requires a company that holds a patent on a lifesaving medicine to make use of all the arrangements at its disposal to render the medicine accessible to all."[9]

On the right to education, it has been noted that "…the ultimate objective of copyright cannot be the protection of creative works for its own sake; copyright serves a nobler role in furthering broad public policy objectives, such as the advancement of learning.[10]

10.3 Treaty Rights

Intellectual property rights are protected under a series of international treaties that were discussed in Chap. 3. International treaty law calls for all States' Parties to a treaty to comply with their obligations in good faith. International treaty law provides that disputes in the interpretation or application of a treaty may be dealt with in accordance with procedures provided under the treaty, in accordance with other dispute-settlement procedures that the parties at issue may have agreed to, or in accordance with procedures of equitable settlement as provided under international law.

The problem that the international regime for the protection of intellectual property rights is facing is that leading countries are making the case that treaty provisions should be implemented in good faith while developing countries and the human rights community are asserting that implementation of those treaties leads to unfairness in many instances. There is thus a tension between strict

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[6] *Paramand Kataria v. Union of India (1989) 4 SCC 286.*

[7] *Olga Tellis v. Bombay Municipal Corp (1986) AIR 180.*

[8] De Schutter 2011. See also UN doc.A/64/170, 23 July 2009.

[9] UN Doc. A/HRC 17/43: Report of expert consultation on access to medicines as a fundamental component of the right to health.

[10] Armstrong et al. 2010, 3.

implementation of treaty rights and the implementation of basic human rights. The treaty revision approach is unlikely to be successful because, for this route to be applicable, States' parties as a whole would have to be agreeable, something that is unlikely and probably undesirable.

The International Court of Justice has indicated that there may be situations where resort to equitable settlement is the appropriate route to follow. In the *North Sea Continental Shelf Cases* (1969),[11] the Court held that the Parties were under an obligation to act in such a way that in the particular case, and taking all the circumstances into account, equitable principles were applied. There was no question of the Court's decision being *ex aequo et bono*. It was precisely a rule of law that called for the application of equitable principles.

In the *Case Concerning the Continental Shelf* (Libyan Arab Jamahiriya/Malta) of 1985,[12] the Court noted that the Parties had agreed that the delimitation of the continental shelf must be effected by the application of equitable principles in all the relevant circumstances in order to achieve an equitable result. The Court listed some of these principles including the principle that "equity does not necessarily imply equality" and that there can be no question of distributive justice.

In the *Case Concerning the Frontier Dispute* (Burkina Faso/Republic of Mali), of 1986,[13] the Chamber discussed the role of equity and held that while it could not decide *ex aequo et bono*, it could, however, have regard to equity *infra legem*, that is the form of equity which constitutes a method of interpretation of the law in force, and which is based on law.

What the above decisions indicate is that there may be circumstances in which equitable principles can be applied as part of the law or that principles of equity can be called in aid in the practical application of the law. What we argue for below is not an equitable dispute settlement procedure as such but rather the establishment of an international equity panel within the world intellectual property regime. The concept of an equity panel is not one with many precedents, but we think, it would be a helpful approach having regard to the history of the intellectual property regime and the requirements of justice in the twenty-first century.

10.4 The Case for an International Equity Panel

WIPO has a history of technical arbitration and mediation activities.[14] Our proposal recognizes that they would continue to perform their roles. However, in our view, an International Equity Panel could help reconcile the divergent interests in

[11] *North Sea Continental Shelf*, *Judgment,* I.C.J. Reports 1969, p. 3.

[12] *Tunisia v. Libyan Arab Jamahiriya, Judgment,* I. C. J. Reports 1985, p. 192.

[13] *Frontier Dispute*, *Judgment*, I.C.J. Reports 1986, p. 554.

[14] WIPO, What is Intellectual Property? WIPO Publication No. 450(E); ISBN 92-805-1155-4, 23. See the website of the WIPO Arbitration and Mediation Center, http://www.wipo.int/amc/en/index.html.

the world intellectual property regime by performing functions such as the following: Deliberating on submissions of alleged inequity in the application of intellectual property regimes; Extending good offices for the resolution of differences; Rendering views or advisory opinions on issues submitted to it; and Contributing to the development of equitable principles for future negotiations of intellectual property agreements. We formulate these in deliberately general terms. What is important is the idea. The details can be worked out in further reflections.

An International Equity Panel could, on the proposal of the Director-General, be established by the Assembly of WIPO, serviced by the WIPO Secretariat, and financed from the WIPO regular budget.

An International Equity Panel would draw upon the following sources: The relevant treaties and agreements; International human rights law; The Jurisprudence of the International Court of Justice; and Principles of equity found in international law, including international jurisprudence, and general considerations of justice in an uneven world.

Historically, equity has played a central role in municipal and regional legal systems. In English law, for example, equity developed alongside the common law in order to attenuate its rigidities and in order to help provide justice in needy cases. The twelve English maxims of equity are legendary and provide some guidance on principles that could guide an international equity panel of the kind being suggested here. The first maxim provides that Equity will not suffer a wrong to be without a remedy. He who seeks equity must do equity. He who comes to equity must come with clean hands. Equality is equity and equity looks to the intent rather than to the form. Equity imputes an intention to fulfill an obligation.[15]

Justice Margaret White of the Supreme Court of Queensland Australia, has noted that elements of what we would identify as broadly equitable concepts can be found in the earliest extant records, for example, Hittite treaties with their neighbors in the fourteenth and thirteenth centuries BC which attempted to preempt dishonesty in carrying out the strict terms of the treaty by specifying acts of bad faith which would be incompatible with the oaths and treaty obligations of the parties. Equity can be identified in many societies and religions even if in different forms. The Greeks called it clemency.[16] The Romans termed it *aequitas* or equality. Ancient Chinese law described it as compassion and in Hindu philosophy is found the doctrine of righteousness. In some Islamic schools *istihsan* is employed to avoid undue hardship from the application of the law.

Equity as it has been recognised and developed in international law is most closely related to Western legal traditions. This is because the body of international law rules was developed in Europe after the Peace of Westphalia in 1648 and the rise of statecraft in Europe in the nineteenth century. Justice White notes Aristotelian roots of modern concepts of equity in the Western legal tradition: The universality and completeness of the law necessarily included broad concepts of

[15] See, for example, Snell 2011.

[16] White 2004, 104.

justice and equity and, at the same time, "recognition of the need for systemic correction of shortcomings in the law due, in effect, to that very generality or universality provides equity's roots. Equity, so understood, entailed and entails discretionary characteristics both as to its application and its extent—an enduring issue both in domestic and international law." Justice White called attention to the influence of the great legal theorists of the seventeenth century, Grotius and Pufendorf, "who included an important place for equity in dealings between nations. Grotius referred to the Aristotelian idea of equity as being twofold—being an understanding of what was right and just as well as in its corrective capacity to moderate the general law."[17] By the 1920s, "an unease" arose at "the role of judicial discretion which lay at the heart of the lengthy debates at The Hague in 1920 by a number of jurists, famous in their day, meeting to advise the Council of the League of Nations on the creation of a Permanent Court of International Justice."[18] Article 38 of the Statute of the International Court of Justice is generally held to be an authoritative statement on the sources of public international law. It provides that:

1. The court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:

a. International conventions, whether general or particular, establishing rules expressly recognized by the contesting states;
b. International custom, as evidence of a general practice accepted as law;
c. The general principles of law recognized by civilized nations;
d. Subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.

Discussion on equity in relation to intellectual property is a rare phenomenon and needs to be encouraged in light of the development agenda, calls for a right to development, and the recent pre-nuptials between IPRs and human rights. Academic treatment of equity in relation to international IP law is practically nonexistent. One rare example is the discussion of the role of equity in intellectual property law by Ronald Dworkin in 1990 at a conference on the same in Jerusalem.[19] Equity has also arisen in the context of discussions on genetic resources, intergenerational equity in relation to sustainable development, in relation to media law and access to knowledge,[20] and in relation to technology transfer.[21] Carlos Correa, a staunch critic of the TRIPS regime, has written on TRIPS in relation to development and equity.[22] IP should be viewed as a means towards achieving larger social goals, although they may articulate these goals differently. For

[17] Id., 105.

[18] Id., 106.

[19] Dworkin 1990. Lenk et al. 2007.

[20] Desai 2011, 7.

[21] Blum 2002.

[22] Correa 2004.

example, a report of the International Expert Group on Biotechnology, Innovation, and Intellectual envisaged a "New IP era where IP is viewed as a servant to, and not master of, values such as equity and fairness."[23] Tzen Wong has argued that "To promote social justice, policies in IP and development must take on the concerns of both formal and informal sectors within nation states, and address the interests of marginalized groups" such as indigenous communities.[24] As seen throughout this work, there have been dramatic calls by States and non-state actors for a more equitable international IP regime.

Equity is not a stranger to intellectual property law. Statutory intellectual property monopolies are founded on the principle "that the unauthorized use of another's intellectual labour is an unfair exploitation of it."[25] In UK law, for example, unfair competition law provides for remedies such as breach of confidence and the tort of passing off. Where an intellectual creation falls outside of statutory categories, it may be protected in one of three ways: by express or implied contract, by keeping it secret and, once made public, by the laws of passing off. The law of breach of confidence, rooted in part in the law of equity, covers any obligation not to divulge information which is not generally available to the public. Remedies include compensatory damage, injunction (restraining order), and delivery-up of unlawful materials.

Passing off, like breach of confidence is a legal remedy of uncertain pedigree "stemming from equitable action to restrain the use of a name in circumstances in which the owner of that name might be exposed to legal actions in the use of his name was unchecked."[26] Passing off takes place wherever one person emulates the appearance, name get-up, or other identificatory features of another's business or trade products as to confuse the public to believe that his or her goods or business are those of the other person. Passing off is an ancillary remedy to infringement of statutory monopoly and it protects the right to enjoy undisturbed the goodwill in one's business reputation.[27] At the European level, the EC treaty stipulates in Article 81 that a fundamental goal of the Union is the prevention of anti-competitive practices. TRIPS Article 8(2) stipulates that appropriate measures consistent with TRIPS "may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology." As noted earlier, subsequent to TRIPS Article 39, which provides for effective protection against unfair competition related to undisclosed information, WIPO published the *Model Provisions on the Protection Against Unfair Competition*,[28] Article 6 (1) of which stipulates that,

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[23] IEGBIIP 2008, 14.

[24] Wong 2011.

[25] Philips and Firth 2009, 281. See generally Bentley and Sherman 2009, 1003–1061; Kitch 1998; Philips and Firth 2009, "Breach of Confidence and Passing Off," 284–306; Schechter 1999; Woodlaw 2004.

[26] Ibid., 278.

[27] Ibid.

[28] WIPO, Model Provisions on Protection Against Unfair Competition. WIPO Publication No. 832, 1996, 52.

> Any act or practice, in the course of industrial or commercial activities, that results in the disclosure, acquisition or use by others of secret information without the consent of the persons lawfully in control of that information (hereinafter referred to as the "rightful holder") and in a manner contrary to honest commercial practices shall constitute an act of unfair competition.[29]

TRIPS Article 8 acknowledges that IP rights could give rise to anti-competitive behavior by individuals or firms or by concerted practices or agreements and that such practice should be prevented. Whereas competition and IPRS are normally seen as interdependent and not contradictory, competition law is also seen as "a necessary limit to the legal powers conferred by IPRs on the basis that conflicts between the two are bound to arise given their different objectives."[30] An UNCTAD-ICTSD commentary on TRIPS and development has listed three types of conflicts that may arise between the pursuit of competitiveness and IPRs. First, IP may be used contrary to the objectives and conditions of its protection (misuse). Second, market power resulting from intellectual property may be used to extend the protection beyond its purpose, such as to enhance, extend, or abuse monopoly power. Third, agreements on the use or the exploitation of intellectual property may be concluded in restraint of trade or adversely affect the transfer or dissemination of technology or other knowledge (restrictive contracts or concerted practice).[31] The scope of application of Article 8 principles is restricted to practices to three kinds: abuse of intellectual property rights by rights holders, practices which unreasonably restrain trade, and practices which adversely affect the international transfer of technology.[32] Article 8(2) regarding appropriate measures to prevent the abuse of IP may be taken into consideration only where the practice is "directly and essentially IPR-related… After all, it is an Agreement on intellectual property, not on competition law."[33] The UNCTAD–ICTSD commentary invited developing countries:

> To consider appropriate legal and economic responses to anticompetitive practices arising from the abuse or the misuse of IPRs. They can tailor applications of their competition laws as desired for this task, subject to the general requirements in TRIPS. Caution is in order, however, because overzealous use of competition law can increase uncertainty and limit incentives for investment, including by local firms, which in turn, could also raise contracting costs in technology agreements. Again, a balance must be struck between promoting market incentives and the need to limit monopolistic and unfair business practices.[34]

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[29] Ibid.

[30] UNCTAD–ICTSD, Resource Book on TRIPS and Development (Cambridge, New York: Cambridge University Press, 2005), 540.

[31] Ibid., 541. Article 40 of TRIPS addresses anti-competitive practices in contractual licenses.

[32] Ibid., 547.

[33] Ibid., 548. Article 40 of TRIPS addresses anti-competitive practices in contractual licenses seems to be a *lex specialis* provision since it seems to have a narrower scope of application than Article 8.2. Member States have to act on licensing practices or conditions pertaining to IP rights if they have an adverse impact on trade and may impede the transfer and dissemination of technology.

[34] Ibid., 554.

The concern over the 'ratcheting up' of the minimum IP standards at the international level and the seemingly "unstoppable intellectual property blitzkrieg" prompted Gerald Dworkin to examine the necessity of guarding against excessive protection which can hamper competition without serving any socially useful purpose.[35] He has argued that unfair competition is a remedy "which provides an opportunity for the courts to explore the proper limits of intellectual property protection."[36] Dworkin refers to the definition of unfair competition in a UK case, *Moorgate Tobacco Co. v. Philip Morris* (1985), in which Dean J refers to three distinct ways in which unfair competition has been used:

(i) As synonymous to the doctrine of passing off;
(ii) As a generic name to cover the range of legal and equitable causes of action available to protect a trader against the lawful trading activities of a competitor;
(iii) To describe what is claimed to be a new and general cause of action which protects a trader against damage caused either by "unfair competition" generally, or more particularly, by the "misappropriation" of knowledge or information in which he has a "quasi-proprietary right".[37]

Dworkin suggested that the common law could adopt the third category approach of a new and general unfair competition cause of action "which has the capacity to reach beyond passing off and other economic torts."[38] Even if the courts have shown a willingness to extend the reach of the law to new forms of unfair competition, such as the tort of passing off, he notes resistance in common law courts to extension to a cause of action based on misappropriation. The scope of such an action would need to be fleshed out. The reluctance to do so stems from fears that the delicate balances that Parliament and the courts have elaborated may be upset by extending the reach of unfair competition law too far. At the international level Dworkin estimated that commitments via Article 10b and TRIPS demonstrate scant attention to the area of unfair competition. The general issue of unfair intellectual property uses and practices at the international level should bear in mind the claims of the right to development by much of the international community and the attendant human rights obligations.

In carrying out its work an equity panel can be mindful of jurisprudence emanating from the ICJ, UN human rights bodies, universal treaty-based human rights mechanisms, regional human rights bodies and relevant pronouncements of the TRIPS Council. In particular it can take cognizance of and further refine General Comment 17 of the CESCR, which has been proposed as a sound basis on which to bridge intellectual property and human rights, though it is not without criticism as seen earlier. It can also take into account the critical perspectives of academic commentators on the area of human rights and intellectual property.

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35 Dworkin 2004, p. 175.

36 Ibid., 177.

37 Ibid., 177. *Moorgate Tobacco Co. v. Philip Morris, (1985) RPC 219.*

38 Ibid., 177.

10.5 The Possible Need for a WIPO Committee of Experts on the Application of Norms

Among the international organizations of the UN system with foundation treaties, the WIPO stands out in its lack of a supervisory system or of a committee of experts to follow-up on implementation of the treaties in accordance with contemporary imperatives. The ILO, one of the oldest international organizations, has a Committee of Experts on the Application of Conventions and Recommendations. It also has a Committee on Freedom of Association.

There may be a case for the establishment of a WIPO Committee of Experts of, say, fifteen members, one from each geographical region operating in the UN system, entrusted with functions such as the following: the consideration of reports from States Parties to WIPO Conventions; undertaking fact-finding missions to States Parties where called for; considering a system of individual petitions in the area of intellectual property rights and using its good offices in needy cases.

There may also be a case for a WIPO reporting system that would require States Parties to WIPO treaties to submit once every few years reports to the Committee of Experts on how the treaty is being implemented keeping in mind the imperatives norm of the right to life, the right to development, and basic human rights such as the right to health and the right to education, and also keeping in mind the principles of equity. Over time, comments and recommendations to particular states, as well as General Comments, could help bring the international protection of intellectual property rights in harmony with advancement of the rights of humanity.

Where there are situations in respect of which it might be helpful to have a fact-finding process into how a particular treaty is being implemented in the light of the imperative right to life, the right to development, and basic human rights three members of the Committee of Experts could be mandated to look into particular situations and to provide their findings and recommendations.

