Sita Venkateswar
Sekhar Bandyopadhyay *Editors*

Globalisation and the Challenges of Development in Contemporary India

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Globalisation and the Challenges of Development in Contemporary India

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Chapter 1
Globalisation and the Challenges of Development: An Introduction

Sita Venkateswar and Sekhar Bandyopadhyay

Abstract Situating the emergent discourses that are elaborated in subsequent chapters of the book, the introduction sets out the historical and socio-political developments in India. The authors provide an overview of the key themes and multidisciplinary approaches encompassed within the book to enable understanding of the contingencies and conjunctures that shape twenty first century India.

Keywords Historical · Socio-political · Multidisciplinary · Twenty first century · India

1.1 India at the Crossroads

Globalisation is not a new phenomenon in world history, as India was part of the largest global empire for nearly 200 years. When India achieved independence from British rule on 15 August 1947, Prime Minister Nehru reminded his countrymen in his inaugural 'Tryst with destiny' speech, that the immediate goal of political freedom had been achieved, but the greater challenge was to ensure for every citizen the freedom from poverty, ignorance, disease and inequality. And that challenge has continued to confront the postcolonial state ever since, as the meaning of freedom has expanded exponentially, and therefore, the contest between growth and social justice has always been at the centre of India's development narrative from the very beginning of the journey as a modern nation-state.

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Over the last six decades, however, India has undergone momentous changes. Recent scholarly literature suggest that in the early days of independence there were uncertainties and debates over the future direction of the new nation-state, as decolonisation was a clumsy and incomplete process (Chakrabarty 2007). Partition violence and the refugee influx that followed had a lasting impact on the economy as well as on communal relations and citizenship issues within the new nation-state. However, since the promulgation of the new Constitution in 1950 and the first election in 1951–1952, India began to journey along a path which is often described as that of 'Nehruvian consensus' on parliamentary democracy, secularism, industrialisation and socialism. The Constitution laid the foundations for a strong state and privileged the ideas of social justice and equity over individual freedom (Mukherjee 2010), while the Five Year Plans provided for massive public investments in industries and infrastructure to facilitate economic growth (Mahalanobis 1955). India was thus set on the path towards modernity.

But this modernity had many contradictions. On the political side, while electoral democracy was adopted, everyday democracy was frowned upon. Within a few months of the promulgation of the new Constitution, Prime Minister Nehru moved an amendment to curb press freedom. A new party system began to appear, but the country continued to be governed under a one party hegemony which the political scientist Rajni Kothari famously called the "Congress system" (Kothari 2002). It revealed its ugly teeth of authoritarianism during the period of 'Emergency' in the 1970s. On the other hand, despite attacks from the state, there were also the growth of an independent media and the gradual rise of a civil society.

On the economic side, while the Five Year Plans focused primarily on industries in the public sector, India's capitalist transformation remained incomplete. Agriculture continued to be the mainstay of the economy and provided livelihood for the majority of her population. But land reforms in the form of abolition of zamindari and redistribution of land, which were urgently necessary, were delayed and hampered first by legal challenges and then by obstructionist strategies of the landed elite, in collusion with a corrupt bureaucracy. The agricultural sector experienced limited structural or technological change, except in the form of the so-called 'Green Revolution', introducing high yield variety of seeds in the Fourth Five Year Plan in the mid-1960s. In the end it created limited pockets of prosperity within the country; and the increased use of pesticides and herbicides adversely affected the environment. The Green Revolution thus further exacerbated the regional disparities in living standards and created a new powerful interest group of rich farmers (Chatterjee 1997).

Structurally, in a mixed economy model, the private sector was allowed to function, but it was constrained by restrictive regulations, often referred to as the 'license raj', which resulted in gradually rising problems of bureaucratic delays and political corruption. But the indigenous businesses were protected by high tariff walls, justified in the name of import substitution. The organized labour movement was protected by stringent labour legislation, but widespread poverty became an ever-growing problem and slowed down other social developments. Rapid industrialisation and construction of massive infrastructural facilities endangered

the environment and led to mass protests, such as the 'Chipko' (Hug the tree) movement in the 1970s against deforestation and the 'Narmada Bachao Andolan' (Save Narmada Movement) in the 1980s against dislocation of the adivasi and Dalit villagers caused by a large dam project on river Narmada to produce hydroelectricity (Guha 1998). On the social side, untouchability was abolished by the Constitution and the Scheduled Castes and Tribes were given the protection of affirmative action policies; yet casteism and the problem of social exclusion were far from resolved. The spread of primary education remained limited and the level of literacy continued to be low. Tertiary education, on the other hand, received large investments, leading to the rise of an articulate, educated middle class. The status of women continued to be a source of concern, despite powerful women's movements. The society and economy in India thus apparently represented a bundle of contradictions.

Amidst all these contradictions however, dramatic changes began to occur from the 1980s. First on the political scene, the so-called "Congress system" declined, accompanied by the rise of the Janata Party, and later the Bharatiya Janata Party (BJP) in the late 1980s. At the beginning of the 1990s, the advent of the momentous economic crisis caused by depleted foreign exchange reserves, led to the reforms of 1991, opening the doors to global capital. It meant applying the same formula for deregulation of financial markets trialled in Latin America during the previous decade (Bagchi 2008, pp. 320–321). In real terms, the reforms meant the lowering of import tariffs, easing of the licensing regime, actively soliciting foreign direct investments, reducing the number of industries reserved for the public sector, rationalising the taxation system, reducing subsidies, and attempting to reform labour legislation. India thus unmistakably took the first steps towards globalisation, which we broadly define here as the "global ascendancy of capital," borrowing the phrase from Amiya Bagchi (2008). The World Bank described the change as a "quiet economic revolution" (quoted in Nayar 1998, p. 335). And both mainstream political parties—the Congress and the BJP—embraced it with equal alacrity.

As economic reforms picked up momentum in the early years of the new millennium, India attracted worldwide attention, primarily because of spectacular growth rates. It remained in the range of 6–6.5 % during the period between 1991 and 2009; it was more than 9 % between 2005 and 2008. Although global recession has slowed it down, yet even a rate of growth of more than 5 % in 2012–2013 has been the envy of many developed nations in the First World. This growth is believed to have been fuelled by the service industries (like ICT), rather than manufacturing, and by domestic demand rather than external trade. This indicates the existence of a large domestic market, serviced by an expanding middle class with its insatiable appetite for consumer goods. Every business corporation in the developed world therefore wants a share of this market and they have been invited with open arms. India is projected as a rising Asian giant, alongside China, and is widely expected to overtake Japan to become the third largest economy in the world. But this economic growth has also drawn attention to its many challenges and contradictions.

The first and foremost challenge is to distribute the benefits of economic growth across disadvantaged sectors of the society, as poverty alleviation does not always automatically follow economic growth. The Planning Commission estimated that poverty in India declined from 37.2 % in 2004–2005 to 21.9 % in 2011–2012, the annual rate of decline being 2.18 % during the same period.[1] While this is admirable, the decline has not been as fast as the rate of economic growth, and importantly, is slower in relation to other growing economies, such as China, where poverty reduction has occurred at a much faster rate. Since growth has been driven by the service sector and not manufacturing, not enough jobs are created for the swelling masses. Hence, despite strong views in favour of laissez faire and free market, the state had to intervene, through such employment generating development schemes as the National Rural Employment Guarantee Act of 2005, providing guaranteed employment for 100 days at minimum wage. Yet, the level of poverty has remained unacceptably high, particularly in areas populated by adivasi groups, and also in other rural and urban sectors. In general, according to the Planning Commission's estimation, poverty rates remained much higher in the rural areas (25.7 %) in 2011–2012 than in the urban (13.7 %). The issue of food security, once thought to have been resolved, has resurfaced, with steps taken to address it through legislation promising 'right to food'. While India has taken a lead role in the global IT industry, only around 10 % of the adult population has access to computers or internet, indicating an uncomfortable digital divide. In the words of economist R. Nagaraj, "India's development story … is one of *growth acceleration with polarisation: modest poverty reduction with marginal gains in tangible human welfare* (Nagaraj 2013, pp. 196–197. Italics original)." This is what Jean Drèze and Amartya Sen have recently described as "lopsided growth" (2013, p. ix).

Today's India thus presents a series of challenges to scholars and analysts. A predictable response is to portray India as a set of conflicting contrasts: the economic giant ready to unleash its potential, but hamstrung by bureaucracy and inadequate infrastructure. Acclaimed for the innovations and technological skills in demand globally, India's potential human capital of 1.2 billion remains crippled by poverty, illiteracy and the unrealised promise of its youth bulge and associated generous demographic dividend. A postcolonial success story, whose enduring testament to electoral democracy is betrayed by unyielding, persistent oppressions, regularly congealing in violence across the spectrum of caste, class and gender. A fortunate country endowed with rich, natural resources, safeguarded and protected through millennia by tribal traditions, is plundered without foresight for the benefit of a few. Some of these contradictions are undoubtedly legacies from the past. But the critical questions remain: how have these been addressed by the development strategies of the past two decades and how can we deal with them in future?

That the paths of globalisation and neoliberal policies create their own challenges is now recognised even by their staunchest votaries. Pascal Lamy, the

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[1]http://planningcommission.gov.in/data/datatable/data_2312/DatabookDec2014%2099.pdf (accessed on 5/10/2015).

Secretary-General of the World Trade Organisation, identified the problem in 2011: "Even as global integration delivers enormous benefits—growing wealth, spreading technology, the rise of billions of people in the developing world—it also creates new risks—financial instability, economic imbalances, environmental stresses, growing inequalities, cyber penetration—that we seem to have difficulty managing."[2] It is not too hard to see that today's India faces many of these risks. So to address them, as well as to deal with some of the enduring structural inequities of Indian society, both the Eleventh and Twelfth Five Year Plans (2006–2011 and 2012–2017) that embraced free market models, recognised the importance of "inclusive growth". But in India there seems to be no consensus on how to achieve it. As an economist puts it, there are "two major strands of thought in the contemporary development discourse on the Indian economy: the more inclusive, greater state-driven, rights-based approach as opposed to the liberal, deregulated, market-oriented approach. The two are unlikely to converge" (Palit 2013, p. 3). At a political level, it seems, there is a greater acceptance of the free market model, at least since the last parliamentary election in 2014. But this model, too, has its detractors. This book is an attempt to understand these debates and examine the possibilities of these developmental models from multi-disciplinary perspectives. It seeks to move beyond any ready dichotomies to offer new insights to extend our understanding of the current conjuncture in India and thereby enable us to anticipate the decade to come.

1.2 The Book

The collection of papers brought together here emerges from the first conference of the *New Zealand India Research Institute* in August 2013 at Wellington, New Zealand. That inaugural conference titled "*Changing India: from decolonisation to globalisation*" aimed to critically examine the changes underway in the subcontinent since independence in 1947. The event brought a diverse, international mix of India scholars to New Zealand as keynote speakers to enter into dialogue with "local" scholarship from the south-Pacific sites of Australia and New Zealand. This edited volume comprises some of the best papers presented at the conference, a selection based on their engagement with the most pressing issues confronting India. They present "methodological pluralism and substantive diversity" (Bair 2014) to offer multidisciplinary, situated, nuanced readings and analyses by antipodean scholars of India, of a range of contingent issues that frame the contemporary conjuncture in India.

The volume is organised in three sections, which set out the key thematic considerations encompassed in the book. The first section *Framing the*

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[2]Pascal Lamy, Secretary-General of the WTO, '2011 Panglaykim Memorial Lecture on "Harnessing Global Diversity"', 24 June 2011.

Macro-Economic Environment with three chapters defines the framework for interrogating globalisation and economic changes in India over the last decades of the twentieth century, creating the momentum for much of the ensuing elabourations that ushered India into the twenty first century. The next section *Food Security and Natural Resources,* with the three chapters housed there, highlights critical considerations involved in feeding a burgeoning population to address nutrient intake and the production of food staples. The discussions raise issues that have implications for the health of not just the human population but also that of the natural environment, to pose important questions in relation to the resilience of both people and planet confronting increasingly unpredictable climate induced scenarios. The substantive content of the final section *Activism, Development and Changing Technologies* includes four chapters that profile some of the challenges of the current conjuncture in India through the lens of various forms of inequalities and the emergent activisms that propel social change in relation to specific contexts and modes of social oppressions. The section concludes with an elabouration of the potential and promise of changing technologies and new social media to build an informed and active citizenry across existing social divides.