Where individuals or groups are of the view that the intellectual property system is failing to help protect their right to life or to development, or basic rights such as health and education they should be able to submit individual or group petitions seeking redress and justice. A procedure could be developed to accommodate such petitions and to provide for the rendering of the views of the Committee of Experts together with its recommendations.

10.6 Conclusion

This chapter has called attention to the commentary of the Committee on Economic, Social and Cultural Rights on the ramifications of the right to enjoy the benefits of scientific and technological progress. The Committee has also called attention to the duty of international cooperation under the Charter of the United

Nations. It has also been shown that the thrust of contemporary jurisprudence on the right to life has placed preventive obligations on governments as well as positive obligations regarding access to medicines.

A cogent argument was recognized that the current world intellectual property regime often operates at cross purposes with the protection of basic human rights such as the rights to food, to health, and to education. As the Committee on Economic, Social and Cultural Rights has recognized, basic human rights must take precedence over contractual intellectual property rights.

The case for the modernisation of the world intellectual property regime has been recognized within WIPO itself and in the wider international community.[39] This is a big and complex task. The basic rule of international law is *pacta sunt servanda*—treaties in force must be observed in good faith. Pending such time as there may be modernisation of the basic treaties and agreements dealing with intellectual property rights, there is urgent need to devise approaches and methods for attenuating the rigidities of world intellectual property law so that it operates in harmony with the International Bill of Human Rights. This is uncharted territory.

The establishment of an International Equity Panel of the kind presented in this essay would help trace ways forward, case by case, step by step. To do nothing would be unforgiveable. Equity indicates the way forward. An International Equity Panel can render great service.

[39] See WIPO, Vision and Strategic Direction of the World Intellectual Property Organization, WIPO Publication No. 487E, ISBN 92-805-0974-2 (1999), 45–49. "WIPO will need to progressively develop new approaches and instruments for protecting creativity, innovation and knowledge not so far sufficiently covered by the existing means of protection, such as traditional knowledge and folklore…Furthermore, various types of intellectual property rights are being used in a new framework…in order to safeguard the rights of intellectual property owners and to balance those rights with the legitimate interests of the public." p. 46. "Possible conflicts must be addressed…Moreover, the body of intellectual property law must be codified as a resource on which all Member States can rely. This will also provide a basis to determine which areas must be strengthened, which balances must be maintained, which new balances must be achieved, and which new avenues should be explored in shaping the international legal framework for the protection of intellectual property." p. 49.

Chapter 11
Conclusion

This work has argued that the regime of international intellectual property law as it exists at the present time, can both contribute to economic growth and development and at the same time, stultify such growth through the expropriation of traditional knowledge and can result in breaches of the rights to life, to health, and to food. We have presented the views of thoughtful commentators in countries such as India and South Africa identifying deep unfairness and inequity in the current regime. One commentator has written about "trading in death", pleading that instead of depriving needy peoples of medicines that they are in dire need of "the patent regime in his country, India, should be devised so that the utmost priority is granted to securing the people right of access to affordable and quality health care, without monopoly".[1]

It was suggested that the international intellectual property regime can be made fairer and more equitable by adopting the perspectives of human security and in this regard this work has relied on the recommendations of the Commission on Human Security chaired by Mrs. Sadako Ogata and Nobel laureate Amartya Sen. The Commission on Human Security made a powerful case that health and human security are central matters of human survival in the twenty-first century and that knowledge and technology can make a difference. The challenges included the need to make tools and knowledge accessible while promoting incentives and structures for the production of new knowledge. Education and knowledge enabled groups to identify common problems and act in solidarity with others. Access to information and skills allows people to learn how to address concerns that directly affect their security. Knowledge, education, and democratic engagement are inseparable—and essential. Human security could be advanced through international intellectual property laws by creating a more equitable patent regime that would secure the efficient development of appropriate drugs and the facilitation of their extensive use. A balance was called for in crafting an IP regime that should provide equitable access to life-saving essential drugs and vaccines for people unable to purchase technologies from the global marketplace.

[1] Keayla 2009, p. 33.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
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Having examined the fundamentals of the international intellectual property regime through the lens of human security, it was shown that in order to make the regime fairer and more equitable particular attention will have to be given to making sure that heightened protection, especially through 'Trips-Plus' agreements, does not stifle innovation and does not negate flexibilities in the IP regime that would be detrimental to human security. As stated by Michael Kirby, then a member of the UNDP's Global Commission on HIV and the law,

> The fundamental problem presented by global intellectual property law is that the structure of the current regimes was established in much earlier times. It was erected for different creations and inventions. With the advent of digital technology and the huge escalation in the pace of inventiveness (in part brought about because of the technology itself), the obvious need was for a fresh regime. Such a regime would provide much shorter intervals of monopoly protection, with larger pre-conditions for the grant, and new and substantial exceptions and qualifications for their exercise. Yet instead of the global community developing a new regime, apt to the rapidly advancing technology, the world has persisted with attempting to squeeze a new and very large collection of genies into the same inappropriate bottles.
>
> The consequence is a serious disharmony in, and hostility toward, intellectual property law; a disparity between the letter of that law and what is actually happening in society (copyright); and an asserted danger to millions of human lives in the context of present pharmaceutical protections and the AIDS and other epidemics (patents)[2]

Particular issues in need of attention from a human security perspective are as follows. First, there is a need to maximize exceptions and limitations under Articles 9(2) and (10)(2) of the Berne Convention so as to facilitate access to information that ultimately affects the rights to education, to development, and to health. A related issue is the ever-expanding scope and duration of copyright protection that could negatively impact the preceding rights. Further studies are called for on this area. Second, there is a need to ensure efficient systems of technology transfer. With heightened patent regimes, especially under Trips-plus agreements technology transfer arguably has become more expensive.[3] In addition, the working of patents is necessary for them to be of use to society, given that SMEs, which comprise the backbone of most economies globally, lack the funds to engage in R&D. A related issue is whether intellectual property systems in anyway hinders the transfer of environmentally sound technologies, including new plant varieties, that may reduce the need for pesticides. As noted earlier, a healthy environment is indispensable for every aspect of human security. Third, patent regimes must respect the individuals' fundamental right to health. Patent regimes can play a part in providing health security in terms of incentivizing research and development on needed medicines. As noted by WIPO's Director General Gurry, "health is a precondition for the enjoyment of all other things".[4] In addition, States must craft their patent regimes carefully so as to maximize flexibilities that exist under the TRIPS

[2] Kirby 2011.

[3] UNDP 2008.

[4] Gurry 2011.

Agreement. The potential impact of 'ill-considered' drafting of patent laws was highlighted by Kealya.[5] Fourth, the fundamental right to food is potentially affected by the patenting of technology under *both* the *sui generis* plant variety regime and the patent regime. As the Special Rapporteur on the right to food has noted, this bears the potential for the "verticalization" of food production, "as agricultural producers would become dependent on the prices set by companies for the seeds on which they have patents and would be denied the traditional right to sell and exchange seeds among themselves, as well as to save part of their crops in order to retain seeds for the next planting season".[6] The challenges to the world's food supply requires incentives for further research on innovative agricultural solutions and excessive protection of breeders' rights and patents might discourage innovation in the name of rewarding it. In addition, as noted in Chap. 3, both privatization of biological resources and sovereign claims over such resources may lead to greater poverty, exploitation, and undermining of 'the biological commons'.

The protection of traditional knowledge of indigenous peoples is essential to the food security and health of millions of people in the developing world. Recognition of the rights of indigenous peoples to such knowledge and related genetic resources has been reflected in the adoption of some instruments that were discussed in Chap. 8. Devising adequate intellectual property protections must pay heed to Article 31 of the Declaration on the Rights of Indigenous Peoples, which provides that indigenous persons are entitled without discrimination to all human rights recognized in international law. Under Article 31 they have the right "to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts". The drafting of instruments for the protection of TK within the GRTKF has been guided by certain core principles: the need for a comprehensive treatment of traditional knowledge; the repression of unfair competition; the principle of recognition of rights of TK holders; the principle of prior informed consent before accessing knowledge of TK holders; the principle of equity and benefit-sharing; the principle of regulatory diversity; a principle of adapting the form of protection to the nature of TK; a principle of effective and appropriate remedies; a principle of safeguarding customary uses, which entails the encouragement of the use of TK and associated genetic resources; the principle of consistency with access and benefit-sharing frameworks for associated genetic resources. These, if ultimately given adequate legal expression, would be consistent with Article 23 of the Declaration of Indigenous Peoples Rights, which stipulates that they have "the right to determine and develop priorities and strategies for exercising their right to development".

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[5] Kealya 2009, 29–30.

[6] Report of the Special Rapporteur on the right to food, A/63/278, 21 October 2008, para 25.

The examination of the UN Declaration on the Right to Development suggests that the content of this declaration can guide future international policies and strategies in the area of intellectual property. There is a solid core content to the right to development at the national level that calls for the following: recognition of the right to development in the national legal order; taking all necessary measures to implement the right to development; formulation of national development policies in the spirit of the UN declaration; Popular participation; equality of access; appropriate economic and social reforms; Eradicating social injustice; halting violations of human rights; the role of women in the development process; acting on the core content of basic economic and social rights; and fair distribution of income. The IP regime must take heed of the need to take all necessary measures to implement the right to development and the need to formulate national development policies in the spirit of the UN Declaration.

Considerations of human security are rarely to be seen in the policies and strategies of international business organizations. But there is increasing pressure on IBOs to take account of the wider community that they serve, beyond their immediate shareholders. It has been suggested that, from the perspective of international human rights as a "global public good", a set of principles to guide business on the human rights dimensions of intellectual property might include, inter alia: (1) The application of international intellectual property norms should be respectful of fundamental human rights such as the right to life, the right to health, to food, and to education; (2) In asserting intellectual property rights business should be mindful of a duty of solidarity to humanity as regards the implementation of the right to development; and (3) IBOs should pursue IP policies consistent with the principle of equity in the international intellectual property regime. As seen in this work, multiple stakeholders have made a powerful call for a more equitable IP regime and IBOs, in the long run, will need to take this into consideration in their planning and operations.

The WIPO has an important role to play in creating a more equitable IP regime. In order to make the organization more attuned to considerations of human security it will be essential to sustain the current integration of developmental aspects of IP in all facets of its work. It is also vital to engage actively with the human rights community to further interject considerations of equity more firmly in the ongoing debates about a more humane IP regime. It was suggested that an international equity panel in WIPO would help guide in the modernization and humanization of international intellectual property law.

Finally, in this vein, it would be a worthwhile initiative for the Director General of the WIPO to empanel a High Level International Commission of Experts to study and to present a report on 'Intellectual Property and Human Security'. Such a report could help modernize the regime of international intellectual property laws, make the regime fairer and more equitable and help modernize the future approaches and strategies of the WIPO and would thus put WIPO squarely back in the drivers' seat in the area of global IP rights.

Annex A
Declaration on the Right to Development

A/RES/41/128
4 December 1986

The General Assembly,

Bearing in mind the purposes and principles of the Charter of the United Nations relating to the achievement of international co-operation in solving international problems of an economic, social, cultural or humanitarian nature, and in promoting and encouraging respect for human rights and fundamental freedoms for all without distinction as to race, sex, language or religion,

Recognizing that development is a comprehensive economic, social, cultural and political process, which aims at the constant improvement of the well-being of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom,

Considering that under the provisions of the Universal Declaration of Human Rights everyone is entitled to a social and international order in which the rights and freedoms set forth in that Declaration can be fully realized,

Recalling the provisions of the International Covenant on Economic, Social and Cultural Rights and of the International Covenant on Civil and Political Rights,

Recalling further the relevant agreements, conventions, resolutions, recommendations and other instruments of the United Nations and its specialized agencies concerning the integral development of the human being, economic and social progress and development of all peoples, including those instruments concerning decolonization, the prevention of discrimination, respect for and observance of, human rights and fundamental freedoms, the maintenance of international peace and security and the further promotion of friendly relations and co-operation among States in accordance with the Charter,

Recalling the right of peoples to self-determination, by virtue of which they have the right freely to determine their political status and to pursue their economic, social and cultural development,

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9,

Recalling also the right of peoples to exercise, subject to the relevant provisions of both International Covenants on Human Rights, full and complete sovereignty over all their natural wealth and resources,

Mindful of the obligation of States under the Charter to promote universal respect for and observance of human rights and fundamental freedoms for all without distinction of any kind such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status,

Considering that the elimination of the massive and flagrant violations of the human rights of the peoples and individuals affected by situations such as those resulting from colonialism, neo-colonialism, *apartheid*, all forms of racism and racial discrimination, foreign domination and occupation, aggression and threats against national sovereignty, national unity and territorial integrity and threats of war would contribute to the establishment of circumstances propitious to the development of a great part of mankind,

Concerned at the existence of serious obstacles to development, as well as to the complete fulfillment of human beings and of peoples, constituted, *inter alia*, by the denial of civil, political, economic, social and cultural rights, and considering that all human rights and fundamental freedoms are indivisible and interdependent and that, in order to promote development, equal attention and urgent consideration should be given to the implementation, promotion and protection of civil, political, economic, social and cultural rights and that, accordingly, the promotion of, respect for and enjoyment of certain human rights and fundamental freedoms cannot justify the denial of other human rights and fundamental freedoms,

Considering that international peace and security are essential elements for the realization of the right to development,

Reaffirming that there is a close relationship between disarmament and development and that progress in the field of disarmament would considerably promote progress in the field of development and that resources released through disarmament measures should be devoted to the economic and social development and well-being of all peoples and, in particular, those of the developing countries,

Recognizing that the human person is the central subject of the development process and that development policy should therefore make the human being the main participant and beneficiary of development,

Recognizing that the creation of conditions favourable to the development of peoples and individuals is the primary responsibility of their States,

Aware that efforts at the international level to promote and protect human rights should be accompanied by efforts to establish a new international economic order,

Confirming that the right to development is an inalienable human right and that equality of opportunity for development is a prerogative both of nations and of individuals who make up nations,

Proclaims the following Declaration on the Right to Development:

Article 1

1. The right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized.
2. The human right to development also implies the full realization of the right of peoples to self-determination, which includes, subject to the relevant provisions of both International Covenants on Human Rights, the exercise of their inalienable right to full sovereignty over all their natural wealth and resources.

Article 2

1. The human person is the central subject of development and should be the active participant and beneficiary of the right to development.
2. All human beings have a responsibility for development, individually and collectively, taking into account the need for full respect for their human rights and fundamental freedoms as well as their duties to the community, which alone can ensure the free and complete fulfilment of the human being, and they should therefore promote and protect an appropriate political, social and economic order for development.
3. States have the right and the duty to formulate appropriate national development policies that aim at the constant improvement of the well-being of the entire population and of all individuals, on the basis of their active, free and meaningful participation in development and in the fair distribution of the benefits resulting therefrom.

Article 3

1. States have the primary responsibility for the creation of national and international conditions favourable to the realization of the right to development.
2. The realization of the right to development requires full respect for the principles of international law concerning friendly relations and co-operation among States in accordance with the Charter of the United Nations.
3. States have the duty to co-operate with each other in ensuring development and eliminating obstacles to development. States should realize their rights and fulfill their duties in such a manner as to promote a new international economic order based on sovereign equality, interdependence, mutual interest and co-operation among all States, as well as to encourage the observance and realization of human rights.

Article 4

1. States have the duty to take steps, individually and collectively, to formulate international development policies with a view to facilitating the full realization of the right to development.
2. Sustained action is required to promote more rapid development of developing countries. As a complement to the efforts of developing countries, effective international co-operation is essential in providing these countries with appropriate means and facilities to foster their comprehensive development.

Article 5

States shall take resolute steps to eliminate the massive and flagrant violations of the human rights of peoples and human beings affected by situations such as those resulting from *apartheid*, all forms of racism and racial discrimination, colonialism, foreign domination and occupation, aggression, foreign interference and threats against national sovereignty, national unity and territorial integrity, threats of war and refusal to recognize the fundamental right of peoples to self-determination.

Article 6

1. All States should co-operate with a view to promoting, encouraging and strengthening universal respect for and observance of all human rights and fundamental freedoms for all without any distinction as to race, sex, language or religion.
2. All human rights and fundamental freedoms are indivisible and interdependent; equal attention and urgent consideration should be given to the implementation, promotion and protection of civil, political, economic, social and cultural rights.
3. States should take steps to eliminate obstacles to development resulting from failure to observe civil and political rights, as well as economic, social and cultural rights.

Article 7

All States should promote the establishment, maintenance and strengthening of international peace and security and, to that end, should do their utmost to achieve general and complete disarmament under effective international control, as well as

to ensure that the resources released by effective disarmament measures are used for comprehensive development, in particular that of the developing countries.

Article 8

1. States should undertake, at the national level, all necessary measures for the realization of the right to development and shall ensure, *inter alia*, equality of opportunity for all in their access to basic resources, education, health services, food, housing, employment and the fair distribution of income. Effective measures should be undertaken to ensure that women have an active role in the development process. Appropriate economic and social reforms should be carried out with a view to eradicating all social injustices.
2. States should encourage popular participation in all spheres as an important factor in development and in the full realization of all human rights.

Article 9

1. All the aspects of the right to development set forth in the present Declaration are indivisible and interdependent and each of them should be considered in the context of the whole.
2. Nothing in the present Declaration shall be construed as being contrary to the purposes and principles of the United Nations, or as implying that any State, group or person has a right to engage in any activity or to perform any act aimed at the violation of the rights set forth in the Universal Declaration of Human Rights and in the International Covenants on Human Rights.

Article 10

Steps should be taken to ensure the full exercise and progressive enhancement of the right to development, including the formulation, adoption and implementation of policy, legislative and other measures at the national and international levels.

Annex B
Millennium Development Goals

- End poverty and hunger, universal education, child health, combat HIV/AIDs, environmental sustainability. …
- **Target 8.F: In cooperation with the private sector, make available benefits of new technologies, especially information and communications**
  - Demand grows for information and communications technology
  - Access to the World Wide Web is still closed to the majority of the world's people
  - A large gap separates those with high-speed Internet connections, mostly in developed nations, and dial-up users
- **Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries**

Millennium summit Declaration:

- "We are committed to making the right to development a reality for everyone and to freeing the entire human race from want."
- We resolve therefore to create an environment – at the national and global levels alike – which is conducive to development and to the elimination of poverty.
- We resolve further:
- To ensure that the benefits of new technologies, especially information and communication technologies, in conformity with recommendations contained in the ECOSOC 2000 Ministerial Declaration, 6 are available to all.
- To halve, by the year 2015, the proportion of the world's people whose income is less than one dollar a day and the proportion of people who suffer from hunger and, by the same date, to halve the proportion of people who are unable to reach or to afford safe drinking
- To encourage the pharmaceutical industry to make essential drugs more widely available and affordable by all who need them in developing countries.[1]

[1] UN Millennium Declaration, A/RES/55/2, 18 September 2000, available at http://www.un.org/millennium/declaration/ares552e.pdf.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
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Annex C
United Nations Declaration on the Rights of Indigenous Peoples

General Assembly Resolution 61/295 on 13 September 2007

The General Assembly,

Guided by the purposes and principles of the Charter of the United Nations, and good faith in the fulfilment of the obligations assumed by States in accordance with the Charter,

Affirming that indigenous peoples are equal to all other peoples, while recognizing the right of all peoples to be different, to consider themselves different, and to be respected as such,

Affirming also that all peoples contribute to the diversity and richness of civilizations and cultures, which constitute the common heritage of humankind,

Affirming further that all doctrines, policies and practices based on or advocating superiority of peoples or individuals on the basis of national origin or racial, religious, ethnic or cultural differences are racist, scientifically false, legally invalid, morally condemnable and socially unjust,

Reaffirming that indigenous peoples, in the exercise of their rights, should be free from discrimination of any kind,

Concerned that indigenous peoples have suffered from historic injustices as a result of, inter alia, their colonization and dispossession of their lands, territories and resources, thus preventing them from exercising, in particular, their right to development in accordance with their own needs and interests,

Recognizing the urgent need to respect and promote the inherent rights of indigenous peoples which derive from their political, economic and social structures and from their cultures, spiritual traditions, histories and philosophies, especially their rights to their lands, territories and resources,

Recognizing also the urgent need to respect and promote the rights of indigenous peoples affirmed in treaties, agreements and other constructive arrangements with States,

Welcoming the fact that indigenous peoples are organizing themselves for political, economic, social and cultural enhancement and in order to bring to an end all forms of discrimination and oppression wherever they occur,

R. Ramcharan, *International Intellectual Property Law and Human Security*,
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Convinced that control by indigenous peoples over developments affecting them and their lands, territories and resources will enable them to maintain and strengthen their institutions, cultures and traditions, and to promote their development in accordance with their aspirations and needs,

Recognizing that respect for indigenous knowledge, cultures and traditional practices contributes to sustainable and equitable development and proper management of the environment,

Emphasizing the contribution of the demilitarization of the lands and territories of indigenous peoples to peace, economic and social progress and development, understanding and friendly relations among nations and peoples of the world,

Recognizing in particular the right of indigenous families and communities to retain shared responsibility for the upbringing, training, education and well-being of their children, consistent with the rights of the child,

Considering that the rights affirmed in treaties, agreements and other constructive arrangements between States and indigenous peoples are, in some situations, matters of international concern, interest, responsibility and character,

Considering also that treaties, agreements and other constructive arrangements, and the relationship they represent, are the basis for a strengthened partnership between indigenous peoples and States,

Acknowledging that the Charter of the United Nations, the International Covenant on Economic, Social and Cultural Rights (2) and the International Covenant on Civil and Political Rights, 2 as well as the Vienna Declaration and Programme of Action, (3) affirm the fundamental importance of the right to self-determination of all peoples, by virtue of which they freely determine their political status and freely pursue their economic, social and cultural development,

Bearing in mind that nothing in this Declaration may be used to deny any peoples their right to self-determination, exercised in conformity with international law,

Convinced that the recognition of the rights of indigenous peoples in this Declaration will enhance harmonious and cooperative relations between the State and indigenous peoples, based on principles of justice, democracy, respect for human rights, non-discrimination and good faith,

Encouraging States to comply with and effectively implement all their obligations as they apply to indigenous peoples under international instruments, in particular those related to human rights, in consultation and cooperation with the peoples concerned,

Emphasizing that the United Nations has an important and continuing role to play in promoting and protecting the rights of indigenous peoples,

Believing that this Declaration is a further important step forward for the recognition, promotion and protection of the rights and freedoms of indigenous peoples and in the development of relevant activities of the United Nations system in this field,

Recognizing and reaffirming that indigenous individuals are entitled without discrimination to all human rights recognized in international law, and that indigenous peoples possess collective rights which are indispensable for their existence, well-being and integral development as peoples,

Recognizing that the situation of indigenous peoples varies from region to region and from country to country and that the significance of national and

regional particularities and various historical and cultural backgrounds should be taken into consideration,

Solemnly proclaims the following United Nations Declaration on the Rights of Indigenous Peoples as a standard of achievement to be pursued in a spirit of partnership and mutual respect:

ARTICLE 1

Indigenous peoples have the right to the full enjoyment, as a collective or as individuals, of all human rights and fundamental freedoms as recognized in the Charter of the United Nations, the Universal Declaration of Human Rights(4) and international human rights law.

ARTICLE 2

Indigenous peoples and individuals are free and equal to all other peoples and individuals and have the right to be free from any kind of discrimination, in the exercise of their rights, in particular that based on their indigenous origin or identity.

ARTICLE 3

Indigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.

ARTICLE 4

Indigenous peoples, in exercising their right to self-determination, have the right to autonomy or self-government in matters relating to their internal and local affairs, as well as ways and means for financing their autonomous functions.

ARTICLE 5

Indigenous peoples have the right to maintain and strengthen their distinct political, legal, economic, social and cultural institutions, while retaining their right to participate fully, if they so choose, in the political, economic, social and cultural life of the State.

ARTICLE 6

Every indigenous individual has the right to a nationality.

ARTICLE 7

1. Indigenous individuals have the rights to life, physical and mental integrity, liberty and security of person.
2. Indigenous peoples have the collective right to live in freedom, peace and security as distinct peoples and shall not be subjected to any act of genocide or any other act of violence, including forcibly removing children of the group to another group.

ARTICLE 8

1. Indigenous peoples and individuals have the right not to be subjected to forced assimilation or destruction of their culture.
2. States shall provide effective mechanisms for prevention of, and redress for:

(a) Any action which has the aim or effect of depriving them of their integrity as distinct peoples, or of their cultural values or ethnic identities;
(b) Any action which has the aim or effect of dispossessing them of their lands, territories or resources;
(c) Any form of forced population transfer which has the aim or effect of violating or undermining any of their rights;
(d) Any form of forced assimilation or integration;
(e) Any form of propaganda designed to promote or incite racial or ethnic discrimination directed against them.

ARTICLE 9

Indigenous peoples and individuals have the right to belong to an indigenous community or nation, in accordance with the traditions and customs of the community or nation concerned.

No discrimination of any kind may arise from the exercise of such a right.

ARTICLE 10

Indigenous peoples shall not be forcibly removed from their lands or territories. No relocation shall take place without the free, prior and informed consent of the indigenous peoples concerned and after agreement on just and fair compensation and, where possible, with the option of return.

ARTICLE 11

1. Indigenous peoples have the right to practise and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies and visual and performing arts and literature.
2. States shall provide redress through effective mechanisms, which may include restitution, developed in conjunction with indigenous peoples, with respect to their cultural, intellectual, religious and spiritual property taken without their free, prior and informed consent or in violation of their laws, traditions and customs.

ARTICLE 12

1. Indigenous peoples have the right to manifest, practise, develop and teach their spiritual and religious traditions, customs and ceremonies; the right to maintain, protect, and have access in privacy to their religious and cultural sites; the right to the use and control of their ceremonial objects; and the right to the repatriation of their human remains.
2. States shall seek to enable the access and/or repatriation of ceremonial objects and human remains in their possession through fair, transparent and

effective mechanisms developed in conjunction with indigenous peoples concerned.

ARTICLE 13

1. Indigenous peoples have the right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons.
2. States shall take effective measures to ensure that this right is protected and also to ensure that indigenous peoples can understand and be understood in political, legal and administrative proceedings, where necessary through the provision of interpretation or by other appropriate means.

ARTICLE 14

1. Indigenous peoples have the right to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching and learning.
2. Indigenous individuals, particularly children, have the right to all levels and forms of education of the State without discrimination.
3. States shall, in conjunction with indigenous peoples, take effective measures, in order for indigenous individuals, particularly children, including those living outside their communities, to have access, when possible, to an education in their own culture and provided in their own language.

ARTICLE 15

1. Indigenous peoples have the right to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information.
2. States shall take effective measures, in consultation and cooperation with the indigenous peoples concerned, to combat prejudice and eliminate discrimination and to promote tolerance, understanding and good relations among indigenous peoples and all other segments of society.

ARTICLE 16

1. Indigenous peoples have the right to establish their own media in their own languages and to have access to all forms of non-indigenous media without discrimination.
2. States shall take effective measures to ensure that State-owned media duly reflect indigenous cultural diversity. States, without prejudice to ensuring full freedom of expression, should encourage privately owned media to adequately reflect indigenous cultural diversity.

ARTICLE 17

1. Indigenous individuals and peoples have the right to enjoy fully all rights established under applicable international and domestic labour law.

2. States shall in consultation and cooperation with indigenous peoples take specific measures to protect indigenous children from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development, taking into account their special vulnerability and the importance of education for their empowerment.
3. Indigenous individuals have the right not to be subjected to any discriminatory conditions of labour and, inter alia, employment or salary.

ARTICLE 18

Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions.

ARTICLE 19

States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them.

ARTICLE 20

1. Indigenous peoples have the right to maintain and develop their political, economic and social systems or institutions, to be secure in the enjoyment of their own means of subsistence and development, and to engage freely in all their traditional and other economic activities.
2. Indigenous peoples deprived of their means of subsistence and development are entitled to just and fair redress.

ARTICLE 21

1. Indigenous peoples have the right, without discrimination, to the improvement of their economic and social conditions, including, inter alia, in the areas of education, employment, vocational training and retraining, housing, sanitation, health and social security.
2. States shall take effective measures and, where appropriate, special measures to ensure continuing improvement of their economic and social conditions. Particular attention shall be paid to the rights and special needs of indigenous elders, women, youth, children and persons with disabilities.

ARTICLE 22

1. Particular attention shall be paid to the rights and special needs of indigenous elders, women, youth, children and persons with disabilities in the implementation of this Declaration.
2. States shall take measures, in conjunction with indigenous peoples, to ensure that indigenous women and children enjoy the full protection and guarantees against all forms of violence and discrimination.

ARTICLE 23

Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, indigenous peoples have the right to be actively involved in developing and determining health, housing and other economic and social programmes affecting them and, as far as possible, to administer such programmes through their own institutions.

ARTICLE 24

1. Indigenous peoples have the right to their traditional medicines and to maintain their health practices, including the conservation of their vital medicinal plants, animals and minerals.
   Indigenous individuals also have the right to access, without any discrimination, to all social and health services.
2. Indigenous individuals have an equal right to the enjoyment of the highest attainable standard of physical and mental health. States shall take the necessary steps with a view to achieving progressively the full realization of this right.

ARTICLE 25

Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.

ARTICLE 26

1. Indigenous peoples have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired.
2. Indigenous peoples have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.
3. States shall give legal recognition and protection to these lands, territories and resources.
   Such recognition shall be conducted with due respect to the customs, traditions and land tenure systems of the indigenous peoples concerned.

ARTICLE 27

States shall establish and implement, in conjunction with indigenous peoples concerned, a fair, independent, impartial, open and transparent process, giving due recognition to indigenous peoples' laws, traditions, customs and land tenure systems, to recognize and adjudicate the rights of indigenous peoples pertaining to their lands, territories and resources, including those which were traditionally owned or otherwise occupied or used. Indigenous peoples shall have the right to participate in this process.

ARTICLE 28

1. Indigenous peoples have the right to redress, by means that can include restitution or, when this is not possible, just, fair and equitable compensation,

for the lands, territories and resources which they have traditionally owned or otherwise occupied or used, and which have been confiscated, taken, occupied, used or damaged without their free, prior and informed consent.

2. Unless otherwise freely agreed upon by the peoples concerned, compensation shall take the form of lands, territories and resources equal in quality, size and legal status or of monetary compensation or other appropriate redress.

ARTICLE 29

1. Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous peoples for such conservation and protection, without discrimination.
2. States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent.
3. States shall also take effective measures to ensure, as needed, that programmes for monitoring, maintaining and restoring the health of indigenous peoples, as developed and implemented by the peoples affected by such materials, are duly implemented.

ARTICLE 30

1. Military activities shall not take place in the lands or territories of indigenous peoples, unless justified by a relevant public interest or otherwise freely agreed with or requested by the indigenous peoples concerned.
2. States shall undertake effective consultations with the indigenous peoples concerned, through appropriate procedures and in particular through their representative institutions, prior to using their lands or territories for military activities.

ARTICLE 31

1. Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.
2. In conjunction with indigenous peoples, States shall take effective measures to recognize and protect the exercise of these rights.

ARTICLE 32

1. Indigenous peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and other resources.

2. States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.
3. States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.

ARTICLE 33

1. Indigenous peoples have the right to determine their own identity or membership in accordance with their customs and traditions. This does not impair the right of indigenous individuals to obtain citizenship of the States in which they live.
2. Indigenous peoples have the right to determine the structures and to select the membership of their institutions in accordance with their own procedures.

ARTICLE 34

Indigenous peoples have the right to promote, develop and maintain their institutional structures and their distinctive customs, spirituality, traditions, procedures, practices and, in the cases where they exist, juridical systems or customs, in accordance with international human rights standards.

ARTICLE 35

Indigenous peoples have the right to determine the responsibilities of individuals to their communities.

ARTICLE 36

1. Indigenous peoples, in particular those divided by international borders, have the right to maintain and develop contacts, relations and cooperation, including activities for spiritual, cultural, political, economic and social purposes, with their own members as well as other peoples across borders.
2. States, in consultation and cooperation with indigenous peoples, shall take effective measures to facilitate the exercise and ensure the implementation of this right.

ARTICLE 37

1. Indigenous peoples have the right to the recognition, observance and enforcement of treaties, agreements and other constructive arrangements concluded with States or their successors and to have States honour and respect such treaties, agreements and other constructive arrangements.
2. Nothing in this Declaration may be interpreted as diminishing or eliminating the rights of indigenous peoples contained in treaties, agreements and other constructive arrangements.

ARTICLE 38

States in consultation and cooperation with indigenous peoples, shall take the appropriate measures, including legislative measures, to achieve the ends of this Declaration.

ARTICLE 39

Indigenous peoples have the right to have access to financial and technical assistance from States and through international cooperation, for the enjoyment of the rights contained in this Declaration.

ARTICLE 40

Indigenous peoples have the right to access to and prompt decision through just and fair procedures for the resolution of conflicts and disputes with States or other parties, as well as to effective remedies for all infringements of their individual and collective rights. Such a decision shall give due consideration to the customs, traditions, rules and legal systems of the indigenous peoples concerned and international human rights.

ARTICLE 41

The organs and specialized agencies of the United Nations system and other intergovernmental organizations shall contribute to the full realization of the provisions of this Declaration through the mobilization, inter alia, of financial cooperation and technical assistance. Ways and means of ensuring participation of indigenous peoples on issues affecting them shall be established.

ARTICLE 42

The United Nations, its bodies, including the Permanent Forum on Indigenous Issues, and specialized agencies, including at the country level, and States shall promote respect for and full application of the provisions of this Declaration and follow up the effectiveness of this Declaration.

ARTICLE 43

The rights recognized herein constitute the minimum standards for the survival, dignity and well-being of the indigenous peoples of the world.