1.3 Engaging with Globalisation

As is usually the case with collections that emerge from conference presentations, thematic considerations are implicit and require extraction rather than directly and consistently addressed across the board by all the contributors to the volume. Hence, for a polysemic and slippery concept such as globalisation it is useful to attempt to articulate the extent of its conceptual ramifications to encompass the implicit and explicit modes in which it is interwoven into the chapters that follow. To that end, the extended quote below provides the scope for its usage in the book:

> The word globalisation has been used to identify a set of broad socio-economic changes that began to occur in some geographical locations in the early 1970s and gathered a triumphant pace following the end of the Cold War. These changes are frequently associated with neoliberalism and include the deregulated expansion of speculative capital; rapid technological development, especially in communicative technology; the transnationalisation of production and the weakening of labour movements; the reforming of some international trade agreements and an increasing multinationalisation of some corporations. Linked to this has been an increased role for multilateral inter-governmental organisations such as the G5, G8 and G20 groupings, the World Trade Organisation, the European Union and the United Nations in the legislative and regulatory structures of contemporary governance. Attempts to understand the political, social and experiential implications of these changes have underpinned what we can think of as a second use of the term globalisation, as it refers to the increasingly large and multidisciplinary body of intellectual work (Connell and Marsh 2011, p. xiv).

This book is a part of the corpus of multidisciplinary scholarship that grapples with the idea of globalisation in its contemporary neoliberal variant unleashing the multi-layered ramifications across multiple scales of visibility and impact.

The authors also wrestle with the 'frictions'[3] (Tsing 2005) elicited through such collisions to emphasise the 'disjunctures and difference' (Appadurai 1996) of the intertwining of 'global' and 'local' in India in the uneven contours of global flows within local landscapes, defying attempts to impose a uniform set of analytical tools to calibrate the diversity of contexts that comprise India.

We are forced to reckon with India's non-compliance with any tailor-made teleological assumptions about the course of development that steers its own 'late modern' path into a future that does not parallel the course followed by Western European nations. What this suggests is that the elements that constitute contemporary capitalism and modernity in India and other postcolonial contexts cannot be assimilated to a template set by the advanced capitalist contexts of the global north; feudal vestiges coexist within the agrarian sector, along with forms of violence emerging from the amalgamation of national-global features of late capitalism to create the conditions for the further entrenchment of inequalities, dispossession and displacement.

Taken as a whole the chapters as they unfold illustrate varied ways of underscoring the empty rhetoric of economic growth from deregulation and a globally integrated economy promised by the proponents of globalisation. What is successfully accomplished instead is the deepening and exacerbation of entrenched structural violence and the inequalities in place in postcolonial nation-states that eclipse the moderate benefits enjoyed by the privileged few who successfully straddle the global-local nexus.

1.4 Framing the Macro-economic Environment

In the first section, Anthony D'Costa's opening chapter raises a deceptively simple yet complex query: why India's development remains elusive despite enviable growth rates over that same period. A good part of India is largely untouched by economic growth in any meaningful way, even if official reports of declining poverty are to be believed. After all, simply crossing BPL means very little in terms of human welfare and dignity. Moving beyond the various 'nation-centric' explanatory routes provided by scholars and analysts alike, D'Costa presents an alternative perspective to position India in the wider capitalist dynamic of the late twentieth century articulating the national with the global. Late capitalism in India, and for that matter in other select developing countries as well, has meant new technologies, mature capitalists, and a relatively well-developed state. All three cumulatively stand for economic growth, industrialisation, urbanisation,

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[3]"Tsing's (2005) idea of "friction" provides the unifying concept to express the relationship between the local and the global as it is experienced in actual life, by which globalising forces are given their concrete forms and power to affect outcomes" (Townsend 2015), hence highlighting the 'productive' dimension the concept encompasses in making things happen, as well as the conflicts that those processes engender.

and some politically negotiated redistribution. D'Costa argues that the working of compressed capitalism, that is, primitive accumulation, which is historically complete elsewhere, is an ongoing feature in India and is dispossessing and displacing people thereby jeopardizing future development. Furthermore, the persistence of petty commodity production due to displacement, technology-led, and enclave-based economic production adds to the development conundrum. The resulting inequality in India in an expanding economy is thus not an anomaly but a reflection of systemic capitalist dynamics. Such an argument is consonant with recent sociological analyses of global trends (cf. Sassen 2013, 2014; Robinson 2013; Panitch 2013), which suggest instead that modes of primitive accumulation continue apace globally, to expel and render invisible vast numbers of 'surplus bodies' out of any productive calculus whether in India or elsewhere, sharply marking new formations of inequalities worldwide.

Building on those prognoses, Ranjan Ray's chapter *India's Economic Performance in the Post Reforms Period: A Tale of Mixed Messages* focuses on three aspects of India's performance in the post reforms period. They are: (a) food and nutrient intake with special reference to the prevalence of undernourishment rates (POU); (b) anthropometric indicators, with special attention to child health; and (c) multi-dimensional deprivation and multi-dimensional poverty indicators that focus on several key access indicators such as access to drinking water, fuel, electricity, etc. With attention to the methodological shifts in poverty assessments, Ray tracks the emergence of a more complex view of welfare with the Multi-Dimensional Poverty Index (MPI), which has supplanted uni-dimensional expenditure-based measures of poverty. Taking the opportunities provided by the availability of household level micro-data sets, Ray's chapter sets out a wider horizon for engaging with such data. He ranges beyond national borders to compare India's performance on (a), (b) and (c) above with those of China and Vietnam providing a counterpoint to India's trajectories in these domains. Each of these countries witnessed significant economic reforms in the past three decades that led to an improvement in several of their key macro indicators. Vietnam, for example, experienced lack lustre economic growth, similar to India's, until the Doi Moi reforms of the early 1980s, when the economy recorded sharp improvements on several economic indicators. The Vietnam/India comparison on child health and MPI, that this chapter presents, is therefore of much interest. While there is now a literature that compares China and India on macro aggregates, there is not much evidence on China/India comparison on micro-data based levels of living indicators. A similar attentiveness to context is applied to economic variations within India and across the various states. Ray's careful analyses dispel the homogenous portrayal of India's economic performance that is usual within the international context to profile the sharp regional disparities on several welfare indicators, most notably, on child health, neonatal and child mortality and concludes with a discussion of such disparities between Indian states.

A lateral movement that interrogates the complex intersections between globalisation and the new economy takes centre stage in Adrian Athique's paper *Post-Industrial Development and the New Leisure Economy.* One of the central

tenets of economic and political thinking in the Anglophone countries during the recent phase of globalisation has been the inevitability of a permanent shift away from manufacturing as the central plank of the economy in favour of a new scenario where technical innovation, creative performance and information management are the main sources of activity. A modernist worldview typical of the 1950s would characterize this as a process of 'undevelopment'. In a changing world, however, we might elect to see the de-industrialisation of the West as a necessary rebalancing of the uneven development of the colonial era. More commonly, however, the notion of a 'post-industrial' society has been postulated not as a lapse into a pre-industrial epoch or a lasting redistribution of productive wealth, but rather as marking a paradigm shift into a new stage of post-modern social and economic development (Bell 1973; Masuda 1980; Kumar 2005). By this reading, the most developed countries are deemed as having passed through certain stages in economic and social organisation (namely, agricultural society and industrial society) prior to the pursuit of a post-industrial society. This teleology naturally causes us to question the implications of this new paradigm for India, which has invested so much in industrialisation as the ultimate goal of the development process.

In the wider context of contemporary globalisation, we must also be attentive to new alignments between Indian business and the influence of international business models that favour entertainment and services. Certainly, one of the striking features of India's ongoing economic transformation has been the runaway success of a sector of the economy that was neglected by India's planners during the socialist era, and which remains little understood by Western exporters and investors. This is India's leisure economy, where the enthusiasm for a range of pursuits (from sports to movies, from pilgrimages to shopping trips and from texting to television) now forms a major constituent of the nation's social and economic life. Over the past two decades, this sector has emerged as a major component of India's 'New Economy' and made significant interventions in civil society and urban form across the country. It becomes useful at this juncture to consider whether the formalisation of recreational consumption is symptomatic of economic lift-off and 'developed status' or indicative of the diversion of resources from India's longstanding development ambitions. Eschewing the customary focus on IT services, call centres and biotechnology, Athique's chapter examines the utility, trajectory and broad significance of the 'new leisure economy' as an intrinsic aspect of India's postindustrial strategy.

1.5 Food Security and Natural Resources

The three preceding chapters map the broad scope of the questions addressed in this collection and identify some key lines of enquiry, multi-disciplinary methodologies and analyses elaborated in successive chapters. In the second section, extending Ray's earlier analyses to engage with their implications for policy, Srikanta Chatterjee's discussion titled *India's Evolving Food and Nutrition*

Scenario: An Overview examines the evolution of India's food economy since independence to identify the factors and forces responsible for the on-going food and nutrition scarcity scenario. After 60 years of planned economic development, the Indian economy has many achievements to its credit, but the ability to provide its vast population with an adequate, let alone balanced, diet is, sadly, not one of them. India experienced widespread famines with surprising regularity in the past that independent India has avoided. However, hunger and malnutrition have continued to plague India's vast multitudes to this day, despite the dramatic improvements in India's economic growth in recent decades. Chatterjee examines the current situation in India with respect to the availability and affordability of food at different levels of affluence in both rural and urban India. He then turns to the policy arena to examine how the situation of insecurity can be minimised and goes on to interrogate the legislation guaranteeing the 'right to food' within India's socio-economic framework and the issue of an alternative policy framework is addressed in that context.

Over the past 25 years, the qualitative and quantitative transformation of Indian economy and society is manifest by sustained economic growth and growing inequality (Chaps. 2 and 3). Redressing these inequalities is the key development challenge now facing India. As charted by Athique, a key dimension of this transformation has been a shift of the centre of gravity of the economy to the manufacturing and especially services sectors, creating a huge and growing urban middle-class. Increasingly cut off from the agrarian traditions of their forebears, nevertheless, agriculture remains the main livelihood of over half the population, and India is still a major agricultural producer. The challenge of redressing this specific imbalance is the focus of Graeme Macrae's next chapter *The Basmati Borderlands: Agrarian Crisis and Alternative Futures for Indian Agriculture.* Indian agriculture is now poised between two futures—one of increasing technology-driven intensification and integration into national and global markets—the other a neo-Gandhian vision of local communities renewed by ecologically-based forms of small-farming producing for more local consumption. Macrae reflects on the development challenge posed by this critical moment through the lens of Basmati rice cultivation at a point where these alternative visions meet and interact—the dynamic border-zone between the irrigated plains and the foothills and valleys of the Himalayas, where old varieties and practices meet global export markets.

Jagadish Thakar and Mohan Datta's invited chapter includes a south Indian perspective to the ensuing discussion and is based on an ethnographic academic-community collaboration grounded in the key tenets of the culture-centred approach. Their chapter outlines the discursive processes, practices, and resources utilized by DDS *Sangham* members, an organized collective of women farmers in Telangana, to promote millets, a marginalized crop. The story of millets voiced by the women farmers is also a story of alternative rationalities to large-scale corpora-tisation of Indian agriculture; instead, resisting the academic-industry-policy nexus by connecting local interpretations of food value to broader logics of development, nutrition, and hunger. The women come together in interpreting food as culture, rooted in local cultural understandings of health and nutrition. The processes of

collective organisation rooted in this depiction of food value and health within local cultural logics draw upon identity formation, solidarity, and collaboration with a variety of local, national, and global actors.