ARTICLE 44

All the rights and freedoms recognized herein are equally guaranteed to male and female indigenous individuals.

ARTICLE 45

Nothing in this Declaration may be construed as diminishing or extinguishing the rights indigenous peoples have now or may acquire in the future.

ARTICLE 46

1. Nothing in this Declaration may be interpreted as implying for any State, people, group or person any right to engage in any activity or to perform any act contrary to the Charter of the United Nations or construed as authorizing or encouraging any action which would dismember or impair, totally or in part, the territorial integrity or political unity of sovereign and independent States.
2. In the exercise of the rights enunciated in the present Declaration, human rights and fundamental freedoms of all shall be respected. The exercise of the rights set forth in this Declaration shall be subject only to such limitations as are determined by law and in accordance with international human rights obligations. Any such limitations shall be nondiscriminatory and strictly necessary solely for the purpose of securing due recognition and respect for the rights and freedoms of others and for meeting the just and most compelling requirements of a democratic society.
3. The provisions set forth in this Declaration shall be interpreted in accordance with the principles of justice, democracy, respect for human rights, equality, non-discrimination, good governance and good faith.

Annex D
The Protection of Traditional Knowledge: Draft Articles of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore

Document prepared by the Secretariat
Twenty-First Session, Geneva, 16 to 20 April 2012
WIPO/GRTKF/IC/21/4
DATE: 18 JANUARY 2012

Introduction

1. At its Nineteenth Session, held from 18 to 22 July 2011, the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore ('the Committee') requested that document WIPO/GRTKF/IC/19/5 ("The Protection of Traditional Knowledge: Draft Articles") be transmitted as a working document to this session of the Committee. It further requested that Articles 1, 2, 3 and 6 of the document be replaced by the options for those articles, together with their associated comments and policy considerations, as presented to the Committee during the session by the facilitators on traditional knowledge, Ms. Andrea Bonnet López (Colombia) and Mr. Nicolas Lesieur (Canada). In addition, the "Policy Objectives" and "General Guiding Principles" appearing in document WIPO/GRTKF/IC/18/5 ("The Protection of Traditional Knowledge: Revised Objectives and Principles") should be added to this document, in the same manner that corresponding "Policy Objectives" and "General Guiding Principles" appear in document WIPO/GRTKF/IC/19/4 ("The Protection of Traditional Cultural Expressions: Draft Articles").[2]

Preparation and structure of this document

2. Pursuant to the decision above:
   (a) the "Policy Objectives" and "General Guiding Principles" appearing in document WIPO/GRTKF/IC/18/5 ("The Protection of Traditional Knowledge: Revised Objectives and Principles") have been added, in the same manner that corresponding "Policy Objectives" and "General Guiding Principles" appear in document

[2] Draft Report of the Nineteenth Session of the Committee (WIPO/GRTKF/IC/19/12 Prov. 2).

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9,

WIPO/GRTKF/IC/19/4 ("The Protection of Traditional Cultural Expressions: Draft Articles");

(b) Articles 1, 2, 3 and 6 of WIPO document WIPO/GRTKF/IC/19/5 ("The Protection of Traditional Knowledge: Draft Articles") have been replaced by the options for those articles, together with their associated comments and policy considerations, as presented by the facilitators at the Nineteenth Session of the Committee; and

(c) Articles 4, 5, 7, 8, 9, 10, 11 and 12 of WIPO document WIPO/GRTKF/IC/19/5 ("The Protection of Traditional Knowledge: Draft Articles") have been retained.

3. *The Committee is invited to review and comment on the articles contained in the Annex towards developing a revised and updated version thereof.*

THE PROTECTION OF TRADITIONAL KNOWLEDGE: DRAFT ARTICLES

POLICY OBJECTIVES (to be discussed at a later stage)

The protection of traditional knowledge should aim to:

Recognize value

(i) recognize the [holistic] nature of traditional knowledge and its intrinsic value, including its social, spiritual, [economic], intellectual, scientific, ecological, technological, [commercial], educational and cultural value, and acknowledge that traditional knowledge systems are frameworks of ongoing innovation and distinctive intellectual and creative life that are fundamentally important for indigenous and local communities and have equal scientific value as other knowledge systems;

Promote respect

(ii) promote respect for traditional knowledge systems; for the dignity, cultural integrity and intellectual and spiritual values of the traditional knowledge holders who conserve, develop and maintain those systems; for the contribution which traditional knowledge has made in sustaining the livelihoods and identities of traditional knowledge holders; and for the contribution which traditional knowledge holders have made to the [conservationConservation of the environment] conservation and sustainable use of biodiversity, to food security and sustainable agriculture, and to the progress of science and technology;

Meet the [actual] rights and needs of holders of traditional knowledge

(iii) be guided by the aspirations and expectations expressed directly by traditional knowledge holders, respect their rights as holders and custodians of traditional knowledge, contribute to their welfare and economic, cultural and social benefit and [reward] recognize the value of the contribution made by them to their communities and to the progress of science and socially beneficial technology;

Promote conservation and preservation of traditional knowledge

(iv) promote and support the conservation and preservation of traditional knowledge by respecting, preserving, protecting and maintaining traditional knowledge systems and

providing incentives to the custodians of those knowledge systems to maintain and safeguard their knowledge systems;

Empower holders of traditional knowledge and acknowledge the distinctive nature of traditional knowledge systems

(v) be undertaken in a manner that empowers traditional knowledge holders to protect their knowledge by fully acknowledging the distinctive nature of traditional knowledge systems and the need to tailor solutions that meet the distinctive nature of such systems, bearing in mind that such solutions should be balanced and equitable, should ensure that conventional intellectual property regimes operate in a manner supportive of the protection of traditional knowledge against misuse and misappropriation, and should effectively empower associated traditional knowledge holders to exercise due rights and authority over their own knowledge;

Support traditional knowledge systems

(vi) respect and facilitate the continuing customary use, development, exchange and transmission of traditional knowledge by and between traditional knowledge holders; and support and augment customary custodianship of knowledge and associated genetic resources, and promote the continued development of traditional knowledge systems;

Contribute to safeguarding traditional knowledge

(vii) while [recognizing the value of a vibrant public domain], contribute to the preservation and safeguarding of traditional knowledge and the appropriate balance of customary and other means for their development, preservation and transmission, and promote the conservation, maintenance, application and wider use of traditional knowledge, in accordance with relevant customary practices, norms, laws and understandings of traditional knowledge holders, for the primary and direct benefit of traditional knowledge holders in particular, and for the benefit of humanity in general on the basis of prior informed consent and the mutually agreed terms with the holders of that knowledge;

Repress [unfair and inequitable uses] misappropriation and misuse

(viii) repress the misappropriation of traditional knowledge and other unfair commercial and non commercial activities, recognizing the need to adapt approaches for the repression of misappropriation of traditional knowledge to national and local needs;

Respect for and cooperation with relevant international agreements and processes

(ix) take account of, and operate consistently with, other international and regional instruments and processes, in particular regimes that regulate access to and benefit sharing from genetic resources which are associated with that traditional knowledge;

Promote innovation and creativity

(x) encourage, reward and protect tradition based creativity and innovation and enhance the internal transmission of traditional knowledge within indigenous and [traditional] local communities, including, subject to the consent of the traditional knowledge holders,

by integrating such knowledge into educational initiatives among the communities, for the benefit of the holders and custodians of traditional knowledge;

Ensure prior informed consent and exchanges based on mutually agreed terms

(xi) ensure the use of traditional knowledge with prior informed consent and exchanges based on mutually agreed terms, in coordination with existing international and national regimes governing access to genetic resources;

Promote equitable benefit sharing

(xii) promote the fair and equitable sharing and distribution of monetary and non monetary benefits arising from the use of traditional knowledge, in consistency with other applicable international regimes, the principle of prior informed consent and including through [fair and equitable compensation in special cases where the individual holder is not identifiable or the knowledge has been disclosed];

Promote community development and legitimate trading activities

(xiii) if so desired by the holders of traditional knowledge, promote the use of traditional knowledge for community based development, recognizing the rights of traditional and local communities over their knowledge; and promote the development of, and the expansion of marketing opportunities for, authentic products of traditional knowledge and associated community industries, where traditional knowledge holders seek such development and opportunities consistent with their right to freely pursue economic development;

Preclude the grant of improper IP rights to unauthorized parties

(xiv) curtail the grant or exercise of improper intellectual property rights over traditional knowledge and associated genetic resources, by requiring [the creation of digital libraries of publicly known traditional knowledge and associated genetic resources], [in particular, as a condition for the granting of patent rights, that patent applicants for inventions involving traditional knowledge and associated genetic resources disclose the source and country of origin of those resources, as well as evidence of prior informed consent and benefit sharing conditions have been complied with in the country of origin];

Enhance transparency and mutual confidence

(xv) enhance certainty, transparency, mutual respect and understanding in relations between traditional knowledge holders on the one hand, and academic, commercial, educational, governmental and other users of traditional knowledge on the other, including by promoting adherence to ethical codes of conduct and the principles of free and prior informed consent;

Complement protection of traditional cultural expressions

(xvi) operate consistently with protection of traditional cultural expressions and expressions of folklore, respecting that for many traditional communities their knowledge and cultural expressions form an indivisible part of their [holistic identity.]

(i) recognize the holistic nature of traditional knowledge, including its social, spiritual, economic, intellectual, educational and cultural importance;
(ii) promote respect for traditional knowledge systems; for the dignity, cultural integrity and intellectual and spiritual values of the traditional knowledge holders who conserve and maintain those systems;
(iii) meet the actual needs of holders of traditional knowledge;
(iv) promote conservation and preservation of traditional knowledge;
(v) support traditional knowledge systems;
(vi) repress unfair and inequitable uses of traditional knowledge;
(vii) operate consistently with relevant international agreements and processes;
(viii) promote the fair and equitable sharing of benefits arising from the use of traditional knowledge;

(ix) enhance transparency and mutual confidence in relations between traditional knowledge holders on the one hand, and academic, commercial, educational, governmental and other users of traditional knowledge on the other, including by promoting adherence to ethical codes of conduct and the principles of free and prior informed consent.

GENERAL GUIDING PRINCIPLES (to be discussed at a later stage)

These principles should be respected to ensure that the specific substantive provisions concerning protection are equitable, balanced, effective and consistent, and appropriately promote the objectives of protection:

(a) Principle of responsiveness to the [needs and expectations of] rights and needs identified by traditional knowledge holders
(b) Principle of recognition of rights
(c) Principle of effectiveness and accessibility of protection
(d) Principle of flexibility and comprehensiveness
(e) Principle of equity and benefit sharing
(f) Principle of consistency with existing legal systems governing access to associated genetic resources
(g) Principle of respect for and cooperation with other international and regional instruments and processes
(h) Principle of respect for customary use and transmission of traditional knowledge
(i) Principle of recognition of the specific characteristics of traditional knowledge
(j) Principle of providing assistance to address the needs of traditional knowledge holders

ARTICLE 1

SUBJECT MATTER OF PROTECTION

DEFINITION OF TRADITIONAL KNOWLEDGE

Option 1

1.1 For the purposes of this instrument, the term “traditional knowledge” refers to the know-how, skills, innovations, practices, teachings and learning, resulting from intellectual activity and developed within a traditional context.

Option 2

1.1 Traditional knowledge is knowledge that is dynamic and evolving, resulting from intellectual activities which is passed on from generation to generation and includes but is not limited to know-how, skills, innovations, practices, processes

and learning and teaching, that subsist in codified, oral or other forms of knowledge systems. Traditional knowledge also includes knowledge that is associated with biodiversity, traditional lifestyles and natural resources.

CRITERIA FOR ELIGIBILITY

Option 1

1.2 Protection extends to traditional knowledge that is:

(a) the unique product of or is distinctively associated with beneficiaries as defined in Article 2;
(b) collectively generated, shared, preserved and transmitted from generation to generation; and
(c) integral to the cultural identity of beneficiaries as defined in Article 2;

Alternative

(d) not widely known or used outside the community of the beneficiaries as defined in Article 2, for a reasonable period of time with prior informed consent;

or

(d) not widely known or used outside the community of the beneficiaries as defined in Article 2, for a reasonable period of time;
(e) not in the public domain;
(f) not protected by an intellectual property right; and
(g) not the application of principles, rules, skills, know-how, practices, and learning normally and generally well-known.

Option 2

1.2 Protection under this instrument shall extend to traditional knowledge that is generated, preserved and transmitted from generation to generation and identified or associated or linked with the cultural identity of beneficiaries, as defined in Article 2.

COMMENTARY ON ARTICLE 1 BY THE FACILITATORS

Option 1: Policy approach

This option contains a simple, narrower definition of TK, along with a more detailed list of eligibility criteria.

Option 2: Policy approach

This option contains a more detailed and open-ended definition of TK.

However, the specific choice of terms to denote the protected subject matter is left to be determined by national/domestic law.

This option also includes a reference to sacred or secret TK.

Comments on policy approach

With the aim to clean the text, both options exclude any elements that define what a beneficiary is. This issue is left in its entirety to Article 2.

In light of comments received, the facilitators kept those two issues that deal with secret and sacred TK.

Some delegations have expressed a desire to include a definition of secret TK. However, some delegations wondered what the boundaries of sacred TK were, and whether this issue should be addressed by this kind of instrument.

Comments on Article 1.2

The text has been streamlined into two options.

Option 1 maintains the concepts "distinctively", "collectively" and "cultural identity". The other concepts (such as the public domain and TK that is not widely known or used), including as alternatives, need further discussion.

ARTICLE 2

BENEFICIARIES OF PROTECTION

Option 1

Beneficiaries of protection of traditional knowledge, as defined in Article 1, are indigenous peoples/communities and local communities.

Option 2

Beneficiaries of protection of traditional knowledge, as defined in Article 1, may include:

(a) indigenous peoples/communities;
(b) local communities;
(c) traditional communities;
(d) families;
(e) nations;
(f) individuals within the categories listed above; and
(g) where traditional knowledge is not specifically attributable or confined to an indigenous peoples or local community, or it is not possible to identify the community that generated it, any national entity determined by domestic law.

COMMENTARY ON ARTICLE 2 BY THE FACILITATORS

Option 1: Policy approach

In this option, "beneficiaries" are indigenous and local communities.

Option 2: Policy approach

In this option, "beneficiaries" include families, nations, and individuals. This option reflects the position of countries that do not use the term indigenous peoples or local communities but consider that individuals or families maintain TK.

Comments on policy approach

The facilitators believe that the term "beneficiaries" merits a parallel discussion in the TCE and the TK texts.

As a placeholder, the facilitators have reflected in this draft the same texts that have been presented by the TCE facilitator.

Option 1 contains the core types of beneficiaries. Option 2 contains additional types of beneficiaries that will require further discussion.

ARTICLE 3

SCOPE OF PROTECTION

Option 1

3.1 Adequate and effective legal, policy or administrative measures should be provided, as appropriate and in accordance with national law, to:

(a) prevent the unauthorized disclosure, use or other exploitation of [secret] traditional knowledge;

(b) where traditional knowledge is knowingly used outside the traditional context:

(i) acknowledge the source of traditional knowledge and attribute its holders where known unless they decide otherwise;
(ii) encourage use of traditional knowledge in a manner that does not disrespect the cultural norms and practices of its holders.

(c) encourage traditional knowledge holders and users to establish mutually agreed terms addressing approval requirements and the sharing of benefits arising from commercial use of that traditional knowledge.

Optional addition

3.2 Beneficiaries, as defined in Article 2, should, according to national law, have the following exclusive rights:

(a) enjoy, control, utilize, maintain, develop, preserve and protect their traditional knowledge;
(b) authorize or deny the access and use of their traditional knowledge;
(c) have a fair and equitable share of benefits arising from the commercial use of their traditional knowledge based on mutually agreed terms;
(d) prevent misappropriation and misuse, including any acquisition, appropriation, utilization or practice of their traditional knowledge without the establishment of mutually agreed terms;
(e) prevent the use of traditional knowledge without acknowledgment and attribution of the origin of their traditional knowledge and its holders, where known; and
(f) ensure that the use of the traditional knowledge respects the cultural norms and practices of the holders.

Option 2

3.1 Member States shall ensure, that the beneficiaries, as defined in Article 2, have the following exclusive collective rights to:

(a) enjoy, utilize, maintain, develop, preserve, protect and exclusively control their traditional knowledge;
(b) authorize or deny the access and use of their traditional knowledge;
(c) have a fair and equitable share of benefits arising from the use of their traditional knowledge based on mutually agreed terms;
(d) prevent misappropriation and misuse, including any acquisition, appropriation, utilization or practice of their traditional knowledge without the prior and informed consent of the holders and the establishment of mutually agreed terms;
(e) require, in the application for intellectual property rights involving the use of their traditional knowledge, the mandatory disclosure of the identity of the traditional knowledge holders and the country of origin, as well as evidence of compliance with prior informed consent and benefit-sharing requirements in accordance with domestic law or requirements of the country of origin;
(f) prevent the use of traditional knowledge without acknowledging the source and origin of that traditional knowledge and its holders, where known;
(g) ensure that the use of the traditional knowledge respects the cultural norms and practices of the holders.

3.2 For the purposes of this instrument, the term “utilization” in relation to traditional knowledge shall refer to any of the following acts:

(a) Where the traditional knowledge is a product:

(i) manufacturing, importing, offering for sale, selling, stocking or using the product beyond the traditional context;

(ii) being in possession of the product for the purposes of offering it for sale, selling it or using it beyond the traditional context.

(b) Where the traditional knowledge is a process:

(i) making use of the process beyond the traditional context; or
(ii) carrying out the acts referred to under sub-clause (a) with respect to a product that is a direct result of the use of the process; or

(c) When traditional knowledge is used for research and development leading to profit-making or commercial purposes.

3.3 Member States shall provide adequate and effective legal measures to:

(a) ensure the application of the aforementioned rights, taking into account applicable domestic law and customary practices;
(b) prevent the unauthorized disclosure, use or other exploitation of traditional knowledge;
(c) where traditional knowledge is knowingly used outside the traditional context:

(i) acknowledge the source of traditional knowledge and attribute its holders where known unless they decide otherwise;
(ii) encourage use of traditional knowledge in a manner that does not disrespect the cultural norms and practices of its holders;
(iii) encourage, where the traditional knowledge is secret or is not widely known, traditional knowledge holders and users to establish mutually agreed terms addressing approval requirements and the sharing of benefits arising from commercial use of that traditional knowledge.

COMMENTARY ON ARTICLE 3 BY THE FACILITATORS

General comments

Article 3, which relates to the scope of protection, proved to be particularly challenging to untangle. The facilitators approached this by isolating on the one hand the rights of the holders of TK, and on the other, the measures to be taken in relation to the protection of TK such as misappropriation.

Informal consultations have confirmed that although the facilitators' text will be helpful to the IGC, if only because it eliminates overlap and repetition, it still falls short in drawing clear linkages between the problems related to the protection of to TK, and the possible measures to be taken to address these problems.

One suggestion put forward is to restructure the text further by clustering the current provisions under four broad approaches: a rights-based approach; a broad and flexible framework; targeted provisions for the protection of secret TK; and a mixed approach. The co-facilitators consider this suggestion to be interesting and encourage the IGC to consider it as it moves forward on this important pillar. They also recommend keeping in the text the definition of utilization, recognizing that a later stage in the discussion, the IGC may wish to create a separate section in the body of the text containing all definitions.

Option 1: Policy approach

The policy approach underlying this option is that Member States should have maximum flexibility to define the scope of protection (responsibilities of Member States and, in the alternative, the rights of the TK holders).

Option 2: Policy approach

This policy approach is more detailed and prescriptive, and is a rights-based approach with stronger obligations for Member States.

Comments on policy approach

For the purposes of this article, the facilitators have distinguished the rights given by the instrument to the TK holders and the actions to be taken by Member States to support those rights.

Comments on Article 3.1

In Option 1, the facilitators have created two sub-options. The first one contemplates measures to be taken by Member States, while Option 2 contemplates rights to be provided to beneficiaries, in addition to the aforementioned measures. This mirrors used in the TCE facilitators' text.

Facilitators have used the term Member States as to avoid pre-judging the nature of this instrument

Regarding sub-paragraph e) under option 2, the facilitators wonder whether this should be a right given to TK holders or, rather, an obligation for Member States like under option 1.

Regarding the country of origin, the facilitators wondered whether it was the country of origin of the TK or of the holders of the TK.

The facilitators have suggested to move suggested 3.4 to article 6 since it refers to exclusions.

The paragraph referring to the principles of the right to self-determination was removed as the facilitators felt it did not deal with scope of protection, and would be more appropriate under principles and objectives.

For paragraph 3.2 under Option 3, the facilitators were unsure as to the intent of the proposed paragraph and did not include it in the two options.

ARTICLE 4

SANCTIONS, REMEDIES AND EXERCISE OF RIGHTS

4.1 States should/Member States [Contracting Parties shall [undertake to]] adopt, [[as appropriate and] in accordance with their legal systems], the measures necessary to ensure the application of this instrument.

[*Option 1*

4.2 Member States shall [/should] ensure that enforcement procedures are available under their laws against the [willful or negligent] infringement of the protection provided to traditional knowledge under this instrument sufficient to constitute a deterrent to further infringements.

Option 2

4.2 Contracting Parties undertake to implement the mechanism.

Accessible, appropriate and adequate criminal, civil and administrative enforcement procedures and dispute resolution mechanisms, border measures, sanctions and remedies, shall [should] be available in cases of breach of the protection of the traditional knowledge so as to permit effective action against any act of infringement [misappropriation or misuse] of traditional knowledge, including expeditious

remedies which would constitute a deterrent to further infringement [misappropriation or misuse].

4.3. These procedures should be accessible, effective, fair, equitable, adequate [appropriate] and not burdensome for holders of traditional knowledge. [They should also provide safeguards for legitimate third party interests and the public interests.]

4.4 Where a dispute arises between beneficiaries or between beneficiaries and users of a traditional knowledge the parties may agree to [each party may [shall] be entitled] to refer the issue to an [independent] alternative dispute resolution mechanism recognized by international, regional or national law that is most suited to the holders of traditional knowledge. The dispute resolution mechanism between beneficiaries and users should be assigned to national law when beneficiaries and users are from one country.

4.5 To promote relevant measures for the carrying-out of cultural expertise, that take into consideration customary laws, protocols and community procedures for the purposes of dispute settlement.

Option 3

4.1 Appropriate legal, policy and/or administrative measures should be provided to ensure the application of this instrument, including measures to prevent willful or negligent harm to the economic and/or moral interests of the beneficiaries sufficient to constitute a deterrent. Where appropriate, sanctions and remedies should reflect the sanctions and remedies that indigenous people and local communities would use.

4.2 The means of redress for safeguarding the protection granted by this instrument should be governed by the legislation of the country where the protection is claimed.

4.3 Where a dispute arises between beneficiaries or between beneficiaries and users of a traditional knowledge each party shall be entitled to refer the issue to an [independent] alternative dispute resolution mechanism recognized by international, regional or national law.]

ARTICLE 5

ADMINISTRATION OF RIGHTS

The establishment of a national or regional authority or authorities under this article is without prejudice to the national law and the right of traditional knowledge owners to administer their rights according to their customary protocols, understandings, laws and practices.

In the case that the Member State decides thus that they should establish this authority:

5.1 A Member State [contracting party] shall [may] free, prior and informed consent of [, in consultation with] the owners [holders] of traditional knowledge in accordance with its national law, may establish or appoint an appropriate national or regional competent authority or authorities. The functions may include, but need not be limited to, the following:

Alternative

Where so requested by traditional knowledge holders a competent authority (regional, national or local) may to the extent authorized by the holders:

(a) disseminate [disseminating] information and promoting practices about traditional knowledge and its protection under protection of its beneficiaries;
(b) ascertaining whether free, prior informed consent has been obtained;*Alternatives*
(b) providing advice to traditional knowledge holders and users on the establishment of mutually agreed terms.
(b) applying the rules and procedures of the national legislation regarding prior and informed consent and to the fair and equitable sharing of benefits.
(c) supervising fair and equitable benefit-sharing; and
(d) assist [assisting], where possible and appropriate, the owners [holders] of traditional knowledge in the use, practice [exercise] and enforcement of their rights over their traditional knowledge.
(e) determine whether an act pertaining to traditional knowledge constitutes an infringement or another act of unfair competition in relation to that knowledge.

5.2 Where traditional knowledge fulfills the criteria under Article 1, and is not specifically attributable to or confined to a community, the authority may, with the consultation and approval of the traditional knowledge owners [holders] where possible, administer the rights of that traditional knowledge.

5.3 The identity of the [competent] national or regional authority or authorities shall [/should] be communicated to the WIPO.

5.4 [The establishment of a national or regional authority or authorities under this article is without prejudice to the national law and the right of traditional knowledge owners [holders] to administer their rights according to their customary protocols, understandings, laws and practices.]

5.5 The established authority shall include authorities originating from indigenous peoples so that they form part of that authority

ARTICLE 6

EXCEPTIONS AND LIMITATIONS

Option 1

6.1 Measures for the protection of traditional knowledge should not restrict, according to domestic/national law, the generation, customary use, transmission, exchange and development of traditional knowledge by the beneficiaries, within and among communities in the traditional and customary context.

6.2 Limitations on protection should extend only to the utilization of traditional knowledge taking place outside the membership of the beneficiary community or outside traditional or cultural context.

6.3 Member States may adopt appropriate limitations or exceptions under domestic/national law, provided that the use of traditional knowledge:

Alternative

6.3 Member States may adopt appropriate limitations or exceptions under domestic/national law, with the prior and informed consent of the beneficiaries, provided that the use of traditional knowledge:

(a) acknowledges the beneficiaries, where possible;
(b) is not offensive or derogatory to the beneficiaries; and
(c) is compatible with fair practice.*Alternative*
(a) does not conflict with the normal utilization of the traditional knowledge by the beneficiaries; and
(b) does not unreasonably prejudice the legitimate interests of the beneficiaries.

6.4 Regardless of whether such acts are already permitted under Article 6.2 or not, the following shall be permitted:

(a) the use of traditional knowledge in archives, libraries, museums or cultural institutions for non-commercial cultural heritage purposes, including for preservation, display, research and presentation should be permitted; and
(b) the creation of an original work of authorship inspired by traditional knowledge.

6.5 There shall be no right to exclude others from using knowledge that:

(a) has been independently created;
(b) derived from sources other than the beneficiary; or
(c) is known outside of the beneficiaries' community.

6.6 [Secret and sacred traditional knowledge should not be subjected to exceptions and limitations.]

Option 2

6.1 Measures for the protection of traditional knowledge should not restrict the generation, customary use, transmission, exchange and development of traditional knowledge by the beneficiaries, within and among communities in the traditional and customary context [consistent with national/domestic laws of the Member States].

6.2 Limitations on protection shall extend only to the utilization of traditional knowledge taking place outside the membership of the beneficiary community or outside traditional or cultural context.

6.3 Member States may adopt appropriate limitations or exceptions under domestic/national law, provided that the use of traditional knowledge:

Alternative

6.3 Member States may adopt appropriate limitations or exceptions under domestic/national law, with the prior and informed consent of the beneficiaries, provided that the use of traditional knowledge:

(a) acknowledges the beneficiaries, where possible;
(b) is not offensive or derogatory to the beneficiaries; and
(c) is compatible with fair practice.

Alternative

(a) does not conflict with the normal utilization of the traditional knowledge by the beneficiaries; and
(b) does not unreasonably prejudice the legitimate interests of the beneficiaries.

6.4 [Secret and sacred traditional knowledge shall not be subjected to exceptions and limitations.]

COMMENTARY ON ARTICLE 6 BY THE FACILITATORS

Comments

Language was proposed in plenary to the effect that "[t]he independent discovery or the independent innovation is based on traditional knowledge, exemptions and limitations should be over traditional knowledge with country of origin." The facilitators chose not to include that language until clarification is obtained from its proponents.

During informal consultations, some delegations questioned whether secret and/or sacred TK should be included within the scope of this future instrument. All recognized that further discussion was required on this important issue. In the meantime, the facilitators have chosen to keep the language related to secret and/or sacred TK in the text.

ARTICLE 7

TERM OF PROTECTION

[*Option 1*

Protection of traditional knowledge shall [should] last as long as the traditional knowledge fulfills the criteria of eligibility for protection according to Article 1.]

[*Option 2*

Duration of protection of traditional knowledge varies based upon the characteristics and value of traditional knowledge.]

ARTICLE 8

FORMALITIES

Option 1

8.1 The protection of traditional knowledge should [shall] not be subject to any formality.

Option 2

8.1 The protection of traditional knowledge requires some formalities.

[8.2 In the interests of transparency, certainty and the conservation of traditional knowledge, relevant national authorities may [should/shall] maintain registers or other records of traditional knowledge.]

ARTICLE 9

TRANSITIONAL MEASURES

9.1 These provisions apply to all traditional knowledge which, at the moment of the provisions coming into force, fulfills the criteria set out in Article 1.

Option 1

9.2 The state should ensure the necessary measures to secure the rights [acknowledged by national [or] domestic law,] already acquired by third parties in accordance with its national law and its international legal obligations.

Option 2

9.2 Continuing acts in respect of traditional knowledge that had commenced prior to the coming into force of these provisions and which would not be

permitted or which would be otherwise regulated by these provisions, should be brought into conformity with these provisions within a reasonable period of time after they entry into force [, subject to respect for rights previously acquired by third parties in good faith].]

ARTICLE 10

CONSISTENCY WITH THE GENERAL LEGAL FRAMEWORK

Option 1

[10.1 Protection under this instrument shall take account of, and operate consistently with, other international [and regional and national] instruments [and processes] [, in particular the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity].]

Option 2

[10.1 [Protection under this instrument should leave intact] and should in no way affect the rights or the protection provided for in international legal instruments [, in particular the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity].]

[10.2 Nothing in this instrument may be construed as diminishing or extinguishing the rights that indigenous peoples or local communities [or nations]/beneficiaries have now or may acquire in the future.]

Alternative

10.2 In accordance with Article 45 of the United Nations Declaration on the Rights of Indigenous Peoples, nothing in this instrument may be construed as diminishing or extinguishing the rights that indigenous peoples have now or may acquire in the future.

ARTICLE 11

NATIONAL TREATMENT AND OTHER MEANS OF RECOGNIZING FOREIGN RIGHTS AND INTERESTS

[The rights and benefits arising from the protection of traditional knowledge under national/domestic measures or laws that give effect to these international provisions should be available to all eligible beneficiaries who are nationals or residents of a Member State [prescribed country] as defined by international obligations or undertakings. Eligible foreign beneficiaries should enjoy the same rights and benefits as enjoyed by beneficiaries who are nationals of the country of protection, as well as the rights and benefits specifically granted by these international provisions.]

National treatment as to all domestic law or national treatment as to laws specifically identified to fulfill these principles; or

Reciprocity; or

An appropriate means of recognizing foreign rights holders.

ARTICLE 12

TRANS-BOUNDARY COOPERATION

In instances where traditional knowledge is located in territories of different States/Member States [contracting Parties], those States/Member States [contracting Parties] should [shall] co-operate by taking measures that are supportive of and do not run counter to the objectives of this instrument. This cooperation should [shall] be done with the participation [and consent]/[and prior informed consent] of the traditional knowledge owners [holders].

Parties shall consider the need for modalities of a global mutual benefit sharing mechanism to address the fair and equitable sharing of benefits derived from the use of traditional knowledge that occurs in transboundary situations for which it is not possible to grant or obtain prior informed consent.

Annex E
Development Agenda of WIPO[3]

The 45 Adopted Recommendations Under the WIPO Development Agenda

At the 2007 General Assembly, WIPO Member States adopted 45 recommendations (of the 111 original proposals) made by the Provisional Committee on Proposals Related to a WIPO Development Agenda (PCDA). The 45 adopted recommendations are listed below in the following clusters:

* Recommendations with an asterisk were identified by the 2007 General Assembly for immediate implementation

Cluster A: Technical Assistance and Capacity Building

* 1. WIPO technical assistance shall be, *inter alia*, development-oriented, demand-driven and transparent, taking into account the priorities and the special needs of developing countries, especially LDCs, as well as the different levels of development of Member States and activities should include time frames for completion. In this regard, design, delivery mechanisms and evaluation processes of technical assistance programs should be country specific.

2. Provide additional assistance to WIPO through donor funding, and establish Trust-Funds or other voluntary funds within WIPO specifically for LDCs, while continuing to accord high priority to finance activities in Africa through budgetary and extra-budgetary resources, to promote, *inter alia*, the legal, commercial, cultural, and economic exploitation of intellectual property in these countries.

* 3 Increase human and financial allocation for technical assistance programs in WIPO for promoting a, *inter alia*, development-oriented intellectual property culture, with an emphasis on introducing intellectual property at different academic levels and on generating greater public awareness on intellectual property.

[3] WIPO, available at http://www.wipo.int/ip-development/en/agenda/recommendations.html.

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9,

* 4. Place particular emphasis on the needs of small and medium-sized enterprises (SMEs) and institutions dealing with scientific research and cultural industries and assist Member States, at their request, in setting-up appropriate national strategies in the field of intellectual property.

5. WIPO shall display general information on all technical assistance activities on its website, and shall provide, on request from Member States, details of specific activities, with the consent of the Member State(s) and other recipients concerned, for which the activity was implemented.

* 6. WIPO's technical assistance staff and consultants shall continue to be neutral and accountable, by paying particular attention to the existing Code of Ethics, and by avoiding potential conflicts of interest. WIPO shall draw up and make widely known to the Member States a roster of consultants for technical assistance available with WIPO.

* 7. Promote measures that will help countries deal with intellectual property-related anti-competitive practices, by providing technical cooperation to developing countries, especially LDCs, at their request, in order to better understand the interface between IPRs and competition policies.

8. Request WIPO to develop agreements with research institutions and with private enterprises with a view to facilitating the national offices of developing countries, especially LDCs, as well as their regional and sub-regional intellectual property organizations to access specialized databases for the purposes of patent searches.