1.6 Development, Activism, Changing Technologies

Thakar and Mohan's discussion nicely segues into Felix Padel's chapter and the next section of the book. It is also the second invited contribution to this volume to fill a vital gap in the selection of conference papers to address the situation of Adivasis in India. His research among the Adivasis of Orissa informs his discussion in his chapter titled *Investment-Induced Displacement and the Ecological Basis of India's Economy* to offer a close-up view of the kinds of "compressed capitalism" alluded to by D'Costa earlier in this volume. As several other papers in this volume emphasize (Chaps. 5–7), the food security of India's poor is on a knife edge, in a context where globalising forces are increasing the gap between rich and poor. Despite a high GDP, and official statistics showing poverty as declining, many question this data and understand poverty as getting worse (Chaps. 2 and 3), with about 50 % of Adivasis and Dalits living in famine conditions. Various causes combine to make it harder to maintain a livelihood through subsistence-based agriculture, while tens of thousands of small-scale farmers, including especially Adivasis, have been forced off their land or are threatened with displacement in the immediate future. Though this is often termed "Development-Induced Displacement", people at the grassroots often insist that, for them and their communities, displacing projects represent anything but development. What is beyond doubt is that financial investment is driving these projects, with a view to making substantial profits from their land and resources. "Investment-Induced Displacement" is therefore a more proper term for this process. Meanwhile mainstream models of investment-based development are being promoted with increasing intolerance towards environmental concerns. Social activists are accused of opposing India's development in an Intelligence Bureau report made public in June 2014. To counteract this, a Statement by Concerned Citizens was released on 25 June, signed by 70 prominent Indian activists, under the title 'Uphold Sustainable Development! Condemn 'Foreign Funded' Destructive Development promoted by the IB!' The environment ministry of the new BJP government promises a good environment for business and rapid clearances for industrial projects. At issue are the intrinsic rights of communities of Adivasis and other small-scale farmers. Often perceived as "backward", yet in terms of long-term sustainability, their practices represent the most highly developed forms of adaptation to ecosystems. Also at issue is the present and future health of the country's ecosystems as a whole, in relation to economic theories that prioritize GDP, "growth, "the free market", and "competition", at the expense of traditional values of sharing, co-operation and non-monetized exchange. Water sources, at the heart of every ecosystem, are under particular threat, with the metals and mining industry consuming and polluting

inordinate quantities, causing a lack for agriculturalists. "Adivasi economics" is based on ecological principles, and the ecological basis of the wider economy needs to be recognised in policy if the acute poverty evident in India's cities (Chaps. 8 and 9) as well as rural areas is to be lessened.

Leading on to an examination of urban spaces, Vicky Walters interrogates the notion of 'an inclusive city'. Her discussion titled *Urban neoliberalism and the right to water and sanitation for Bangalore's poor* confronts the lives of urban poor through the provision of basic civic services. The economic reforms of 1991 and the emphasis on urban India as the power engine of the country's modernising, liberalising and globalising economy has seen the pace of urbanisation in India increase significantly in recent years. Fuelled also by processes of primitive accumulation (Chap. 2), the agrarian crisis (Chap. 6), and uneven development (Chaps. 1, 3 and 8), it is estimated that within 20–25 years the country's urban population will increase by double—to some 600 million people. Many of these new urban inhabitants will live in slums (*bastis*) such as the ones discussed by Gibson in the following chapter. Many others will be homeless. Alongside this demographic change is a political and physical transformation as urban infrastructures, governance institutions, space and social relations are increasingly made subject to neoliberal logics, rationalised under the auspices of achieving equity, efficiency and sustainability. These transformations dovetail with the Government of India's focus on 'Faster, More Inclusive and Sustainable Growth'—the title of the twelfth five-year plan (2012–2017), and the notion of the 'inclusive city'—a city where growth with equity is promoted and achieved. One way this is playing out in urban India is through the marketisation and commoditisation of civic services and basic infrastructures such as water and sanitation. Walters' field research explored homeless people's access to water and sanitation in Bangalore, to explain emerging inequalities associated with market oriented reforms in key urban sectors and infrastructures. Combined with embedded inequalities of caste, class, gender and religion the idea, of an 'inclusive city' is rendered elusive and untenable for the most marginal, and vulnerable of India's urban residents. She asserts that there are inherent contradictions between neoliberal urban transformation and ambitions for inclusive development.

Shifting the frame to a different urban locale is Lorena Gibson's chapter *Bastis as "forgotten places" in Howrah, West Bengal*. While Kolkata's poverty is world-famous, Howrah, located on the opposite side of the Hoogly river and Kolkata's twin city, fares worse. Howrah's *bastis* (slums) have been described as "deplorable", "dirty", "filthy" and "overcrowded" since the late 1800 s. For reasons explored by D'Costa, India's recent rapid economic growth has not improved the lives of those living in poverty, such as those residing in Howrah's *bastis*. In this chapter, Gibson argues that Howrah's *bastis*, many of which are inhabited by the minority and marginalised Muslim population, are "forgotten places": historically and politically constructed habitats that are neglected, but nevertheless deeply inhabited, by the state (Lee and Yeoh 2004; Fernandes 2010). In these *bastis*, services that are the responsibility of the state—such as access to education or the civic amenities discussed by Walters in the earlier chapter—are

not adequately provided for, resulting in uneven development and vulnerable urban spaces within Howrah city. Gibson shows how "forgotten places" leave a gap that NGOs and grassroots organisations try to fill, drawing on ethnographic fieldwork to describe the efforts of Howrah Pilot Project, an organisation that runs grassroots-level development initiatives in one of Howrah's *bastis*. By considering how Howrah Pilot Project works to provide Muslim children from the poorest households within that *basti* with access to education—widely considered a basic human right—she argue that these efforts can be viewed as a response to processes of 'active forgetting' perpetuated through historical sociocultural structures of inequality and injustice. However, as Walters and Chatbar (next chapter) both suggest, such organisations need to be augmented by a responsive state in order to achieve meaningful, long-term, beneficial change.

Rakhee Chatbar picks up the threads of the discussion here to engage with the impact of ICTs on rural lives in her chapter titled *Rural Development in Contemporary South India: Empowerment through Information and Communication Technologies (ICTs).* Over the past two decades, there have been some important changes in approaches to development in India. The 1990s marked an important shift in India as the New Economic Policy (NEP) changed the economic, political, and social landscape. Since the adoption of the NEP there has also been a shift in approaches to development: the state has been deemed incapable of delivering development on its own, NGOs are recognised as key allies, multi-stake holder partnerships are viewed as essential, knowledge is seen as the key driver of change, and ICTs are increasingly mobilised for development (ICT4D). ICT4D projects, as Pieterse (2010) notes, are emblematic of the globalisation-development nexus. India's performance since the NEP at the macro level has been hailed as a success; however, there is much disparity across the states and across different aspects of development (R. Ray). Such uneven development is the outcome of "systemic capitalist dynamics" (D'Costa).

In contrast to the urban context of the discussion by Gibson and Walters, Chatbar explores the role technology plays in development in rural regions through a micro level study. Specifically, her chapter interrogates an ICT4D project established by a prominent Indian NGO that aims to empower rural communities through public access to ICTs. Drawing upon field based research from the state of Tamil Nadu and the Union Territory of Pondicherry, South India, she demonstrates that the Centres do offer limited opportunities in the form of generic information and enhanced skills, especially amongst young and educated people, to participate in the information revolution. Research also shows that it can provide employment opportunities on occasion, develop the social prestige of individuals and the villages, and offer opportunities to specific groups within the village communities such as women, youth, and others who are otherwise socially marginalised. Her research also illustrates that the design, implementation, and operation of the project is not conducive to transformative empowerment. Drawing on literature on empowerment in development studies, she argues that 'transformative empowerment' through ICTs can only be enabled if the ICT4D initiative addresses the key drivers of marginalisation in rural communities—structural and systemic conditions.

The final chapter in this volume is Paula Ray's *Paradigms of Digital Activism,* which augurs the promise of new social media to effect social transformations. India has the deepest penetration of mobile phone usage, and the second highest usage of mobile Internet in the world. Even the low-end mobile phones are enabled with options to access social networking sites (SNS). It helps that SNS can now be accessed in vernacular languages, too. This development in mobile telephony has the potential to bridge the rural-urban divide and overcome the socio-economic diversity of the country's population (Chap. 2) and make SNS available to the people, which in turn can connect millions of users instantly and efficiently. It is not surprising then that Indian SNS-users are beginning to harness this capacity to digital activism. Any form of communication, non-profit or commercial, must involve a level of persuasion to be considered successful. While persuasion can take many different forms, in activism mediated through digital communication tools, it tends to follow two paradigms: to inform and to inspire. These paradigms are not randomly distributed, but rather depend on the socio-economic development of the people to be persuaded; in a developed country, digital activism is used to inspire people on an issue of concern, and in a developing country digital tools are used foremost to inform the people about a cause. The choice of paradigm is also guided by access to communication technology.

In this chapter, Ray argues that given the disparity in socio-economic development (Chap. 2) between urban and rural regions in contemporary India, both paradigms co-exist within the Indian context. In rural India, activists engage in text-messaging projects like CGNet Swara and SMSOne to make the less privileged sections of the society aware of their rights (Chap. 9). In urban India (Chap. 4), however, inspiration for a cause is guided by calculated persuasion, as evident from the anti-corruption movement led by Anna Hazare. It mobilised people and promoted participation to an unprecedented level, predominantly through mobile internet usage. The way its activities were managed and implemented is comparable to the persuasive strategies of a multinational corporation seeking global recognition. Ray concludes that digital activist 'branding' has the potential to bring about social change, depending on how the communication tool is used along with the nature of the issues raised online.

The book concludes with a commentary from Douglas Hill who draws together the range of methodologies and key arguments from the contributors' chapters, highlighting the cohesive, dialogic thread running through the volume, binding them together and sequentially expanding the purview for consideration of contemporary India.

The eclectic collection brought together in this volume demonstrates a diversity of approaches and perspectives grounded in the specificity of context yet attentive to the broader ramifications of the issues that emerge from those contexts. The contributors eschew the familiar terrain of caste, class and gender to chart the current conjuncture in India, its antecedents and future trajectories across the fault lines of globalisation and development. The primarily antipodes based contributors from New Zealand and Australia extend across the range of new and emerging scholars to more established and eminent voices, thus working across disciplines, generations and locations to chart contemporary India.

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Part I
Framing the Macro Environment

Chapter 2
Compressed Capitalism, Globalisation and the Fate of Indian Development

Anthony P. D'Costa

Abstract India's economic turnaround since the 1980s and especially since 1991 has been widely credited as a result of economic reforms. Gradual and systematic deregulation at home and increased international integration promises even better economic performance. While this may be only partly true since a good part of India is untouched by economic growth in any meaningful way, even if official reports of declining poverty are to be believed. The question this paper poses is why, despite envious economic growth rates, India's development seems elusive. This is a complex issue and could be addressed variously but the reasons are all likely to resort to "nation-centric" explanations. I take an alternative perspective, to position India in the wider capitalist dynamic of the late twentieth century, articulating the national with the global. Late capitalism in India and for that matter other select developing countries has meant new technologies, mature capitalists and a relatively well-developed state. All three cumulatively stand for economic growth, industrialisation, urbanisation and some politically negotiated redistribution. However, as I would like to argue that the workings of compressed capitalism, that is, primitive accumulation, which is historically complete elsewhere, is an ongoing feature in India, dispossessing and displacing people thereby jeopardising future development. Furthermore, the persistence of petty commodity production due to displacement and exclusion due to technology-led and enclave-based economic production adds to the development conundrum. The resulting inequality in India in an expanding economy is thus not an anomaly but a reflection of systemic capitalist dynamics.

Keywords Compressed capitalism · Globalisation · Primitive accumulation · Displacement · Petty commodity production · Capitalist maturity · Inequality

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2.1 Introduction

In *One Hundred Years of Solitude* by Gabriel García Márquez, the history of the town of Macondo is so convoluted that it is hard to decipher whether history is moving forward or circling back (Márquez 1992). The grand narrative of Indian development is similar. Development is a cumulative and tumultuous series of shifts and tensions in the economy, society, the collective and individual consciousness and expectations going forward and falling back. Like Macondo's history, India's development fortunes and misfortunes seem to repeat themselves, constantly pushed and pulled by the multiple forces of the past and its unformed future. Unlike Macondo's founders who knew the codes, however, there are no hidden codes to reveal the magic formula for development. As in most postcolonial societies, India's attempts to break loose from structural dependence have been matched by the grip of history, generously described as institutional weakness. India's future will no doubt be global and modern, but its future will not be determined by historical teleology or be a mirror image of the West. India is part of global capitalism, whose modern origins emerged in the West, but today its development fate is integrally tied to its own efforts and what the world offers and takes away. Hamstrung by its own history and pushed forward by its "lateness" to industrialisation, India's development process has been far from linear, like Macondo's evolution.

The objective of this chapter is to critically examine India's development possibilities in the current era of international economic integration, its road to capitalist maturity and the incomplete and elusive agrarian transition that was historically central to advanced capitalism.[1] I argue that this uneven development is an outcome of compressed capitalism. It results from a country's late entry to development due to colonialism, where the state plays an extended and overt role trying to transform the economy through modern industry, but in a context of a truncated agrarian transformation and the persistence of a large petty commodity producer sector. A large agrarian society along with a petty commodity sector under capitalist development should be in the dustbins of history, but in late industrialising countries such as India they remain part and parcel of contemporary capitalism. There is both incomplete primitive accumulation (or at least the alienation of peasants from the land is ongoing rather than done with even though the share of agriculture to GDP has fallen substantially) and an incomplete industrial milieu. These coexist uncomfortably in the narrowly based highly internationalised advanced industrial and service sectors tied to the global capitalist system.