9. Request WIPO to create, in coordination with Member States, a database to match specific intellectual property -related development needs with available resources, thereby expanding the scope of its technical assistance programs, aimed at bridging the digital divide.

10 To assist Member States to develop and improve national intellectual property institutional capacity through further development of infrastructure and other facilities with a view to making national intellectual property institutions more efficient and promote fair balance between intellectual property protection and the public interest. This technical assistance should also be extended to sub-regional and regional organizations dealing with intellectual property.

* 11. To assist Member States to strengthen national capacity for protection of domestic creations, innovations and inventions and to support development of national scientific and technological infrastructure, where appropriate, in accordance with WIPO's mandate.

* 12. To further mainstream development considerations into WIPO's substantive and technical assistance activities and debates, in accordance with its mandate.

* 13. WIPO's legislative assistance shall be, *inter alia*, development-oriented and demand-driven, taking into account the priorities and the special needs of developing countries, especially LDCs, as well as the different levels of development of Member States and activities should include time frames for completion.

* 14. Within the framework of the agreement between WIPO and the WTO, WIPO shall make available advice to developing countries and LDCs, on the

implementation and operation of the rights and obligations and the understanding and use of flexibilities contained in the TRIPS Agreement.

Cluster B: Norm-setting, flexibilities, public policy and public domain

* 15. Norm-setting activities shall:

- be inclusive and member-driven;
- take into account different levels of development;
- take into consideration a balance between costs and benefits;
- be a participatory process, which takes into consideration the interests and priorities of all WIPO Member States and the viewpoints of other stakeholders, including accredited inter-governmental organizations (IGOs) and NGOs; and
- be in line with the principle of neutrality of the WIPO Secretariat.

* 16. Consider the preservation of the public domain within WIPO's normative processes and deepen the analysis of the implications and benefits of a rich and accessible public domain.

* 17. In its activities, including norm-setting, WIPO should take into account the flexibilities in international intellectual property agreements, especially those which are of interest to developing countries and LDCs.

* 18. To urge the IGC to accelerate the process on the protection of genetic resources, traditional knowledge and folklore, without prejudice to any outcome, including the possible development of an international instrument or instruments.

* 19. To initiate discussions on how, within WIPO's mandate, to further facilitate access to knowledge and technology for developing countries and LDCs to foster creativity and innovation and to strengthen such existing activities within WIPO.

20. To promote norm-setting activities related to IP that support a robust public domain in WIPO's Member States, including the possibility of preparing guidelines which could assist interested Member States in identifying subject matters that have fallen into the public domain within their respective jurisdictions.

* 21. WIPO shall conduct informal, open and balanced consultations, as appropriate, prior to any new norm-setting activities, through a member-driven process, promoting the participation of experts from Member States, particularly developing countries and LDCs.

22. WIPO's norm-setting activities should be supportive of the development goals agreed within the United Nations system, including those contained in the Millennium Declaration.

The WIPO Secretariat, without prejudice to the outcome of Member States considerations, should address in its working documents for norm-setting activities,

as appropriate and as directed by Member States, issues such as: (a) safeguarding national implementation of intellectual property rules (b) links between intellectual property and competition (c) intellectual property -related transfer of technology (d) potential flexibilities, exceptions and limitations for Member States and (e) the possibility of additional special provisions for developing countries and LDCs.

23. To consider how to better promote pro-competitive intellectual property licensing practices, particularly with a view to fostering creativity, innovation and the transfer and dissemination of technology to interested countries, in particular developing countries and LDCs.

Cluster C: Technology Transfer, Information and Communication Technologies (ICT) and Access to Knowledge

24. To request WIPO, within its mandate, to expand the scope of its activities aimed at bridging the digital divide, in accordance with the outcomes of the World Summit on the Information Society (WSIS) also taking into account the significance of the Digital Solidarity Fund (DSF).

25. To explore intellectual property -related policies and initiatives necessary to promote the transfer and dissemination of technology, to the benefit of developing countries and to take appropriate measures to enable developing countries to fully understand and benefit from different provisions, pertaining to flexibilities provided for in international agreements, as appropriate.

26. To encourage Member States, especially developed countries, to urge their research and scientific institutions to enhance cooperation and exchange with research and development institutions in developing countries, especially LDCs.

27. Facilitating intellectual property -related aspects of ICT for growth and development: Provide for, in an appropriate WIPO body, discussions focused on the importance of intellectual property -related aspects of ICT, and its role in economic and cultural development, with specific attention focused on assisting Member States to identify practical intellectual property -related strategies to use ICT for economic, social and cultural development.

28. To explore supportive intellectual property -related policies and measures Member States, especially developed countries, could adopt for promoting transfer and dissemination of technology to developing countries.

29. To include discussions on intellectual property -related technology transfer issues within the mandate of an appropriate WIPO body.

30. WIPO should cooperate with other IGOs to provide to developing countries, including LDCs, upon request, advice on how to gain access to and make use of intellectual property-related information on technology, particularly in areas of special interest to the requesting parties.

31. To undertake initiatives agreed by Member States, which contribute to transfer of technology to developing countries, such as requesting WIPO to facilitate better access to publicly available patent information.

32. To have within WIPO opportunity for exchange of national and regional experiences and information on the links between IPRs and competition policies.

Cluster D: Assessment, Evaluation and Impact Studies

33. To request WIPO to develop an effective yearly review and evaluation mechanism for the assessment of all its development-oriented activities, including those related to technical assistance, establishing for that purpose specific indicators and benchmarks, where appropriate.

34. With a view to assisting Member States in creating substantial national programs, to request WIPO to conduct a study on constraints to intellectual property protection in the informal economy, including the tangible costs and benefits of intellectual property protection in particular in relation to generation of employment.

* 35. To request WIPO to undertake, upon request of Member States, new studies to assess the economic, social and cultural impact of the use of intellectual property systems in these States.

36. To exchange experiences on open collaborative projects such as the Human Genome Project as well as on intellectual property models.

* 37. Upon request and as directed by Member States, WIPO may conduct studies on the protection of intellectual property, to identify the possible links and impacts between intellectual property and development.

38. To strengthen WIPO's capacity to perform objective assessments of the impact of the organization's activities on development.

Cluster E: Institutional Matters including Mandate and Governance

39. To request WIPO, within its core competence and mission, to assist developing countries, especially African countries, in cooperation with relevant international organizations, by conducting studies on brain drain and make recommendations accordingly.

40. To request WIPO to intensify its cooperation on IP related issues with United Nations agencies, according to Member States' orientation, in particular UNCTAD, UNEP, WHO, UNIDO, UNESCO and other relevant international organizations, especially the WTO in order to strengthen the coordination for maximum efficiency in undertaking development programs.

41. To conduct a review of current WIPO technical assistance activities in the area of cooperation and development.

* 42. To enhance measures that ensure wide participation of civil society at large in WIPO activities in accordance with its criteria regarding NGO acceptance and accreditation, keeping the issue under review.

43. To consider how to improve WIPO's role in finding partners to fund and execute projects for intellectual property -related assistance in a transparent and member-driven process and without prejudice to ongoing WIPO activities.

* 44. In accordance with WIPO's member-driven nature as a United Nations Specialized Agency, formal and informal meetings or consultations relating to norm-setting activities in WIPO, organized by the Secretariat, upon request of the Member States, should be held primarily in Geneva, in a manner open and transparent to all Members. Where such meetings are to take place outside of Geneva, Member States shall be informed through official channels, well in advance, and consulted on the draft agenda and program.

Cluster F: Other Issues

45. To approach intellectual property enforcement in the context of broader societal interests and especially development-oriented concerns, with a view that "the protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations", in accordance with Article 7 of the TRIPS Agreement.

References

Abbott FM, Cottier T, Gurry F (2007) International intellectual property law in an integrated world economy. Aspen Publishers, New York

Abi-Saab G (1980) The legal formulation of a right to development. In: Jean-Dupuis R (ed) The right to development at the international level. Hague Academy of International Law, Sijthoff & Noordhoff, The Hague

Alfredsson G, Eide A (1999) The universal declaration of human rights: a common standard of achievement. Martinus Nijhoff Publishers, Dordrecht

Alikhan S (2000) Socio-economic benefits of intellectual property in developing countries. WIPO, Geneva

Alikhan S, Mashelkar M (2005) Intellectual property and competitive strategies in the 21st century. Kluwer Law International, Frederick

Alikhan S, Mashelkar RA (2009) Intellectual property and competitive strategies in the 21st century, 2nd edn. Kluwer Law International, Frederick

Allen Consulting Group (2001) The economic contribution of Australia's copyright industries. Center for Copyright Studies, Australian Copyright Council

Anderson RD, Wager H (2006) Human rights, development, and the WTO: the cases of intellectual property and competition policy. J Int Econ Law 9(3):707

Andreassen B (ed) (2006) The right to development. Nobel Foundation

Aplin T, Bently L, Malynicz S (2012) Gurry on breach of confidence: the protection of confidential information. Oxford University Press, Oxford

Armstrong C et al (eds) (2010) Access to knowledge in Africa. The role of copyright. University of Cape Town Press, Cape Town

Arrow K (1962) Economic welfare and allocation of resources for invention In: Nelson R (ed) The rate and direction of inventive activity. Princeton University Press, Princeton

Ban J (2003) Health as a global security challenge. Seton Hall J Dipl Int Relat 4(2):19

Barnett M, Duvall R (eds) (2005) Power in global governance. Cambridge University Press, Cambridge

Baylis J et al (2010) Strategy in the contemporary world: an introduction to strategic studies. Oxford University Press, Oxford

Beiter K (2008) Case comment: the right to property and the protection of interests in intellectual property—a human rights perspective on the European Court of Human Rights' decision in Anheuser-Busch Inc v Portugal. Int Rev Intellect Prop Compet Law 39(6):714–721 (Westlaw India Delivery Summary, 5 April, 2012)

Ben-Attar DS (2004) Trade secrets: intellectual piracy and the origins of American industrial power. Yale University Press, New Haven

Benedeck W (2009) Human security and human rights interaction. In: Goucha M, Crowley J (eds) Human security. UNESCO, Paris

R. Ramcharan, *International Intellectual Property Law and Human Security*,
DOI: 10.1007/978-90-6704-900-9,

Bentley L, Sherman B (2009) Intellectual property law. Oxford University Law, Oxford
Bergsten F (1990) The world economy after the cold war. Foreign Aff 69:96–112
Bird RC, Jain SC (2008) The global challenge of intellectual property rights. Elgar Publishing, Cheltenham
Blakeney M (1997) Bioprospecting and the protection of traditional medical knowledge of indigenous peoples: an Australian perspective. Eur Intellect Prop Rev 6:302
Blum JD (2002) The role of law in global e-health: a tool for development and equity in a digitally divided world. St Louis Univ Law J 46:85
Boren D (1992) The intelligence community: how crucial? Foreign Aff 71(3):52–62
Boutros-Ghali B (1993) Agenda for peace, United Nations
Boyd S, Kerr W, Nicholas P (2003) Agricultural biotechnology versus intellectual property rights: are developing countries at the mercy of multinationals. J World Intellect Prop 6(2):211
Brown AEL (2010) Access to essential technologies: the role of the interface between intellectual property, competition and human rights. Int Rev Law Comput Technol 24(1):51–61
Brundtland GH (2003) The globalization of health. Seton Hall J Dipl Int Relat 4(2) (Special edition on Global Health):7–12
Buzan B (1983) People, states, and fear: the national security problem in international relations. Wheatsheaf, University of North Carolina Press, Chapel Hill
Byle D, Fischer K (2002) Accessing modern science: policy and institutional options for agricultural biotechnology in developing countries. IP Strategy Today, No. 1
Caledonia BH (2006) Assessing a company's most valuable assets: conducting an intellectual property audit, 1 May 2006. http://www.cll.com/articles/article.cfm?articleid=29
Campbell D, Picciotto S (2003) The acceptable face of intervention: intellectual property in Posnerian law and economics. Soc Leg Stud 15(3):455–472
Carolan M (2008) Making patents and intellectual property work: the asymmetrical harmonization of TRIPS. Organ Environ 21(3):295–310
Carr C, Morton J, Furniss J (2000) The economic espionage act: bear trap or mousetrap? Texas Intellect Prop Law J 8(2):160–209
Center for Development and Human Rights (2004) The right to development: a primer. Sage Publications India, New Delhi
Chapman AR (2002) The human rights implications of intellectual property protection. J Int Econ Law 5(4):861
Chapman A, Russell S (eds) (2002) Core obligations: building a framework for economic. Social and Cultural Rights, Intersentia
Charter of Fundamental Rights of the European Union (2000) J.O. (C 364) 12
Chen G, Wang Q (1997) Patterns of utilization of medical services in Singapore. Working paper series 6-97. School of Accountancy and Business Research Center, Nanyang Technological University
Chittaranjan K (1999) Leakage of US nuclear secrets. Strateg Anal 23(4). http://www.ciao.net.org/olj/sa/sa_99chk04.html
Chon M (2011) Copyright and capability for education: an approach 'from below'. In Wong Y, Dutfield G (eds) (2011) Intellectual property and human development: current trends and future scenarios. Cambridge University Press, Cambridge
Chowdhury SR, Denters MG, de Waart PJ (eds) (1992) The right to development in international law. Martinus Nijhoff Publishers, Dordrecht
Clayton J (2002) Export controls must meet tomorrow's challenges, not yesterday's, Urgent action needed to preserve and enhance international security and free trade, Address at the IBC conference
Collins-Chase C (2008) The case against trips-plus protection in developing countries facing aids epidemics. Univ Pa J Intl Law 29(3):764–802
Commission on Human Security (2003) Human security now. Report of the Commission on Human Security
Commission on Intellectual Property Rights (2002) Integrating intellectual property rights and development policy. Report of the CIPR, London. http://www.ipr.commission.org

Coombe R (1998) Intellectual property, human rights & sovereignty: new dilemmas in international law posed by the recognition of indigenous knowledge and the conservation of biodiversity. Indiana J Glob Leg Stud 6(1):59. http://www.repository.law.indiana.edu/ijgls/vol6/iss1/3
Coriat B, Orsi F, d'Almeida C (2006) TRIPS and the international public health controversies: issues and challenges. Ind Corp Change 15(6):1035
Correa C (2002) Public health and intellectual property rights. Glob Soc Policy 2(3):264
Correa CM (ed) (2010) Research handbook on the protection of intellectual property under WTO rules. Edward Elgar Publishing, Cheltenham
Correa CM (2004) Update on international development relating to the intellectual property protection of traditional knowledge including traditional medicine. Trade-Related Agenda, Development and Equity (T.R.A.D.E.) working papers 18, South Centre, Switzerland
Cullet P (2000) Intellectual property rights and food security in the south. J World Intellect Prop 7(3):261
Cullet P (2001) Property rights over biological resources: India's proposed legislative framework. J World Intellect Prop 4(2):211
Cullet P (2003) Food security and intellectual property rights in developing countries. International Environmental Law Research Centre. IELRC working paper 2003-3
Cullet P (2007) Human rights and intellectual property protection in the TRIPS Era. Hum Rights Q 29(2):403
Davis M (1996–1997) Indigenous peoples and intellectual property rights, Research paper 20, Department of the Parliamentary Library, Parliament of Australia. www.aph.gov.au/library
De Beer J (2009) Implementing the World Intellectual Property Organization's development agenda. CIGI and Wilfrid Laurier University Press, Waterloo
Department of Statistics (Singapore) (2003) Economic contributions of Singapore's creative industries. Economic Survey of Singapore, First Quarter 2003
Desai AC (2011) Symposium: intergenerational equity and intellectual property: legal traditionalism, creative destruction, and the role of media law in the intergenerational social contract. Wis Law Rev 167–176
Dessemontet F (1998–1999) Protection of trade secrets and confidential information. Paper published on University Lausanne Website. http://www.unil.ch/webdav/site/cedidac/shared/Articles/Protection%2520Trade%2520Secrets.pdf. Accessed 29 May 2012
Dinopoulos E, Kottaridi C (2008) The growth effects of national patent policies. Rev Int Econ 16(3):500
Dinwoodie GB (2008) Trademark law and theory: a handbook of contemporary research. Edward Elgar Publishing, Northampton
Drahos P (1999) Intellectual property and human rights. Intellect Prop Law Q 3:349
Drahos P (2000) Human rights, globalization and intellectual property rights. Paper presented to CESRC/INCHRITI workshop on international trade, finance and investment and economic, social and cultural rights: the role of the committee on economic social and cultural rights in a globalizing economy, 19 August 2000, Palais Wilson, Geneva
Dutfield G (2002) Multilateral agreements and aTRIPS-plus world: The World Intellectual Property Organisation (WIPO). Quaker United Nations Office, Geneva
Dutfield G, Suthersanen U (2010) Global intellectual property law. Edward Elgar Publishing, Cheltenham
Dworkin G (1990) The role of equity in intellectual property law. In: Goldstein S (ed) Equity and contemporary legal developments. Papers presented to the first international conference on equity, Faculty of Law, Hebrew University of Jerusalem June 1990. Harry and Michael Sacher Institute for Legislative Research and Comparative Law. Hebrew University of Jerusalem 1992
Dworkin G (2004) Unfair competition: is it time for European harmonization. In: Vaver D, Bently L (eds) Intellectual property in the new millennium. Cambridge University Press, Cambridge
Elbadawi A, Hartzenberg T(2000) Development issues in South Africa. Macmillan Press, London