This chapter accounts for the grotesque forms of uneven development in India. I only identify the larger set of contemporary capitalist dynamics in the Indian context and do not pursue the multiple and complex causal mechanisms behind uneven development. The rest of the chapter is divided into three main sections.

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[1]Of course, it is becoming increasingly clear that the classic form of agrarian transition, at least for India, may no longer be viable or relevant.

In section two, I briefly develop the systemic dynamics of compressed capitalism.[2] The global context for this national capitalism is significant. In section three, I disaggregate the accumulation model in India into three components. These generate mechanisms that contribute to both an affluent India and an impoverished and unorganised one (D'Costa 2010). The final section brings out some of the contemporary dimensions of compressed capitalism, particularly increasing inequality, and demonstrates that the structural transformation of India under globalisation, for the moment, is wishful thinking. At best India is likely to have islands of advanced capitalism, with most of the rest wallowing in the quagmire of an impoverished and unequal society that is partly of its own making, but also the structural result of its participation in the world economy.

2.2 Compressed Capitalism, Late Development and Globalisation

Capitalism is a historical system and is specific to particular places and times. Since institutions vary, the nature of capitalism at the national level tends to be different as well, although latecomers to development, the so-called postcolonial societies, commonly suffer from the legacies of colonialism. It was the colonisers that set the institutional terms of engagement with the world economy. At the same time, with formal independence they have been free (at least nominally) to pursue opportunities offered by the contemporary world economy. Thus, former East Asian colonies such as South Korea, Taiwan, and Hong Kong and Singapore in Southeast Asia (but not Indonesia and the Philippines) seem to have surmounted the colonial structures of trade by exploiting the economic opportunities at the global level through conscious policies, hard work and a favourable external environment. All these economies enjoyed the advantages of backwardness (Gerschenkron 1962): with colonial subjugation and subsequent nationalist strategies, states are quite well developed to pursue economic development and improve their status in the world economy.

Compressed capitalism can be conceptualised as the outcome of a three-legged, interdependent process. The first component is the process of primitive accumulation (PA) in the classical Marxist understanding of capitalism, that is, the alienation of peasants from the land. In the formation of early capitalism PA has been an instrumentalist process where the origin of capital arose from the usurpation of land. Alienation, however, is double-edged in that the physical separation is accompanied by value separation of workers from their labour under commodity production. In this process, alienation in the first instance is the beginning of the formation of an industrial proletariat engaged in production and the beginning of what has come to be a durable capital–labour divide. In the interim, before a fully formed industrial proletariat comes into being, capitalist

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[2]A more elaborate version of this framework can be found in D'Costa (2014a).

trajectories in history show the formation of a petty commodity producing (PCP) sector, which comprises a class of producers that own their tools, produce for the market, often rely on family labour, and remain small scale. In the classic transformation process with capitalist expansion and structural transformation, the PCP sector largely disappears along with peasants, as a fully formed proletariat comes into existence.

This view has been strongly challenged by Castells and Portes (1989), who argue that the disappearance of the PCP sector (also known as the informal sector) is not inevitable; its reproduction and persistence results from multiple causes, including the restructuring of capitalist economies. Consistent with this view, I advance an integrated approach that goes beyond the informal sector, to better understand the impact of contemporary global capitalism on India's transformation possibilities. What is at dispute is not that the highly stylised capitalist transition in the West and later Japan is untrue. In fact, Japan, as a late entrant to capitalist development, substantially squeezed (or compressed) the processes of PA and PCP dissolution faster than the West, while South Korea, Taiwan and other smaller countries in Asia developing later have transformed their economies even more rapidly. The crucial difference, apart from the society- and institution-specific mechanisms at work, is that global capitalism has changed substantially with deregulation and technological change. Structural power has shifted considerably in favour of capital, against workers and marginalised communities, to particular global centres of accumulation in both rich and poor countries (Hoogvelt 2001). It is in this context that India's transformative challenges need to be situated. The premise is straightforward: a vast part of India's population remains agrarian, its petty commodity producing sector continues to grow, and yet a small modern sector is experiencing dynamic expansion and the economy itself is undergoing growth and structural change over time.

To explain this phenomenon for India there are two interrelated levels of analysis. The first is the national/regional level, in this case India and its relationship with "in-house" capitalist expansion. The second level is the global economy, which has its own systemic dynamics that propel the larger economic system and pull in and influence the articulation of countries and regions to the world economy. Thus, I argue that the process of capitalist transition in India, in conjunction with the changing dynamics of the world economy, determines the particular form of contemporary capitalist development in India. This analytical approach could be applied to the advanced capitalist countries as well, but their links to the world economy are likely to be different from those of late industrialisers.

Compressed capitalism squeezes PA, a process that is historically complete in the formation of global capitalism but not in specific regions of the world. The vast PCP sector that results from PA and sustains it coexists with a narrow band of advanced mature capitalist sector (MC). The latter is a product of a late industrialising state. The simultaneous existence of these three components suggests compression of the ongoing process of separation of peasants from the land, the inertia of the petty commodity sector and a relatively dynamic pocket of advanced capitalist sectors
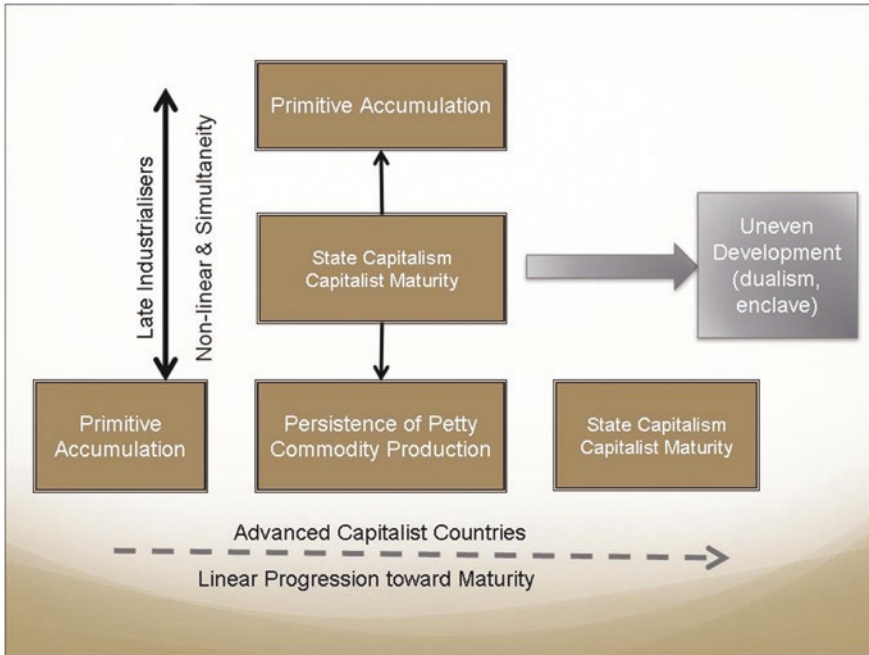
Fig. 2.1 Processes behind compressed capitalism

within which there is also compression due to leapfrogging of technologies and economic production.[3] The net result is argued to lead to a truncated form of capitalist industrial transformation (Sanyal 2007; Samaddar 2009, pp. 35–36). Diagrammatically the processes of compression are presented in Fig. 2.1.

The three interrelated processes of PA, PCP and MC (primitive accumulation, petty commodity producers, mature capitalist sector) are depicted vertically for late industrialising countries such as India to denote their simultaneity or coexistence in contrast to the horizontal and sequential evolution of the three processes, as depicted in the lower part of the diagram for the more advanced capitalist societies. While intuitively this might be a trivial issue, the important point to recognise is the very different global contexts in which the three interrelated processes in the past have operated and the way they operate today. The expansive nature of global capitalism has thrown open economic opportunities in unprecedented ways, allowing considerable mobility throughout the world. However, ongoing PA and the persistent PCP cast serious doubt on the transformative capability of these opportunities similar to what advanced capitalist countries or their recent followers in East Asia have experienced. As shown in the next section, Indian development is not only hamstrung by its inability to

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[3]It is beyond the scope of this paper to incorporate other forms of compression such as income for specific communities and classes.

create adequate, meaningful employment (the qualitative dimension) but also is circumscribed by the skill and technology bias of the modern sector, which has a dampening effect (the quantitative dimension) in an otherwise expansive capitalist system.

The pervasiveness of low productivity subsistence agriculture and the existence of an advanced modern industrial sector is termed economic dualism by development scholars. The Latin American structuralists saw this as "enclave" development (Celso Furtado, for example), where primary product exports contributed to limited economic change; more mainstream economists (Michael P. Todaro) viewed it as "dualism" arising from the coexistence of a traditional and a modern sector. Both views, albeit for different reasons, subscribed to policy intervention in favour of domestic industrialisation to alter the existing structures of economic production. India's import substitution industrialisation contributed to that effort substantially. However, generating employment in capital-intensive industries in a demand-constrained economy was an altogether different story. What India now endures is a development trajectory that promises to lift many boats but the ground reality indicates a world in which the vast swathe lives on the margins.

This is not difficult to anticipate. With an agrarian crisis fueling rural-to-urban migration the number of already underemployed urban workers rises even more and thus ensures a low-wage informal or unorganised sector. The paradox is that there is a high-growth economy characterised by high and rising incomes for the upwardly mobile middle classes and increasing technological complexity in the structure of production, which further limits employment for those without education and technical skills and widening income gaps.

2.3 Compressed Capitalism in Action

2.3.1 Primitive Accumulation

At the outset it must be pointed out that Marx in his history of the rise of capitalism refers to the "origin" of capital as primitive accumulation, which is further reproduced and expanded as capitalism progresses, creating a free wage labour force. Subsequent deepening of economic activities completes the process of proletarianisation to support industrialisation. However, the contemporary form of separation of cultivators from the land in India cannot be seen as the source of capital, for that would imply non-capitalist relations when in reality India is already capitalist. However, the separation of peasants or tribal populations from mining and forested areas is similar in effect to historical primitive accumulation in that land grabs lead to dispossession and displacement and thus proletarianisation and migration.

What is different with land grabs today is that not only are they not the source of capital in Marx's sense but they do not appear to produce the industrial proletariat that has been so ingrained in capitalist development in mature capitalist economies.

Instead, a "floating" population arises as part of the growing unorganised sector, with substantial numbers who are self-employed (Sanyal 2007). Today it takes capital and extra-economic coercion through the state to acquire land in India. The displacement that takes place results from capitalist encroachment for industrial and extractive activities, real estate and infrastructure development and special economic zones and ecological parks. Almost all of these are part of a deepening capitalism but not in the primitive accumulation sense. Rather land grabs contribute to the reproduction and expansion of existing capital through production, rental income and speculation.

Contemporary land acquisition has taken multiple forms for multiple purposes. A large share of India's population relies on agriculture for its livelihood. While the share of Indian agriculture to GDP has consistently fallen since independence, to about 16 % in 2011–2012, the number of people making a living from agriculture and related activities has been estimated to be 52 % of the total number of workers in 2009–2010 (Thomas 2012, p. 45). This suggests not only the low productivity of agriculture but also a high degree of vulnerability of the rural population. Given that there are between 13 and 18 million families in rural India that are estimated to be landless (Working Group on Human Rights in India and the UN 2012, p. 11), their displacement as rural wage workers is inevitable with the encroachment of agricultural land by business and state interests. Although the sale and purchase of land is regulated, it is nevertheless increasingly subject to market forces; where necessary, the state exercises "eminent domain" in wresting control of land from the owner-cultivators. Whether compensated or not, cultivators are physically dispossessed and displaced, while marginal and small landholders and the landless rural workers who depend on medium and large owner-cultivators as wage workers are likely to be out of a livelihood.

Dispossession and displacement result from alternative uses of agricultural or forested land, such as urban industrial projects, infrastructure development such as roads, for productive purposes such as factories and special economic zones, or land submerged by dams. There is little systematic data on displacement since land records themselves are scarce and many transactions, unless contested, go unreported. However, scattered information on specific projects indicates that dispossession is a real threat to livelihoods in India even if the future rehabilitation and resettlement of affected populations could be ensured through investment-led alternative use of the land. What is important to recognise is the intensity of land acquisition today, which is aimed at capitalist growth without necessarily securing livelihoods for the displaced. Historically, this would have been commonplace but we live in a more enlightened era that imposes a moral responsibility and provides a political space for the disadvantaged to voice their opposition to and resist dispossession (Chatterjee 2008). Land acquisition is facilitated not only by widespread indebtedness of cultivators but also by "eminent domain" exercised by the state.