ERC Service Industries Subcommittee Workgroup on Creative Industries (2002) Creative industries development strategy, Sept 2002. http://www.erc.gov.sg/frm_ERC_CreativeInd.htm
European Community (2002) Concept paper relating to paragraph 6 of the Doha declaration on the TRIPS Agreement and Public Health. Communication from the European Communities and their member states. WTO Document IP/C/W/339 4 March 2002
Fink C, Maskus KE (2005) Intellectual property and development: lessons from recent economic research. IBRD, Oxford
Food and Agriculture Organization (FAO) (2005) Voluntary guidelines to support the progressive realization of the right to adequate food in the context of National Food Security. Adopted by the 127th session of the FAO Council, Nov 2004. ftp://ftp.fao.org/docrep/fao/meeting/009/y9825e/y9825e01.pdf
Forman L (2011) An elementary consideration of humanity? Linking trade-related intellectual property rights to the human right to health in international law. J World Intellect Prop 14(2):155
Fryer WT (2005) The Geneva act of The Hague agreement concerning the international registration of international designs: drafting history and analysis. Kluwer Law International, Aspen
Gangjee D (2012) Relocating the law of geographical indications. Cambridge University Press, Cambridge
Garcia F (1999) The global market and human rights: trading away the human rights principle. Brooklyn J Int Law 25:51
Gervais DJ (2007) Intellectual property, trade and development: strategies to optimize economic development in a TRIPS-plus era. Oxford University Press, Oxford
Ghai Y (2006) Redesigning the state for 'right to development'. In: Andreassen BA and Marks SP (eds) (2010) Development as a Human Right; legal, political and economic dimensions
Gibson J (2009) Intellectual property, medicine and health: current debates. Ashgate, Aldershot
Glasius M, Kaldor M (eds) (2006) A human security doctrine for Europe: project, principles. Routledge, Practicalities Milton Park
Gomez J (1998) Internet politics: surveillance & intimidation in Singapore. Think Centre, Singapore
Gorjestani N (2000) Indigenous knowledged for development. Paper presented to the UNCTAD conference on traditional knowledge in Geneva
Gosseries A, Marciano A, Trowel A (eds) (2010) Intellectual property and theories of justice. Palgrave Macmillan, London
Government of Canada, Human Security Report. http://www.hsrgroup.org/
Graff G et al (2001) Towards and intellectual property clearinghouse for Ag-Biotechnology: an issue paper; Summary of an industry, academia, and international developmental round table. IP Strategy Today, No. 3
Gray BW, Bouzalas E (2001) Industrial design rights: an international perspective. Kluwer Law International, The Hague
Greenhalgh C, Rogers M (2010) Innovation, intellectual property, and economic growth. Princeton University Press, Princeton
Grossheide W (ed) (2010) Intellectual property and human rights: a paradox. Edward Elgar, Cheltenham
Grossman G, Lai E (2004) International protection of intellectual property. Am Econ Rev 94:1635
Gurry F (1984) Breach of confidence. Clarendon Press, Oxford
Gurry F (2011) Health and innovation: in the eye of the storm, speech to medicines Australia 2011 parliamentary dinner, Canberra, Australia, March 2. http://www.wipo.int. Accessed 1 March 2012
Hague Academy of International Law (1980) The right to development at the international level. In: Jean-Dupuis R (ed) Workshop, The Hague, 16–18 Oct. Sijthoff & Noordhoff, The Hague
Hardison P (2009) Experiences from the United States of America, WIPO panel on indigenous and local communities' concerns and experiences in promoting, sustaining and safeguarding

their traditional knowledge, Traditional cultural expressions and genetic resources, fifteenth session, 7–11 Dec 2009, Geneva, WIPO/GRTKF/IC/15/INF/5(a)
Harris D et al (2009) Law of the European Convention on Human Rights, 2nd edn. Oxford University Press, Oxford
Haugen HM (2007) The right to food and the TRIPS agreement. Martinus Nijhoff Publishers, The Hague
Haugen HM (2009) Human rights and TRIPS exclusion and exception provisions. J World Intellect Prop 11:354
Haugen HM (2010) Access versus incentives: analysing intellectual property policies in four UN specialized agencies by emphasising the role of the World Intellectual Property Organization and human rights. J World Intellect Prop 13(6):697
Haugen H et al (2011) Food security and intellectual property linkages. In: Wong T, Dutfield G (eds) Intellectual property and human development. Cambridge University Press, Cambridge
Helfer LR (2003) Human rights and intellectual property: conflict or coexistence? 5 Minn Intellect Prop Rev 47:994
Helfer LR (2004) Intellectual property rights in plant varieties: international legal regimes and policy options for national governments. Food and Agriculture Organization, Rome
Helfer LR, Austin GW (2011) Human rights and intellectual property: mapping the global interface. Cambridge University Press, Cambridge
Hestermeyer H (2007) Human rights and the WTO: the case of patents and access to medicines. Oxford University Press, Oxford
International Chamber of Commerce (2011) Intellectual property: powerhouse for innovation and economic growth. ICC, The Hague
ICC Commission on Intellectual Property (2007) Policy statements: recommendations on the implementation of the WIPO development agenda proposals, Document n° 450/1031, 29 Nov
ICC Commission on Intellectual Property (2009) Nature, traditional knowledge and capacity building, Submission to the Secretariat of the convention on biological diversity for the 8th Ad Hoc open ended working group on access and benefit-sharing, Montreal, 9–15 Nov 2009, Policy Brief, Document No. 450/1052 and No. 213/72 – 18 Sept. http://www.iccwbo.org. Accessed 3 June 2012
ICC Commission on Intellectual Property (2011) Patent disclosure requirements relating to genetic resources: will they work? Policy Brief, Document No. 450/1065 – 9 May 2011, p. 1. http://www.iccwbo.org. Accessed 3 June 2012
Idris K (2003) Intellectual property: a power tool for economic growth. WIPO Publication No. 888. WIPO
International Commission on Intervention and State Sovereignty (ICISS) Responsibility to protect. http://responsibilitytoprotect.org/ICISS%20Report.pdf
ICTSD (2007) Intellectual property and access to clean energy technologies in developing countries: an analysis of solar photovoltaic, biofuel wind technologies. ICTSD Trade and Sustainable Energy series paper No. 2. ITCSD, Geneva
International Security (1976) Foreword, vol 1, No. 1
IPEG (2000) Joint statement on the WTO/TRIPS agreement implementation, Darwin, Australia, 6 June. http://www.apec.org/Meeting-Papers/Ministerial-Statements/Trade/2000_trade/annex_c.aspx
International Expert Group on Biotechnology, Innovation and Intellectual Property (IEGBIIP) (2008) Towards a new era of intellectual property: from confrontation to negotiation. McGill, Center for Intellectual Property Policy. http://www.theinnovationpartnership.org/data/ieg/documents/report/TIP_Report_E.pdf
Ivison D, Patton P (2000) Political theory and the rights of indigenous peoples. Cambridge University Press, Cambridge
Jacanimijoy A (1998) Initiatives for the protection of the rights of the possessors of traditional knowledge, indigenous peoples, and local communities. WIPO roundtable on intellectual property and indigenous peoples, Geneva 23 and 24 July 1998, WIPO/INDIP/RT/98/4E

Janis MW (1982–1983) Equity and international law. Tulane Law Rev 57:80–88
Janis MW (1983) The ambiguity of equity in international law. Brooklyn J Int Law 9(7)
Jehoram HC (1989) Critical reflections on the economic importance of copyright. VCH, Verlagsgesellschaft mbH, 4, Winheim
Jehoram TC, van Nispen C, Huydecoper T, Huydecoper JLR (2010) European trademark law: community trademark law and harmonized national. Aspen and Kluwer Law, The Netherland
Jensen C (2001) Are you carrying a trade secret? The industrial physicist. American Institute of Physics (Oct/Novemb 2001)
Joffe A (2008) Creative industries in South Africa, Research Commissioned By Department of Labour of South Africa, March 2008. http://www.labour.gov.za/downloads/documents/research-documents/Creative%20Industries_DoL_Report.pdf
Jolly R, Emmerij L, Weiss TG (2009) UN ideas that changed the world. Indiana University Press, Bloomington
Kaldor M (2007) Human security: reflections on globalization and intervention. Polity Press, Cambridge
Kariyawasam K (2005) The recent law reforms and plant intellectual property law in Sri Lanka: Compliance with the TRIPS and CBD. Asian Law 7:169
Keayla BK (2009) The Amendment Patents Act of 1970: a critique. In: D'Souza S, Parulekar A (eds) Indians patents law: legal and business implications. MacMillan, New Delhi
Kennedy M (2010) When will the Protocol amending the TRIPS Agreement enter into force? J Int Econ Law 13(2):473
Keohane R, Nye J (1977) Power and interdependence: world politics in transition. Little, Brown, Boston
Khaneparkar A (2006) Issues in the realm of patent reform in India. In: Parulekar A, D'Souza S (eds) Indian Patents Law: legal and business implications. Macmillan, Goa
Khor KP, Khor M (2002) Intellectual property, biodiversity, and sustainable development: resolving the difficult issues. Zed Books, London
Kirby M (2011) Intellectual property law, human rights and the HIV/AIDS pandemic—the urgent need for a Luther of jurisprudence. Int Rev Intellect Prop Compet Law (IIC) 42(3):251
Kitch E, Perlman H (1998) Intellectual property and unfair competition, 5th edn. Foundation Press, New York
Knight A, Keating T (2010) Global politics. Oxford University Press, Oxford
Knights R (2001) Limitations and exceptions under the three-step-test and in national legislation–differences between the analog and digital environments. WIPO/CR/MOW/01/2, April 23
Kongolo T (2001) WTO Doha ministerial declaration and intellectual property: African perspectives. Afr Yearb Int Law 9:185
Kongolo T (2005a) Public interest versus the pharmaceutical industry's monopoly in South Africa. J World Intellect Prop 4(5):609
Kongolo T (2005b) New options for African Countries regarding protection for new varieties of plants. J World Intellect Prop 4(3):349
Kongolo T, Shyllon F (2004) Panorama of the most controversial IP issues in developing countries. Eur Intellect Prop Rev 26:260
Kongolo T (2008) Unsettled international intellectual property issues. Wolter Kluwers, Austin
Krattiger A (2002) Public-private partnerships for efficient proprietary biotech science management and transfer, and increased private sector investments. IP Strategy Today, No. 4 (eJournal)
Kur A, Ruse-Khan HG (2008) Enough is enough—the notion of binding ceilings in international intellectual property protection. Max Planck Institute for Intellectual Property Competition and Tax Law, Research paper series, No. 09-01
Ladas S (1975) Patents, trademarks, and related rights: national and international protection. Harvard University Press, Cambridge
Laing D (1999) The economic importance of music in the European Union. Reprint of article in Soundscapes, July 1999. http://www.iccc.rug.nl

Landes WM, Posner RA (2003) The economic structure of intellectual property law. Harvard University Press, Cambridge
Leidwein A (2011) Food security, climate change and IP rights. WIPO Magazine, June 2011, No. 3
Lenk C, Hoppe N, Andorno R (eds) (2007) Ethics and law of intellectual property: current problems in politics. Ashgate, Aldershot
Liao JCY (2006) China's response to the global IPR regime: compliance or resistance? Issues Stud 42(4):175
Lord KM, Fontaine R (2010) Managing 21st-century diplomacy: lessons from global corporations. Center for a New American Century, Washington
Lowe V (1988–1989) The role of equity in international law. Aust Yearb Int Law 12:54
M'Baye K (1972) Le droit au développement, comme un droit de l'homme. Inaugural Lecture at the International Institute for Human Rights, Strasbourg
M'Baye K (1979) Emergence of the 'right to development' as a human right in the context of a new international economic order, address to meeting of experts on human rights, human needs and the establishment of a new international economic order, 16 July 1979, SS-78/CONF.630/8
MacFarlane SN, Khong YF (2006) Human security and the UN: a critical history. Indiana University Press, Bloomington
Mahop MT (ed) (2010) Intellectual property, community rights and human rights: the biological and genetic resources of developing countries. Routledge, Oxford
Mares R (2004) Business and human rights: a compilation of documents. Martinus Nijhoffs/Brill, Boston
Marks S (2004) The human right to development: between rhetortic and reality. Harv Hum Rights Law J 17:137
Martin R (2010) The age of customer capitalism. Harv Bus Rev. http://hbr.org/2010/01/the-age-of-customer-capitalism/ar/1
Martínez-Piva JM (2009) Knowledge generation and protection: intellectual property and innovation. Springer, New York
Matthews D (2002) Globalizing intellectual property rights: the TRIPs agreement. Routledge, Oxford
Matthews D (2011a) Intellectual property, human rights and development: the role of NGOs and social movements. Edward Elgar Publishing, Cheltenham
Matthews D (2011b) When framing meets law: using human rights as a practical instrument to facilitate access to medicines in developing countries. WIPO J 3(1):113
May C (2006) The World Intellectual Property Organization. New Political Econ 11(3):436
May C (2007) The World Intellectual Property Organization: resurgence and the development agenda. Routledge, Oxford
May C, Sell S (2006) Intellectual property rights: a critical history. Lynne Rienner, Boulder
Meléndez-Ortiz R, Roffe P (2009) Intellectual property and sustainable development: development agendas in a changing world. Edward Elgar Publishing, Cheltenham
Menon NRM (2009) Indian patent law: drawing on the flexibility offered by TRIPS. In: Parulekar A, S'Souza S (eds) Indian patents law: legal and business implications. Macmillan, New Delhi
Miller S (2001) International security at twenty five. Int Secur 26(1):5
Minister of Health & Others v Treatment Action Campaign & Others (2002) 10 BCLR 1033
Mirandah G, Karuppiah S, Cheong E (1999) Intellectual property regime of Singapore. In: Wineburg A (ed) Intellectual property protection in Asia, 2nd ed. Lexis Law Publishing, Charlottesville
Molas-Gallart J (1998) Dual use technologies and the different transfer mechanisms. Conference paper, The International School on Disarmament Research on Conflicts (ISODARCO) 19th summer course, 26 August–2 Sept 1998. Complex Product Systems Innovation Center. COPS Publications No. 55
Moohr, GS (2003) The crime of copyright infringement: an inquiry based on morality, harm, and criminal theory. Boston Univ Law Rev 83(4):731. http://www.law.uh.edu/faculty/gmoohr/Criminal.pdf. Accessed on 31 May 2012

Moon G (2011) Fair in form but discriminatory in operation—WTO law's discriminatory effects on human rights in developing countries. J Int Econ Law 14(3):553
Moran T (1992) International economics and national security. Foreign Aff 69:5
Morgan R (2011) Transforming law and institution: indigenous peoples, the United Nations and human rights. Ashgate Publishing, Burlington
Morrison J (2011) An overview of current practice and policy relating to business activities and human rights: some of the implications for corporate rule making in corporate citizenship and new governance. In: Pies I, Koslowski P (eds) The political role of corporations. Springer, Heidelberg
Mugabe J (1998) Intellectual property protection and traditional knowledge: an exploration in international policy discourse. Paper presented to a WIPO seminar on traditional knowledge. www.acts.or.ke
Musungu S, Dutfield G (2003) Multilateral agreements and a TRIPS-plus world: The World Intellectual Property Organisation (WIPO). Quaker United Nations Office, Geneva
Ndiaye PT (1996) The economic importance of copyright and neighbouring rights in the cultural industries of African countries having French as a common language. Copyright Bulletin 30(1):3–12
Netanel N (2008) The development agenda: global intellectual property. Oxford University Press, Oxford
Nelson R (1959) The simple economics of basic science research. J Political Econ 67(3):297
Nicholson D (2006) Intellectual property: benefit or burden for Africa. IFLA J 32:310–324
Noehrenberg E (2003) TRIPS, the Doha Declaration and public health. J World Intellect Prop 6(2):379
Nussbaum MC (1997) Capabilities and human rights. Fordham Law Rev 66(2):273
Nye J (1974) Multinationals, the game and the rules: multinationals in world politics. Foreign Aff 53:153
Odagiri H, Goto A, Sunami A (2011) Intellectual property rights, development, and catch up: an international comparative study. Oxford University Press, Oxford
OECD Guidelines for Multinational Enterprises (2011). http://www.oecd.org/dataoecd/43/29/48004323.pdf. Accessed on 2 June 2012
OECD (2009) Globalisation and emerging economies: Brazil, Russia, India, Indonesia, China and South Africa
Office of the National Counterintelligence Executive (ONCE) (2003) Annual report to congress on foreign economic collection and industrial espionage-2002. NCIX 2003-10006, Febr
Ogata S, Cels J (2003) Human security. Glob Gov 9(3):275
Oloka-Onyango J, Udagama D (2000) The realization of economic, social and cultural rights: globalization and its impact on the full enjoyment of human rights, UN Sub-Commission on the Promotion and Protection of Human Rights, E/CN.4/Sub.2/2000/13
Ostergard R Jr (1999) Intellectual property: a universal human right? Hum Rights Q 21:157
Owen T (2009) The uncertain future of human security in the UN. In: Goucha M, Crowley J (eds) Human security UNESCO, Chichester
Pande S (1999) The challenge of nuclear exports control. Strateg Anal 23(4). http://www.ciao.net.org/olj/sa/sa_99pns.02.html
Paris R (2001) Human security: paradigm shift of hot air? Int Secur 26(2):87
Parulekar A, D'Souza S (2006) Indians patents law: legal and business implications. MacMillan Publications, New Delhi
Peoples C, Vaughan–Williams N (2010) Critical security studies: an introduction. Taylor and Francis, New York
Peou S (2009) Human security in East Asia: challenges for collaborative action. Routledge, New York
Philips J, Firth A (2009) Introduction to intellectual property law. Oxford University Press, Oxford
Pires de Carvalho N (2002) The TRIPS regime of patent rights. Kluwer Law International, The Hague