Some of the well-known cases of contested land acquisition have been Nandigram and Singur in West Bengal. In Singur, reasonably well-off farmers, with the help of the then state opposition party Trinamool Congress, prevented investment by Tata Motors to set the Nano car factory (Mohanty 2006). The amount

Table 2.1 Diversion of forest land for non-forestry purposes

Period	Total area diverted during the period (ha)	Average diversion per year (ha)
1. 1951–1952 to 1980	4,135,000	143,000
2. 1980–2002	699,674	31,803
3. 2002–2008	185,984	30,997

Source Ministry of Environment and Forests, Government of India in Singh (2009, p. 151)
Notes Period 1: 1951–1952 to 25.10.1980; Period 2: 25.10.1980 to 29.10.2002; Period 3: 29.10.2002 to 31.07.2008

of land involved was a mere 997 acres, of which, owners of 340 acres refused to part with the land (Roy 2014). Nearly 50,000 people were expected to lose their livelihoods. The accompanying mayhem and tragic deaths indicated the severity of the contestation but also the shortcomings of land acquisition practice. The Narmada Dam in the state of Gujarat was estimated to have displaced 200,000 people, of which nearly 60 % were tribal people (Siddiqui 2012, pp. 5–6). The Korean industrial giant POSCO's steel project in the state of Odisha entails about 4,000 acres (Park 2015). The UN Human Rights Panel has called for a halt to the project given that the estimated number of people to be affected by the project is 22,000. The project remains on hold. There are other steel companies, domestic and foreign, interested in Odisha's iron ore deposits. With few exceptions they are in various stages of abandonment or heading toward failure (Park 2015). While little information is available on the transfer of forested land (see Table 2.1), it can be inferred, given the scale of recorded conversion, a large number of people who rely on forest products will be displaced by various types of projects. When these individual projects and their likely impact are added to the countless other large infrastructure projects and the spread of urban development beyond existing city limits, they suggest not just the march of capitalism, resembling primitive accumulation of another era, but they portend a social and economic disaster if the displaced are not "rehabilitated" through meaningful employment.

Primitive accumulation as currently experienced in India is not about creating capital but rather reproducing and expanding it at a higher rate. This is not the place to discuss cost-benefit analysis of individual projects or wade into the debate whether it is a historical necessity to dispossess and displace rural residents, forest dwellers and the marginalised communities for industrial and non-agrarian transformation. It is entirely possible—theoretically—to "rehabilitate" the displaced in some politically negotiated, non-violent and acceptable manner and continue the industrialisation process. Alternatively, a different kind of development needs to be visited. The history of industrial development is replete with examples of such dispossession and displacement over both time and space worldwide. The real issue is what kind of future is offered to those who are displaced. In other words, what prospects do these people have in the context of a specific form of compressed capitalism, when the historical transformation of land and resources for non-agricultural use accelerates but remains unfinished in India?

2.3.2 Livelihoods Through Petty Commodity Production (PCP)

In a capitalist context, displacement of peasants is a "normal" process and historically was seen as "necessary" for further accumulation. On hindsight, this appears to be true for today's advanced capitalist countries, notwithstanding the brutality of dispossession and exploitation of rural residents and indigenous populations in the different phases of capitalism. Historically, displaced peasants, tenants, cultivators and owners were absorbed by new, increasingly industrial economic activities arising in mercantile towns and cities in a context of labour-absorbing technological change and economic expansion. The contemporary situation as experienced by postcolonial countries is quite different. Petty commodity production is considered a transitory phase, which under capitalist dynamics is expected to wither away. However, contrary to this outcome, late industrialising countries such as India are experiencing the persistence of the petty commodity sector. Paradoxically, both Latin American structuralists and western modernisers for differing ideological reasons were eager to push development and transform society in the image of the industrialised societies. They also sought to reduce the economy's dependence on agriculture and on the world market by pushing state-led industrialisation, which, contrary to expectations, created a large, urban informal sector engaged in petty commodity production (Gilbert and Gugler 1992, p. 100).

In India, PCP comprises both rural and urban labour markets (informal or unorganised in India), and includes casual work and self-employment, along with precarious, short-term, poorly paid and insecure jobs (see Ministry of Labour and Employment, Government of India 2002, pp. 604–605). PCP takes place in the unorganised sector, which is defined as having enterprises with fewer than ten workers. Unorganised workers can be found in both informal and formal sectors and are defined as irregular workers with no social security benefits (National Commission for Enterprises in the Unorganised Sector (NCEUS 2009, p. 134). Further, unorganised enterprises have no legal standing, have low capital intensity and labour productivity, and often use family labour, "concealed as self-employment under different forms of putting out systems" (NCEUS 2009, p. 357).

This labour market is outside of but not divorced from the formal sector, producing a plethora of low-cost commodities and services for its members and for the formal sector as subcontractors. PCP is a buffer for formal labour markets; it tends to depress the general wage level by acting as a reserve army of labour. Workers and owners in this sector include small-scale operators and petty capitalists in food processing, garments, shoes and household goods and self-employed "footloose" (no fixed place for conducting business) vendors, as well as contract or casual wage workers (see Table 2.2). While PCP virtually disappeared under sustained industrialisation in advanced capitalist countries, it persists as a contemporary feature of developing countries. Two interrelated processes contribute to the persistence of the informal sector: slow growth in the countryside leading to

Table 2.2 Economic activities by type of labour markets in India

	Unorganised sector	Organised sector
Agriculture	Agriculture	Agro processing
	Supplies of farm inputs	Fertilisers and pesticides
Trade	Self-employed footloose vendors	Petrol pumps
	Contract/casual wage earner	Transporters
Services (including Infrastructure)	Construction	Utilities
	Self-employed service provider	Hotel and tourism
		IT, telecommunications, mines
Manufacturing	Home-based enterprises	Automobiles
	Factory-based small-scale industries	Engineering
		Industry—steel, cement, refineries

Source Ministry of Labour and Employment, Government of India, "Second Report of the National Commission on Labour" (2002, p. 4)

the rural-to-urban migration of an estimated 315 million (based on the 2001 census) (Samaddar 2009, p. 36) and the natural population growth that adds to the urban informal sector due to lack of growth in formal jobs.

The significance of the unorganised sector in the Indian economy is shown in Table 2.3. This largely represents the petty commodity sector in India. The Ministry of Labour and Employment of India estimates that the unorganised sector employs 94 % of all workers, as cultivators, casual agricultural and urban workers, household industry labourers and the self-employed in urban menial services (NCEUS 2009, p. 15; Bardhan 2006). The irony is that while the capital-intensive industrial sector has not been labour absorbing, thus not meeting the quantitative criterion, the unorganised sector does not meet the quality criterion.

Apparent from these official statistics[4] is the herculean task in providing meaningful employment. A sizeable number of those engaged in the unorganised sector survive at subsistence level and are mostly underemployed. Moreover, the dispossessed and displaced represent a "dark space", which has never been acknowledged in India's planning and continues to survive despite developmental intervention and wider economic growth (see Sanyal 2007, p. 249). By some estimates, India's working-age population is expected to grow by 125 million over the next decade.[5] How India is expected to absorb and accommodate them is anyone's guess, given the persistence of the unorganised sector. The classical transition anticipated from successful primitive accumulation to capitalist industrial expansion appears to have come to a dead end since jobs growth

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[4]It is difficult to obtain information on the unorganised sector, even with official statistics, as workers in the unorganised sector are not formally recorded.

[5]*Economist* 2013. "Wasting Time: India's Demographic Challenge," May 11, 2013, http://www.economist.com/news/briefing/21577373-india-will-soon-have-fifth-worlds-working-age-population-it-urgently-needs-provide. Accessed October 14, 2014.

Table 2.3 Share of different types of employment in total employment (percent)

Formal/informal Sector	Total employment (millions)		
	Informal/unorganised worker	Formal/unorganised worker	Total
1999–2000			
Informal/unorganised Sector	339.7 (99.5 %)	1.8 (0.5 %)	341.5 (100.0 %)
			86.2 %
Formal/organised Sector	23.1 (42.1 %)	31.8 (57.9 %)	54.9 (100.0 %)
			13.8 %
Total	362.8 (91.5 %)	33.6 (8.5 %)	396.4 (100.0 %)
2004–2005			
Informal/unorganised Sector	391.8 (99.6 %)	1.4 (0.4 %)	393.2 (100.0 %)
			86.3 %
Formal/organised Sector	28.9 (46.2 %)	33.7 (53.8 %)	62.6 (100.0 %)
			13.7 %
Total	420.7 (92.3 %)	35.0 (7.7 %)	455.7 (100.0 %)

Source National Commission for Enterprises in the Unorganised Sector (NCEUS) (2009, p. 13)
Note NSSO 55th and 61st Round Survey on Employment–Unemployment, computed
UPSS Usual Principal and Subsidiary Status
Figures in Parenthesis are percent shares of corresponding total

everywhere is selective and in India is heavily circumscribed by its specific form of articulation with the global economy. Notwithstanding the opportunities the world market offers for India's formal sector, the formal sector is unable to generate a large number of jobs while the informal sector continues to reproduce itself with low-quality jobs that support accumulation in the formal sector.

2.4 The Promise and Limits of the Formal Sector

Capitalism is an expansive global system under which production and consumption are increasingly dispersed over space. It is also a system where production and consumption have become decoupled. Thus, it is no longer necessary to produce locally what is needed locally. Increasingly, international trade and far-flung production sites cater to the varied and voluminous demand for goods and services. Multinational companies optimise global production on the basis of labour costs, supply chains, infrastructure logistics and state support for export-oriented investment. India is part of this global system, which has afforded certain economic opportunities for some just as it has introduced new constraints. In this section, I critically analyse the role of the formal sector as it currently operates under compressed capitalism. The purpose is to demonstrate that despite significant gains in industrialisation, exports and technological "catch-up", the goal of development through meaningful employment in India remains elusive.

The postcolonial Indian state, following the Latin American structuralists, attempted to alter the vicissitudes of uneven capitalist development through import substitution industrialisation. India's record is mixed on this score, even though it created substantial industrial infrastructure and capability (Corbridge et al. 2012). The exhaustion of import substitution was hastened by three developments: India's demand constraint on account of widespread poverty and slow growing economy, ideological obsolescence due to the rapid rise of East Asia through state-led export drives, and by "internalisation" of the Washington consensus that has enthusiastically championed liberal market policies in the wake of state incompetence and highhandedness (D'Costa 2013; Mukherji 2013). India's capitalists have had a relatively long incubation period and an early warning of the inevitability of deregulation. Today, Indian capitalists actively participate in the world economy but with a significant buffer provided by a large and growing domestic market.

The deepening of global production through systematic organisation of global value chains has incorporated a large number of countries in various forms, including businesses in India. It is not unusual to see flowers and fruits in North America and Europe from Colombia, India and East Africa; garments from China, India and Bangladesh; manufactured products from China, Malaysia, Taiwan and Japan; software services from India and the Philippines, and the continued dominance of complex technologies, products and services from the triad (USA, Western Europe, Japan) and other East Asian economies. The implications for development in this architecture of global production are twofold: there are opportunities to participate profitably in the world economy, and there are limits to that participation, which are determined by the ability to engage effectively, especially at the higher value end of technological and skill-based segments of the global production chain. The quantitative dimension of jobs growth for a country like India will have to be in labour-absorbing activities on a large scale, while the quality of jobs will depend on the type of skill and education demanded and the share of such jobs to total as well as the distribution of the gains from higher value output claimed by workers and owners in India.

The ability to participate effectively in global value chains depends on capitalist maturity whereby businesses with experience develop their commercial and technological acumen to compete in the world economy (D'Costa 2000). Under the Indian state's industrialisation effort, private capital was protected and could develop considerable competitive strength. Today it is able to leverage its capital base and technological knowledge to expand in an increasingly internationalised Indian economy. Family-controlled conglomerates such as the diversified Tata, Birla and Reliance enterprises are private firms but many of them emerged prior to Indian independence and subsequently expanded within limits under state patronage in the heyday of state planning. More recently, the rise of entrepreneurial IT firms such as Infosys and HCL has conformed to this trajectory of capitalist maturity.