Poteat E (2001) The attack on America's intellectual property: espionage after the cold war. The Bent Of Tau Beta Pi
Potomac Institute for Policy Studies (PIPS) (1996) Dual use project report. 21 July 1996 (PIPS-96-3)
Pugatch MP (2011) When policy meets evidence: what's next in the discussion on intellectual property. Technology Transfer & Environment, Global Challenge Brief (WIPO), June
Pugatch MP (ed) (2006) The intellectual property debate: perspectives from law. Economics and political economy. Edward Elgar Publishing, Cheltenham
Puttnam Lord (2011) Catalyzing creativity in the digital world. WIPO Magazine, April
Rahmatan A (2009) Neo-colonial aspects of global intellectual property protection. J World Intellect Prop 12(1):40
Ramcharan BG (2002) Human rights and human security. Kluwer Law International, The Hague
Ramcharan BG (2008) Contemporary human rights ideas. Routledge, London
Ramcharan R (2005) Intellectual property and security: a preliminary exploration. Contemp Sec Policy 26(1):126
Ramcharan, R (2006) Singapore's emerging knowledge economy: role of intellectual property and its possible implications for Singaporean society. J World Intellect Prop 9:316
Ratner S (2001) Corporations and human rights: a theory of legal responsibility. Yale Law J 111:443. http://www.yalelawjournal.org/the-yale-law-journal/article/corporations-and-human-rights:-a-theory-of-legal-responsibility/
Reddy S (2006) Making heritage legible: who owns traditional medical knowledge? Int J Cult Prop 13:161
Rehman HA ur (2010) India, TRIPS-plus free trade agreements and the future of access to essential medicines. Inf Commun Technol Law 19(3):267–300
Rehman J (2010) International human rights law. Pearson, Essex
Richardson J (2003) Outcome assessment and moving goal posts: commentary on evaluation of the Tzu Chi Institute for complementary and alternative medicine's integrative care program. J Altern Complement Med 9(4):593
Roberts A (2001) Traditional and modern approaches to customary international law: a reconciliation. Am J Int Law 95:757–791
Rossi CR (1993) Equity and international law: a realist approach to the process of international decision-making. Brill, New York
Sagar R (2005) Intellectual property, benefit-sharing and traditional knowledge: how effective is the Indian Biological Diversity Act, 2002? J World Intellect Prop 8(3):382
Sahai S (2003) Indigenous knowledge and its protection in India. In: Bellmann C et al (eds) Trading in traditional knowledge: development perspectives on TRIPS, trade and sustainability. ICTSD, Earthscan Publications Ltd, London
Salgar AH (2003) Traditional knowledge and the biotrade: the Colombian experience. In: Bellmann et al (eds) Trading in knowledge: Development perspectives on TRIPS, trade and sustainability ICTSD, Earthscan, London
Schachter O (1992) Implementing the right to development: programme of action. Martinus Nijhoff Publishers, Dordrecht
Schechter R (1999) Selected intellectual property and unfair competition statutes, regulations and treaties. West Group, St. Paul
Schwarzenberger G (1972) Equity in international law. Yearb World Aff 26:346
Schweitzer P (1996) The growth of economic espionage: America is target number one. Foreign Aff 75(1):10
de Schutter O (2011) The right of everyone to enjoy the benefits of scientific progress and the right to food: from conflict to complementarity. Hum Rights Q 33(2):304
Sen A (1999) Development as freedom. Oxford University Press, Oxford
Senftleben MRF (2004) Copyright, limitations, and the three-step test: an analysis of the three in international and EC copyright law. Kluwer Law International, The Hague
Shabalala D (2011) Knowledge and education, Chapter 7 of Intellectual property and human development public interest intellectual property advisors (shared under a Creative Commons Attribution-Non-Commercial-NoDerivs Licence)

Shan H (2008) The protection of trade secrets in China. Kluwer Law International, The Hague
Shelton D (2000) Introduction: law, non-law and the problem of 'soft-law'. In: Shelton D (ed) Commitment and compliance: the role of non-binding norms in the international legal system. Oxford University Press, Oxford
Shiva V (2001) Protect or plunder? Zed Books, London
Silberston A (1998) The economic importance of copyright. Paper presented at a conference on creativity and intellectual property rights: evolving scenarios and perspectives, Vienna, 12–14 July
Sinjela M, Ramcharan R (2005) Protecting traditional knowledge and traditional medicines of indigenous peoples through intellectual property rights: issues, challenges and strategies. J Minor Group Rights 12:1
Siwek SE (2011) Copyright industries in the US economy: the 2011 report. International Intellectual Property Alliance
Snell E (2011) Snells equity. Sweet and Maxwell, London
Sohn LB (1988) Equity in international law. Proc Ann Meet (Am Soc Int Law) 82:277
Sorensen T (1990) Rethinking national security. Foreign Aff 69(3):1–18
South Centre (1993) Traditional knowledge as prior art and the use of the patent system as a defensive measure against misappropriation, c. 1993. www.southcentre.org
Steinert H, Alston P, Goodman R (2007) International human rights in context. Oxford University Press, Oxford
Stern J (2002–2003) Dreaded risks and the control of biological weapons. Int Secur 27(3):89
Stewart P (1994) Role of US Government in industrial espionage. Executive research project, S24. The Industrial College of the Armed Forces, National Defense University
Tadjbakhsh S, Chenoy AM (2007) Human security: concepts and implications. Routledge, London
Tanaka H (2001) Post-napster: peer-to-peer file sharing systems: current and future issues on secondary liability under copyright laws in the United States and Japan. Entertain Law Rev (Loyola Law Sch) 22(1):37
Tejan-Cole A (2011) Fighting Africa's food deficit. WIPO Magazine, April 2011, p 4
The Economist (2004) Counting heads, August 26. http://www.economist.com
The Economist (2010) Shareholders v stakeholders: a new idolatry, April 22. http://www.economist.com/node/15954434. Accessed 1 May 2012
Torremans PLC (ed) (2004) Copyright and human rights: freedom of expression—intellectual property—privacy. Kluwer Law International, The Hague
Torremans PLC (ed) (2008) Intellectual property and human rights. Enhanced edition of copyright and human rights. Kluwer Law International, The Hague
Ubaldo J (2001) Perspectives on natural health: an anthology of holistic medicine. Philippine International Trade Exhibits and Experts, Manila
UN Human Rights Council (2011) Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, John Ruggie. 21 March. A/HRC/17/31
United Nations (UN) Special Rapporteur on the Right to Food (2009) Seed policies and the right to food: enhancing agrobiodiversity and encouraging innovation. 23 July 2009, A/64/170
UNCTAD-ICTSD (2005) Resource book on TRIPS and development. Cambridge University Press, Cambridge
UNDP (1999) Human development report 1994. Oxford University Press, Oxford
UNDP (2001), Human development report 2001: making new technologies work for human development, UNDP. http:hdr.undp.orgenmediacompletenew1.pdf. Accessed 1 June 2010
UNDP (2008) Towards a balanced '*Sui generis*' plant variety regime: guidelines to establish a National PVP Law and an understanding of TRIPS-plus aspects of plant rights. UNDP, New York
United Nations (1998) Developments in the field of information and telecommunications in the field of international security, A/RES/53/70, 4 Dec 1998 and A/RES/54/49, 23 Dec 1999
United Nations (1999) Role of science and technology in the context of International Security and Disarmament, A/RES/54/50, 23 Dec 1999

United Nations (2000) United Nations millennium declaration, General Assembly Resolution 55/2
United Nations (UN) (1993) Study on the protection of the cultural and intellectual property of indigenous peoples, Daes E, Special Rapporteur of the sub-commission on prevention of discrimination and protection of minorities and chairperson of the working group on indigenous populations, 45th session, E/CN.4/Sub.2/1993/28
United Nations Economic and Social Council (2001) The realization of economic, social and cultural rights. E/CN.4/Sub.2/2001/12
United States (US) Chamber of Commerce (2007) Statement of the US Chamber of Commerce upon the conclusion of the global intellectual property protection and innovation forum. http://www.uschamber.com/press/releases/2007/march/statement-us-chamber-commerce-upon-conclusion-global-intellectual-prope. Consulted 8 Sep 2011, Accessed 1 Novemb 2011
US Department of Commerce (Bureau of Industry and Security) US Commercial Technology Transfers to The People's Republic of China. http://www.bxa.doc.gov
US Government Accountability Office (1996) Economic espionage: information on threat from US Allies, GAO/T-NSIAD-96-114. US Government Printing Office
US Government Accountability Office (1998) Export controls: issues related to the export of communications satellites, statement for the record by Katherine Schinasi, Associte Director, Defense Acquisitions Issues, National Security and International Affairs Division. GAO/T-NSIAD-98-211
US Government Accountability Office (2003) Intellectual property: industry and agency concerns over intellectual property rights, Submitted to House of Representatives, Committee on Government Reform, Subcommittee on Technology and Procurement Policy, hearing on Intellectual Property and Government R&D for Homeland Security, GAO-2-723T, Serial No. 107–181. US Government Printing Office
Vernon R (1971) Sovereignty at Bay. Basic Books, New York
Waart P de, Peters P, Denters E (eds) (1988) International law and development. Martinus Nijhoff Publishers, Dordrecht
Weeramantry CG (1983) The slumbering sentinels. Penguin Books, Harmondsworth
Weissbrodt D, Schoff K (2004) The Sub-Commission's initiative on human rights and intellectual property. Netherl Q Hum Rights 22(2):181
Weissbrodt D, Schoff K (2003) Human rights approach to intellectual property protection: the genesis and application of Sub-Commission resolution 2000/7. Minn Intellect Prop Rev 5:1
Wendland W (2002) Intellectual property, traditional knowledge and folklore: WIPO's exploratory program. Int Rev Intellect Prop Compet Law (IIC) 19(3):485
White Justice M (2004) Equity—a general principle of law recognized by civilized nations. Qld Univ Technol Law J 4:104
Wilke J (2003) Two silicon valley cases raise fears of Chinese espionage. Wall Street J (Online), Jan 15. http://www.economicespionage.com/wsj.htm
Winter P (2009) Avenues for the legal future of the right to development. Parallel event to the 12th session of the Human Rights Council, Geneva, 17 Sept. Friedrich Ebert Stiftung Report, Geneva
WIPO (1975) Agreement between the United Nations and the World Intellectual Property Organization, 21 Jan 1975. WIPO Publication No. 111
WIPO (1986) The Berne convention for the protection of literary and artistic works from 1886 to 1986. WIPO, Geneva
WIPO (1996a) Model provisions on protection against unfair competition. WIPO Publication No. 832
WIPO (1996b) Model provisions on protection against unfair competition. WIPO Publication No. 832. 52
WIPO (1998) Intellectual property and human rights. WIPO Publication No. 762. ISBN: 978-92-805-0847-5
WIPO (2000a) General information on the seventh edition of the International Patent Classification (IPC). WIPO Publication, No. 409

WIPO (2000b) Socio-economic benefits of intellectual property protection in developing. WIPO, WIPO Publication 454 E
WIPO (2001a) Facts and figures 2011. WIPO Publication No. 943(E)
WIPO (2001b) Statement by the World Intellectual Property Organization on intellectual property, biodiversity and traditional knowledge to the committee on trade and environment of the TRIPS Council, WT/CTE/W/182; IPC/C/242, 6 Febr 2001
WIPO (2001c) The economic and cultural importance of copyright and related rights protection with particular reference to collective management. WIPO/ACAD/E/01/11
WIPO (2002a) The digital agenda: implementation of the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT) PCIPD/3/9
WIPO (2002b) Short description of possible subjects for future review by the Standing Committee, SCCR/8/2, August 28
WIPO (2003a) Study on limitations and exceptions of copyright and related rights in the digital environment SCCR, WIPO, Geneva, Doc. SCCR/9/7. http://www.wipo.int/edocs/copyright/en/sccr_9/sccr_9_7.pdf. Accessed 29 May 2012
WIPO (2003b) Traditional knowledge: policy and legal options, WIPO/GRTKF/IC/6/4, 12 Dec
WIPO (2003c) What is intellectual property. WIPO Publication No. 450. WIPO
WIPO (2004) Handbook on intellectual property. WIPO Publication No. 489, WIPO. http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch2.pdf
WIPO (2005) Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGCGRTKF) (2005) Eighth Session, Geneva, 6–10 June 2005, WIPO/GRTKF/IC/8/15 Prov 2
WIPO (2009) Report on the African-Arab regional seminar on copyright limitations and exceptions: addressing the needs of affected constituencies and executive summary. Standing Committee on Copyright and Related Rights, 19th Session, Geneva, 14–18 Dec SCCR/19/14
WIPO (2010a) Intellectual property indicators, 2010. WIPO Publication No. 941(E) ISBN 978-92-805-1978-5
WIPO (2010b) Note on the meanings of the term public domain in the intellectual property system with special reference to the protection of traditional knowledge and traditional cultural expressions/expressions of folklore. WIPO/GRTKF/IC/17/INF/8, NOVEMBER 24, 2010. Seventeenth Session, Geneva, 6–10 Dec
WIPO (2010c) Medium term strategic plan for WIPO 2010–2015, 16 Sept 2010, A/48/3, proposed at the forty-eighth series of meetings, Geneva, 20–29 Sept
WIPO (2011a) Draft general report, 49th assembly: general statements, Assemblies of the Member States
WIPO (2011b) Forty-ninth series of meetings, Geneva, 26 Sept–5 Oct 2011, A/49/18 Prov
WIPO (2011c) Statistics on utility models. http://www.wipo.int/ipstats/en/statistics/models/. Accessed 29 May 2012
WIPO (2011d) Draft treaty on exceptions and limitations for the persons with disabilities, Educational and Research Institutions, Libraries and Archives, SCCR/22/12
WIPO (OMPI) (2012) PCT: Revue annuelle du PCT: Le système international des brevets. OMPI
WIPO, State University of Campinas (2002) Study on the economic importance of industries and activities protected by copyright and related rights in the MERCOSUR Countries and Chile
Wolfensohn J (1998) Culture and sustainable development: a framework for action, Sept 1998
Wong T (2011) Intellectual property through the lens of human development. In: Wong T, Dutfield G (eds) (2011)
Wong T, Dutfield G (2011) Intellectual Property and Human Development: current trends and future scenarios (CUP, Cambridge). Public interest intellectual property advisors 2011—shared under a Creative Commons Attribution-NonCommercial-NoDerivs licence. See http://www.piipa.org
Woodlaw C (2004) The law of passing off: unfair competition by misrepresentation
WTO (1994) TRIPS agreement, Annex 1C of the Marrakesh agreement establishing the World Trade Organization, signed in Marrakesh, Morocco. Available on WIPO Site at http://www.wipo.int/treaties/en/related_docs.html

Wynberg R, Schroeder D, Chennells R (2009) Indigenous peoples, consent and benefit sharing: lessons from the San-Hoodia. Springer, Dordrecht

Young-Ing G (2006) Competing jurisdictions over traditional knowledge in the Northern Americas, WIPO panel on, indigenous and local communities' concerns and experiences in promoting, sustaining and safeguarding their traditional knowledge, Traditional Cultural Expressions and Genetic Resources, WIPO/GRTKF/IC/10/INF/5, Novemb 30

Yu PK (ed) (2007) Intellectual property and information wealth: issues and practices in the digital age. Praeger, New York

Yu PK (2007) Reconceptualizing intellectual property interests in a human rights framework, Legal studies research paper series, Michigan State University, College of Law, Research paper No. 04-01. Univ Calif Davis Law Rev 40:1039. http://ssrn.com/abstract=927335

Zeleza PT, McConnaughay PJ (eds) (2004) Human rights, the rule of law and development in Africa. University of Pennsylvania Press, Philadelphia

Table of Cases

Anheuser-Busch Inc. v. Portugal (73049/01) [2006] E.T.M.R. (ECHR) 126
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