Latecomer states have been active (but not necessarily successful) in boosting accumulation from its primitive form to a more mature industrial form through various policy intervention instruments and governance structures (D'Costa 2012;

Mazumdar 2012). One advantage of late industrialisation is that both capitalists and the state can leverage low production costs to enter sectors that are mature, meaning technologically stable. The Indian state contributes to private sector development by providing public goods and services, and promoting social and economic stability. In India, the selective but substantial development of tertiary technical education and the university system, often publicly financed, has been geared toward national industrialisation, thereby facilitating institutional learning and competitiveness, particularly in mature industries.

However, under compressed capitalism, the dynamics of dispossession and displacement sit uncomfortably with mature capitalism. On the one hand, the "dark space" generated by the ongoing separation of the peasants from their land and a bloated petty commodity sector cannot supply the fuel for competitive high-value industries that use global standards as benchmarks. This means that fostering high quality jobs on a large scale will remain a serious challenge for the foreseeable future. On the other hand, mature capitalist firms from India must play the same game as other global enterprises in maintaining competitiveness, efficiency and economies of scale. Here, PCP on the margin can help depress wages and thereby enhance competitiveness by obtaining not only low-cost industrial inputs but also act as a source of informal labourers (as a supplier of contract, temporary and part-time workers).[6] There are at least two possibilities of creating jobs under compressed capitalism. Indian firms can either enter certain sectors or segments of global value chains (leveraging the cost of labour) and/or leapfrog technologies. This means that there could be a quantitative increase in employment. However, it is also possible that such an outcome will be counteracted by other conditions, especially if scale economies to enhance efficiency are a requirement, which will entail capital- and skill-intensive investment and thereby impact the quantity of employment possible (see Rodrik 2012).

Some of these developments on the employment front are already evident in today's India, although there are complex factors at work that do not necessarily provide clear patterns or definitive conclusions.[7] However, the one conclusion on which there is consensus is that the formal sector has been unable to create the jobs that India needs even as the success of Indian businesses is widely reported internationally. For example, the size of the manufacturing workforce decreased

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[6]One of the oft-repeated complaints by private business has been that labour laws are rigid, implying that the inability to hire and fire workers limits competitiveness and thus investment. While there is some truth to this, it is abundantly clear that such labour laws can be easily circumvented as evidenced by the increase in unorganised workers in organised enterprises (Nagaraj 2007).

[7]Based on the results of the two National Sample Surveys (2004–2005 and 2009–2010) several studies have provided various interpretations. It is beyond the scope of this chapter to get into them. Suffice it to say, these studies have unanimously observed a reduction in the size of the workforce and a decrease in female labour participation. These have been attributed to increased enrolments in schools, decrease in child labour, mechanisation of agriculture, and the retreat of female workers back into the household due to men finding jobs, and the rejection of "unacceptable" jobs (Rangarajan et al. 2011; Mehrotra et al. 2014).

from 2004–2005 to 2009–2010 financial years (Thomas 2012, p. 40). The growth rate of output among different sectors was not in line with the growth rate of employment in those same sectors, leading to what analysts call "jobless growth". This is also observed by others, who indicate a decline of 3 million workers in manufacturing employment over the same period of time (Mehrotra et al. 2014, p. 55); in other words, only about 11 % of the new non-agricultural jobs have been in manufacturing (Thomas 2012, p. 45). The constraints on manufacturing employment can be attributed to lower exports, increased import intensity of manufactured goods and capital intensity and rising wages. These reveal the soft growth environment of the world economy, India's open economic policy, and participation in global value chains that demand more imported inputs, greater efficiency and better quality.

The challenge for India remains both the quantity and quality of jobs. While some progress has been made on the employment front, the sheer numbers of people looking for a livelihood in the context of compression of capitalist processes is a challenge. The pushing out of people from the countryside to join the ranks of the petty commodity sector suggests that growth in formal non-agricultural activity is likely to be India's solution. However, given the large number of available workers, the persistence of the unorganised sector, and the limited number of jobs in the skilled sector, the challenges are daunting. Out of India's 458 million workers, only 12 % are in manufacturing and 0.5 % in the IT sector (or about 10 % of total new jobs between the two surveys (Thomas 2012). Manufacturing in India has been targeted for employment creation but the results are discouraging. While the IT sector has been successfully integrated with the world economy, it has created few jobs.

Manufacturing sub-sectors such as the auto industry have done well in India. From a small auto industry for national consumption, India has catapulted into serving the world economy (see D'Costa 2005). However, even with increases in output, India's auto industry, directly and indirectly, has created a relatively small number of jobs. The auto industry estimates the total of both direct and indirect jobs to be around 19 million, a large number in absolute terms but in the context of the over four hundred million people in the workforce relatively small.[8] The auto industry in India is capital-intensive. In addition, to maintain international competitiveness and quality control, auto manufacturing relies heavily on automation due to the technological bias in today's production. Thus, India's Tata Motors, which produces the Nano, the world's least expensive car, relies on robots in its manufacturing process. The direct permanent jobs can be considered to meet the quality criterion among the larger firms though even in these firms there is a tendency to hire contract workers. In the smaller, lower tiered suppliers in the formal sector a greater portion of workers are likely to be on contract and temporary with little job security, while in the unorganised sector it is likely to be even worse (Narayan and

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[8]ET Bureau 2014. "Slump in automobile market claims 2 lakh jobs: SIAM," April 17, 2014, http://articles.economictimes.indiatimes.com/2014-04-17/news/49214537_1_auto-industry-skoda-auto-10-year-auto-mission-plan. Accessed October 20, 2014.

Vashist 2008, p. 24). The number of enterprises in the unorganised auto sector increased over the period from 1994–1995 to 2005–2006 and employment also expanded, but the number of employees per enterprise and value added have remained virtually stagnant suggesting low productivity growth and thus low wages.

The export-oriented IT sector is suffering a similar fate. The high growth of the sector belies the limited opportunities offered by the sector. Estimates suggest that about 2.5 million people are employed directly, while another 8 million are employed indirectly. The former consists of well-paid jobs for middle class professionals, thereby excluding those without the necessary educational (and thus social) background (D'Costa 2014b). Indirect employment is the "trickle down" effect of the IT industry, impacting unskilled and semi-skilled workers such as domestic help, drivers and security guards (D'Costa 2011). While these numbers are not trivial, they indicate the limited nature of employment generation even in high-growth and high-value sectors. In fact, some have suggested that services cannot be the driver of India's economy (Rodrik 2014).

The recent record on formal employment does not bode well for India's future. For example, the employment elasticity was 2.03 % in the pre-reform period between 1983 and 1993–1994 fiscal years while it was 1.85 % in the post-reform period between 1993–1994 and 2004–2005 clearly showing the employment growth was not keeping with output growth (NCEUS 2009, p. 3). In the organised or formal sector in India between 1991 and 2006, 870,000 jobs were lost in the public sector, while the private sector added 1,094,000 jobs (Government of India, Ministry of Finance 2006, 2009). The net job addition was a tiny fraction of the over 450 million workers in India.

More recent employment surveys do not portend an optimistic future (Table 2.3). In the three rounds of surveys conducted over a 10-year period (1999–2000 to 2009–2010) by the National Sample Survey Office, Ministry of Statistics and Programme Implementation, two categories of workers in urban areas stand out: self-employed and casual workers. Both are high relative to total employment. The pattern discernible in the urban areas is the persistence of self-employment. While larger urban areas such as Class 1 cities (with more than 100,000 population) have a greater share of regular wage and salaried employment than smaller cities, urban India as a whole showed that 41 and 18 % of those employed were self-employed and casual labour respectively. While the ratio for these types of employment vary by size of cities and for males and females, in the most recent survey, the two categories of employment together constituted 45 % or more of those employed.

Furthermore, the same survey (66th Round, 2009–2010) shows that secondary sector (industry, manufacturing) employment has virtually remained unchanged since the 61st Round 5 years prior, with the urban-based tertiary sector absorbing many of India's workers (see Mehrotra et al. 2014, p. 51). This tertiary sector comprises a substantial degree of self-employment and casual labour. In the urban informal sector, about 70 % work in enterprises with fewer than six workers (National Sample Survey Office 2014), which suggest a highly competitive sector with small profit margins. The employment challenge is not just a quantity issue; it

is also a quality issue. The Indian economy as it unfolds in the global economy is at a crossroads; it has the advantages of lateness but appears to suffer from that lateness by having to conform to global best practice standards. Thus, the economy is not able to generate the type of employment necessary to employ the masses. It is also hard to imagine how unorganised firms can effectively compete in a global economy that demands scale economies and modern technologies.

India must create more and better jobs through labour-absorbing manufacturing since thus far India's industries have not been able to create large numbers of good jobs. While there are many hypotheses advanced for this weak manufacturing and thus employment potential (see Thomas 2013), it is important to recognise the limitations of participating in global value chains. To take a well-known example, the complex supplier system used by Apple to manufacture its iPhones in China yields a very low value capture for Chinese workers. For example, Chinese workers making the iPhone 4, based on the prevailing nominal wage of less than $1/hour, received only 7 % of the phone's market value (own calculations based on business reporting). Material cost was about $188 and Apple's margin was $360 per phone (software, marketing and other costs not included). Similarly, for the iPhone 5s model, the teardown analysis shows that manufacturing costs amount to only $8 per phone, materials about $200, and the rest, about 70 %, is "implied margin" (not including software, marketing, royalties, etc.).[9] This is the result of the relentless pressure to cut costs, enhance efficiency, and attain large economies of scale. While it does create employment, it remains to be seen how many quality jobs can be created in India with such type of manufacturing for the world market.

2.5 Inequality as India's Development Fate

The process of compressed capitalism as conceptualised in this chapter indicates the deep divisions that underlie India's contemporary economic and social transformation. Due to the uneven and combined nature of change driven by the three interrelated processes of primitive accumulation, the formation and persistence of the petty commodity sector, and a selective, narrow high road to accumulation through modern, internationalised industrial and services sectors, India's development prospects are mixed, and at worst, nearly impossible. While there are institutional and policy shortcomings whose redress could provide an outlet from the impasse, the process of compressed capitalism is one of structural dynamics that is global in scope and much harder to offset. India's development fortunes must be seen in this light. Here I have examined development only relating to employment,

[9]Rassweiler, A. and Lam, W. 2013, "Groundbreaking iPhone 5s Carries $199 BOM and Manufacturing Cost, IHS Teardown Reveals," September 25, 2013, https://technology.ihs.com/451425/groundbreaking-iphone-5s-carries-199-bom-and-manufacturing-cost-ihs-teardown-reveals. Accessed October 21, 2014.

Table 2.4 Employment types in urban India based on three NSSO surveys

	66th (2009–2010)			61st (2004–2005)			55th (1999–2000)		
	SE	RW/S	CL	SE	RW/S	CL	SE	RW/S	CL
Class 1 city	36.0	54.7	9.4	38.9	52.0	9.1	36.5	51.5	12.0
Class 2 towns	40.6	42.3	8.6	46.6	37.6	15.8	42.8	38.0	19.2
Class 3 towns	45.8	27.2	27.0	51.8	26.9	21.3	46.2	21.1	23.6
Urban India	40.9	40.9	18.2	46.0	38.4	15.6	43.4	37.7	18.9

Source National Sample Survey Organisation (NSSO), Ministry of Statistics and Programme Implementation (2014)

Notes Class 1 population 100,000 and above, Class 2 population 50,000–99,000, Class 3 population 20,000–49,000

SE Self-employment, *RW/S* Regular wage and salaried, *CL* Casual labour

both on quantitative and qualitative dimensions. Built into the jobs question is inequality and poverty, which suggests that either not enough work is available or that employment generation is elusive. As I have shown in Table 2.4, based on NSSO surveys, the types of jobs created are largely casual labour and self-employment, whereas regular wage and salaried jobs have been harder to create, even in urban areas.

Compressed capitalism is not completely responsible for contemporary inequality since India has been saddled with pre-existing inequality based on caste, class, religion and region. Nevertheless, the social processes underway in the context of compressed capitalism exacerbate growing inequality. The logic is straightforward. The pre-existing inequality among classes, castes, religions and regions in the context of economic reforms such as deregulation and liberalisation are likely to create new accumulation opportunities but also likely to worsen inequality (D'Costa 2014b). This is because of the two interrelated developments: too little demand for high-skilled workers linked to the formal global capitalist sector, while labour displacement and dispossession in the countryside expands the number of low-skilled workers in the already large informal sector. The disruptive effects on local labour markets from global economic integration add to the challenges. Both economic and social upward mobility are not completely ruled out in a democracy. However, the structural constraints facing the underprivileged to make inroads into the more dynamic sectors are daunting to say the least.

Consider India's recent high rate of economic growth, which has accompanied heightened social (class) differentiation. A household survey by the National Council of Applied Economic Research (NCAER) shows that the income of high-income households grew much faster than low-income households (see D'Costa and Bagchi 2012, p. 14). In fact, the higher the household income the faster their numbers expanded compared to lower income households. Households earning more than Rs. 5 million annually increased by almost 25 % a year between 1995–1996 and 2001–2002 compared with household groups earning less than Rs. 5 million. The same survey, when extrapolated, indicated even faster growth of the high-income groups in recent years. Furthermore, the interlocking nature of poverty linking low-caste standing and illiteracy (Thorat and Newman 2010; UNDP 2006)

structurally disadvantages the poor (D'Costa 2003) in seeking higher education. While at lower age groups literacy rates do not vary much by social group, literacy rates diverge substantially at higher age groups. For example, for the age group 23 years and above, literacy rates for other backward classes (OBC) were 50.6 %, scheduled castes (SC) and scheduled tribes (ST) (combined) 36.5 % and Muslims 46.1 %, compared to 74 % for the general category of Hindus (generally middle and upper castes) (Prime Minister's High Level Committee 2006, pp. 54, 67).

Due to both higher dropout rates (Jodhka 2011, p. 54; Ahmad 2011, p. 123) and the structural position of Muslims in Indian society, mobility for this group has been limited. The share of Muslims in the civil services in India is very low (Prime Minister's High Level Committee 2006, p. 166). Similarly, much of the economic growth thus witnessed is bypassing women, adding to the burden of inequality. Most of the employment for women can be found as self-employment or casual labour. Regular wage or salaried employment for women, while increasing since the early 1990s, remains low in both rural and urban areas. In 2009–2010, based on the National Sample Survey, it was estimated that 39 % of urban employed women and 4 % of rural employed women received a regular wage or salary (Hill 2014, p. 228).

2.6 Conclusion

In this chapter I introduced the concept of compressed capitalism to underscore the development possibilities for India. The specific features of Indian capitalism based on its historical trajectory and particular inherited predicaments, both colonial and self-generated, have been structurally limiting. However, the workings of contemporary capitalism also impose constraints, less on economic growth and more on social and economic mobility of the historically disadvantaged groups. Global capitalism and its particular articulation with India has opened up economic opportunities but the process is selective, excluding the vast majority because of the education, skill and technology bias of contemporary economic growth. The dispossession and displacement of rural residents, routine processes in capitalist dynamics, take on a far more sinister role in the absence of labour-absorbing employment on a wide scale. Unable to find decent employment, most are compelled to join the ranks of the unorganised sector.

Global capitalism offers export opportunities but only limited participation due to the massive scale of operations, tight supply logistics and continuous push to reduce the cost of production. The fate of India's development, contrary to recent "can-do" optimism of the government and successful businesses, is heavily circumscribed by the structural limits unleashed by compressed capitalism and the widespread inequality that is reproduced. India has its many shortcomings but addressing them alone will be insufficient to transform society since many other systemic impositions emanating from the global capitalist order are likely to act as countervailing forces.

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Chapter 3
India's Economic Performance in the Post-reforms Period: A Tale of Mixed Messages

Ranjan Ray

Abstract This chapter reviews India's economic performance in the two decades since economic reforms were undertaken in the early 1990s. The report card is mixed with impressive performance on several indicators such as growth rates, size of the economy, poverty reduction, per capita income, and rising affluence of large sections of the population coexisting with dismal performance on health, food security and undernutrition. This chapter contains a comparison of India with China and Vietnam using the recently introduced concept of multidimensional poverty, and shows that India lags behind her Asian neighbours on several welfare indicators.

3.1 Introduction

India has undergone many changes since she became independent from British rule in August 1947. While the changes are wide ranging and covered political, social and economic spheres, the most significant changes in post-independent India are the economic reforms in the early 1990s that led to a transformation of the Indian economy. The reforms were necessitated by the fact that the Indian economy was in dire straits in 1991 with foreign exchange reserves barely enough for 3 weeks of imports. The modest growth rates prior to the reforms, referred to as the "Hindu growth rates", increased many fold after the reforms and made India one of the fastest growing nations. The elephant had finally woken up from its

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slumber and was being referred to as an "awakening giant".[1] Comparisons are made of India's economic performance with that of the other Asian giant, China, who had started the process of economic reforms somewhat earlier.

This chapter will focus on India's economic performance during the two decades since the reforms process started. India's journey since independence has been full of contradictions and mixed messages. The story in the past two decades has been no different—if anything, the contradictions have increased. For example, while poverty rates have decreased, hunger rates have increased. While per capita real expenditure has increased, expenditure on cereals has declined. While life expectancy has increased and Indians are living longer, malnutrition has also increased. While durables spending have gone up, the expenditure share of necessities has been declining, most inexplicably, for the poor as well. While Indians are now more affluent than when the reforms started, their calorie intake is a good deal lower, raising the issue of food security.

In this chapter, I will focus on three aspects of India's performance in the post-reforms period: (a) food and nutrient intake with special reference to the prevalence of undernourishment rates (POU), (b) anthropometric indicators, with special attention to child health, and (c) multidimensional deprivation and multidimensional poverty indicators that focus on several key access indicators such as access to drinking water, fuel, electricity, etc. The economics literature has, very recently, seen several significant methodological developments in poverty measurement that embrace a multidimensional view of welfare. The process started with the use of HDI, in place of per capita income, in ranking countries in the 1990 HDR. Exactly 20 years later, the HDI gave way to the MPI (multidimensional poverty index) in the 2010 HDR. The MPI has now supplanted the unidimensional expenditure-based poverty rate as the measure of deprivation, as a logical extension of the idea behind the HDI. This chapter will report comparisons between China, India and Vietnam on multidimensional poverty.

Each of these three countries witnessed significant economic reforms in the past three decades that led to an improvement in several of their key macro indicators. Vietnam, for example was experiencing a lack lustre economic growth, similar to India's, until the Doi Moi reforms of the early 1980s, when the economy recorded sharp improvements on several economic indicators. The Vietnam/India comparison on child health and MPI, that this article will report, is therefore of much interest. While there is now a literature that compares China and India on macro aggregates, there is not much evidence on China/India comparison on microdata-based levels of living indicators. This chapter will provide an opportunity to share some of my results comparing China, India and Vietnam on levels of living indicators based on household level micro data sets. Along with the cross-country comparisons between India, China and Vietnam, my contribution will also compare the performance on health of the different states in India. While in the international context, we discuss India's performance as that of a homogeneous

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[1]See Bardhan (2010) who coined this term. See, also, Basu (2010) for a collection of recent essays on India's 'emerging economy'.

entity, in reality, there have been sharp regional disparities on several health indicators, most notably, on child health, neonatal and child mortality.

The plan of this article is as follows. In the next Sect. 3.2, I present some aggregate indicators on India's economic performance and put it in perspective by comparing with a selected group of countries. Section 3.3 reports the comparison of India with China and Vietnam based on micro data sets. In Sect. 3.4, I focus on India's performance on food security and nutrition and provide evidence on the important role that India's public distribution system plays in this area. Section 3.5 presents evidence on the differential performances on selected health indicators between the various states in India, with special reference to the eastern state of West Bengal which was unique in experiencing uninterrupted communist rule over more than three decades. Section 3.6 concludes this chapter.

3.2   India's Macroeconomic Performance Since Independence

India's economic performance under British rule, especially in the period prior to her independence in 1947, was fairly mediocre. Her per capita GDP was stagnant, or even declining, and there were several instances of famine, the most notable being the Bengal famine during World War II. Along with independence came the adoption of a firmly democratic political system with a free press and a commitment to a steady and an all-inclusive growth. With the establishment of the Planning Commission on 15 March 1950, and the launch of the first Five Year Plan in 1951, the country started the process of economic growth. The development strategy during the first three decades emphasised the role of centralised planning and the importance of the public sector in securing economic advancement of the bulk of the population. On nearly all macroeconomic indicators, India was moving along, with the economic stagnation under the Raj replaced by a steady rate of economic growth. Though not impressive, the growth rates were small but positive and sustained,[2] and the magnitude of poverty reduction was not insignificant. While India witnessed a few economic crises, such as the one in 1965 over the war with Pakistan followed by the twin droughts in 1965 and 1966 leading to devaluation of the Rupee in 1966, the 1991 crisis is regarded as the most serious faced by the country since independence. It took the form of a serious balance of payments crisis with India's foreign exchange reserves barely enough to sustain 3 weeks of imports. This is regarded as a watershed moment in India's economic history since the crisis ushered in a series of major economic reforms that transformed the country with a slow but steady "Hindu rate of growth" into one that, over the next two decades, became of the fastest growing nations in the world.

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[2]These growth rates were described as the 'Hindu rate of growth' by the noted economist and Planning Commission Member, Professor Raj Krishna.

India went through the Asian financial crisis in 1997, the global financial crisis in 2008 and the Eurozone crisis in 2009, relatively unscathed unlike many developed countries such as the USA and several economies in Europe. Though in recent years, the earlier stellar growth rates could not be sustained and they dipped sharply, India still remains one of the fastest growing countries, second only to China. Between 1990–1991 and 2009–2010, real per capita income has grown at a compound rate of 5 % per annum. Between 2002–2003 and 2006–2007, which was the Tenth Plan period, growth rate of GDP was 7.8 % per annum. During the Eleventh Plan period, 2007–2008 to 2011–2012, the growth rate was around 8 % per annum.

India's slow but steady rise in her per capita GDP contrasts sharply with much larger increases in that of other BRIC countries. Since India's per capita GDP is quite low, even a moderate increase in her GDP translated into high growth rates. This, however, masked the fact that throughout the recent decade, 2004–2013, India has not only retained its rank as the poorest country in this group, but that the gap with the others has widened. In contrast, China, another high growth achiever, has pulled away from India and narrowed her gap with Brazil and Russia.

China recorded much higher poverty rates than India at the start of the period, namely, 1981, but by 2010, the picture has reversed quite dramatically. The latest World Bank figures available, for 2010, show that on 1 US $ a day poverty line, China's poverty rate is nearly one-third of that of India's. India's record in poverty reduction should not be underestimated however. After relatively sluggish poverty reductions during the 1980s and early 1990s, the pace picked up significantly, and during the most recent decade leading to the new millennium, there was a full 13-point reduction in the poverty rate. Clearly, the high growth rates in the post-reforms decade did lead to large numbers of people being removed from poverty. Further evidence on poverty reduction in India is provided in Mishra and Ray (2011) which reported, on National Sample Survey data, that the relative poverty rates for all India (rural) declined from 28.9 % in 1993/94 to 16.9 % in 2004/5, while the corresponding urban poverty rates were 23.6 % (1993/94) and 21.0 % (2004/05).

According to figures presented in Dreze and Sen (2013), India's record on non-monetary indicators is not very satisfactory either, especially in relation to her immediate neighbours in South Asia. Only five countries outside Africa, namely, Afghanistan, Bhutan, Pakistan, PNG and Yemen, have lower "youth female literacy rate" than India. Only four countries (Afghanistan, Cambodia, Haiti, Myanmar and Pakistan) have higher child mortality rates than India. Only three countries (Bolivia, Cambodia and Haiti) have lower levels of access to improved sanitation than India. No country has a higher proportion of underweight children than India. India's performance on non-economic indicators is taken up in greater detail in the following section which reports the results of my work comparing India with China and Vietnam based on micro data sets.

3.3 Multidimensional Poverty in China, India and Vietnam: A Comparison on Micro Data Sets[3]

Following the influential work of Sen, there has now been increasing recognition of the fact that poverty and deprivation are multidimensional concepts and, consequently, the traditional expenditure and income poverty rates have been supplanted by multidimensional poverty measures.[4] The multidimensional poverty measure (MPI), which was used for the first time in the 2010 Human Development Report in cross-country poverty comparisons, is broad-based unlike the traditional poverty measures, and is particularly relevant in the context of countries such as India and China. The MPI considers information on a household's access to a variety of dimensions and converts that into a summary measure, namely, the MPI. While the traditional poverty rate involves a single cut-off that defines the 'poor' based on a poverty line, the MPI uses dual cut-offs, one at the level of a dimension to define the dimension specific poverty status of each household or "no access", and the other over all the dimensions to define a "multidimensionally poor" household.

Tables 3.1, 3.2 and 3.3 in Ray and Sinha (2014) present dimension specific head count rates (HCR) of deprivation in India over the period 1992/1993 and 2005/2006 and compare them with that from China and Vietnam. There has generally been a decline in deprivation in all dimensions across the wealth quintiles in both rural and urban areas. The improvement has been more in some dimensions, less in others, but there has been all round progress. A comparison between the "awakening giants" shows that, while China outperforms India on progress in access to drinking water, electricity and education (i.e., literacy of household head), it does not do as well on access to hospital. Vietnam has done particularly well on the latter recording an impressive increase in access to hospital over the period, 1997/1998–2004. Another common feature is that rural deprivation is generally higher than urban, though the rural/urban difference is smaller in China than elsewhere.

Mishra and Ray (2012) focus on a comparison between China and India during the post-reforms period in both countries. With nearly two-fifths of the world population residing in these two countries, China and India parallel each other in size and diversity. Given the huge markets that they offer to the rest of the world, and having registered some of the highest growth rates in recent years, it is natural for these two countries to be put under comparative scrutiny. The main results in Mishra and Ray (2012) can be summarised as follows:

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[3]This section is based on my co-authored papers, Mishra and Ray (2012) and Ray and Sinha (2014). Both these studies were carried out on comparable micro data sets at the level of the household and covered almost contemporaneous time periods.

[4]See the 2010 Human Development Report published by the UNDP for explanation and use of the Multidimensional Poverty Index (MPI).

Table 3.1 Per capita median monthly consumption (quantity, in grams and litre) of 5 food items

Food item	India 2009–2010			Indonesia 2011			Vietnam 2010		
	Rural	Urban	All	Rural	Urban	All	Rural	Urban	All
Rice	11.55	8.94	10.39	14.00	12.00	13.23	18.09	20.78	18.86
Milk	8.66	10.61	10.00	2.00	2.00	2.00	1.13	1.22	1.15
Edible oil	1.15	1.41	1.25	2.50	2.15	2.31	0.50	0.58	0.57
Meat	1.63	1.63	1.63	1.79	1.79	1.79	2.79	3.33	2.92
Vegetables	13.20	13.06	13.15	8.00	6.93	7.51	3.58	4.04	3.75

Table 3.2 Height-for-age and weight-for-height z-scores NFHS II and NFHS III

	Height-for-age z-scores			Weight-for-height z-scores		
	NFHS II	NFHS III	Difference (NFHS II–NFHS III)	NFHS II	NFHS III	Difference (NFHS II–NFHS III)
All India	−1.82	−1.46	−0.35***	−0.84	−1.03	0.18***
North	−2.00	−1.55	−0.46***	−0.76	−1.02	0.26***
South	−1.39	−1.16	−0.24***	−0.90	−0.90	−0.01
West	−1.59	−1.53	−0.06	−1.00	−0.96	−0.04
East	−1.89	−1.48	−0.41***	−0.87	−1.16	0.29***
West Bengal	−1.67	−1.27	−0.39***	−0.91	−0.97	0.07

Notes Improvement is associated with a negative Difference
***: $p < 0.01$, **: $p < 0.05$, *: $p < 0.1$
Source Maitra and Ray (2013)

Table 3.3 Stunting and wasting rates NFHS II and NFHS III

	Stunting			Wasting		
	NFHS II	NFHS III	Difference (NFHS II–NFHS III)	NFHS II	NFHS III	Difference (NFHS II–NFHS III)
All India	0.45	0.36	0.09***	0.16	0.18	−0.03***
North	0.50	0.39	0.12***	0.13	0.18	−0.05***
South	0.33	0.29	0.04***	0.16	0.16	−0.01
West	0.39	0.38	0.01	0.18	0.16	0.02**
East	0.47	0.37	0.10***	0.19	0.22	−0.02**
West Bengal	0.38	0.31	0.07***	0.13	0.18	−0.05***

Notes
Improvement is associated with a positive Difference
Stunting defined by height-for-age z-score $<−2$; Wasting defined by weight-for-height z-score $<−2$
***: $p < 0.01$, **: $p < 0.05$, *: $p < 0.1$
Source Maitra and Ray (2013)

The overall picture in both countries is one of declining deprivation in some dimensions and static, or even, increasing deprivation in others over the period, 1993–2006.

Rural deprivation is generally higher than urban deprivation in both countries.

While access to drinking water has deteriorated in both rural and urban India over this period, there has been an improvement in access to electricity and in the educational level of the household head. This contrasts with a sharp improvement in access to drinking water in China in both rural and urban areas. Access to electricity stands out as a dimension where the Indian deprivation is much higher than in China.

Of special interest in these comparisons is the experience of India and China on health. The principal results are as follows.

China outperforms India in both women's health (measured by BMI) and child health (z-scores). Child stunting remains a significant problem in both countries. While child wasting (underweight children) has virtually disappeared in China, it remains a significant issue in India.

There is evidence of a significant negative association between mother's BMI and child wasting in India, but not in China. This reflects a policy failure in India to delink mother's ill health from that of her offsprings through a nutritional programme of antenatal and post-natal care. India did not have in place the nutrition interventionist programmes such as the National Plan of Action for Nutrition in China in 1997.

Ray and Sinha (2014) extend the comparison of child health between China and India to include Vietnam. Over the period, 1993–2005, China does much better than both India and Vietnam on the incidence of both 'stunted' and 'wasted' children, aged 0–36 months. Vietnam recorded an impressive reduction in the rates of stunted children over the period, 1992–1998, but this did not extend to wasting where the situation worsened. India's record is the worst on both measures. Child stunting remains a serious issue in all the three countries with one in five Chinese children still suffering from stunting in 2006. Though there was an increase in the rates of 'wasted' children in both China and Vietnam during this period, in 2006 they are still below the high rates prevailing in India.

The twin studies by Mishra and Ray (2012) and Ray and Sinha (2014) show that the aggregate picture on multidimensional deprivation has not changed much in either country over this most recent period, even though both India and China recorded high growth rates throughout the late 1990s and the early part of the new millennium. While rural India recorded a continuous decline in deprivation throughout the post-reforms period, urban India experienced rising deprivation in the second half,[5] 1998/1999–2005/2006. In China, both the rural and urban areas experienced a decline in deprivation during the 1990s that was more than made up by a sharp increase in deprivation in the new millennium. Note that, even at the

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[5]See Mishra and Ray (2012) for evidence on the failure of urban India to match the improvement in rural living standards during the period of second generation reforms in India.

end of our chosen period, both countries record quite significant amount of multidimensional deprivation. The picture on deprivation in both India and China is inconsistent with that based on their aggregate growth rates. Our results also reveal that though deprivation in rural India is much higher than in rural China, with the gap closing somewhat during this period, there is not much difference between the deprivation magnitudes in their urban areas. In other words, while China outperforms India on rural deprivation by a large margin, this is not true in the urban areas. Notwithstanding their status as "awakening giants", India and China still face considerable amount of multidimensional deprivation that is not accurately reflected in their aggregated poverty rates or the mean per capita real expenditure figures.

The overall message of this section is a mixed one. During this most recent period, both India and China have seen significant improvements in their living standards and decline in deprivation across a wide range of dimensions. However, both countries still have a long way to go to justify the current media hype over their status as "awakening giants". While China's superiority over India on a wide range of deprivation measures is clear, the results in Mishra and Ray (2012) suggest that this superiority is not a one way affair. Both countries still record high levels of child stunting and child anaemia. Clearly, one needs an integrated approach in both countries to achieve increased access to basic facilities and improvements in child health.

This discussion, and the results in Mishra and Ray (2012) and Ray and Sinha (2014), underlines the need to look beyond macro statistics such as per capita income or growth rates and explore issues such as deprivation on a wide variety of dimensions where the picture looks much less rosy. Besides China's higher growth rates than India's, it is important to recognise that growth in China translated into much greater increase in investment in industry, in manufacturing employment, and in poverty reduction, than was the case in India. Much of the output growth in India was in the services sector which was more skill-based and was limited in its impact on industrialisation and poverty reduction.

3.4 Food Security and Nutrition in India

The World Bank[6] has noted that "South Asia…still has the highest rates and the largest numbers of undernourished children in the world" and adds "the high economic growth experienced by South Asian countries has not made an impact on the nutritional status of South Asian children". Maitra et al. (2013) have examined the link between dietary habits, namely, the consumption of cereals and pulses, and nutritional intake and explained the lack of progress on the health of very young

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[6]"An Urgent Call for Action: Undernourished Children of South Asia", available in http://www.worldbank.org/poverty/.

Indian children by presenting and analysing the household consumption of the principal sources of calorie intake and the rates of undernourishment in India. The focus of the study by Maitra et al. (2013) is on very young Indian children, namely, those in the age group, 0–3 years. As the results from NFHS-3 data set presented and analysed in this paper show, and reiterated in the World Bank report referred to above, a significant percentage (nearly half!!) of such children suffer from stunting and wasting. Can this be explained by an analysis of the food consumption figures, with special reference to households who have one or more such young children in the age group, 0–3 years? The need to focus on this age group of 0–3 years rests on the fact that once stunting and wasting have set in, it is difficult to reverse such declines, and the process gets transmitted to subsequent generations. There is now considerable evidence that suggests that stunting and wasting are passed on by parents to their children and beyond. Maitra et al. (2013) found that in India there is co-movement of declining nutritional intake for both adults and children and the lack of progress in improving health outcomes of children. The analysis has opened the door to directed/targeted policies that might be used to address this problem.

Maitra et al. (2013) asked the further question: can the patterns of anthropometric outcomes for Indian children aged 0–3, particularly the worsening of the short-run nutrition, be explained by changes in calorie inputs and consumption expenditures on food items by households with young children? To answer this, using data from the NSS, this study described the household expenditure patterns for a variety of food items, including both cereal and non-cereal items such as milk, milk products, protein and pulses, from the 55th (1999–2000) and 61st (2004–2005) rounds of India's National Sample Surveys. This study also compared the nutrient intake by households with and without children in the 0–3 years category.

The presence of a young child in India reduces the mean household expenditure on rice, pulses, eggs, fish and meat, vegetables and fruits, items that are typically consumed by adults and older children. The differences in the expenditure figures on these food items between these two household types, namely households with and without young children, are highly significant. Moreover, contrary to expectations, this is also true for milk, a product consumed by young children. Not only are households with young children spending less on food on an adult equivalent basis in both years, but also their situation worsened over the period 1999/2000–2004/2005. In particular, households with children aged 0–3 were not only observed to have lower expenditures on milk in NSS 61, compared to NSS 55; but the gap with other households has also widened with respect to milk expenditures, an important item in child consumption.

These findings come in the wake of an earlier study by Ray (2007), which examined the changes in the nature and quantity of food consumption in India during the reform decade of the 1990s, and analysed their implications for calorie intake and undernourishment. The study documents the decline in cereal consumption, especially in the urban areas, and provides Indian evidence suggesting

an increase in the prevalence of undernourishment[7] (POU) over the period 1987/1988 to 2001/2002. The reforms decade of the 1990s saw an increase in the percentage of households who were unable to meet their daily calorie requirement. The All India picture hides regional differences with regard to several key consumption and welfare indicators, both between states and between rural and urban areas. The investigation showed that, even in the top expenditure decile, several households suffered from undernourishment. In the rural areas of Orissa and Andhra Pradesh, for example, an unacceptably large POU exists even when the calorie requirement is lowered by as much as 20 % of the original calorie norms recommended by the Indian Council of Medical Research (ICMR). This is a unique Indian paradox where an improvement in living standards as measured by increase in per capita expenditure is accompanied by a decline in calorie intake and a consequent increase in the "prevalence of undernourishment". As the study by Mishra and Ray (2009) showed, this was not the case in Vietnam where expenditure poverty rates and POU rates both declined during this period. This reflects a failure in India to promote awareness of nutritious dietary habits. India did not have the policy initiatives that were taken in Vietnam. There have been several private and public initiatives to enhance food security in Vietnam in the 1990s; for example the Dutch Foundation for the Advancement of Tropical Research (WOTRO), under its programme, Nutrition and Health, 1995–1999, undertook a project entitled "Nutritional Status and Health of Women in Relation to Household Food Security in Urban and Rural Vietnam." The Government of Vietnam, in 1990/1991, formulated a new socioeconomic strategy designed to improve the nutritional levels of the whole community, for the period up to 2000. India has much to learn from Vietnam in this regard.

The prevalence of undernourishment among some of the more affluent households calls for a reassessment of the current strategy of directing the Targeted Public Distribution System (TPDS) exclusively at households "below the poverty line" (BPL). Ray (2007)'s study showed that, both as a source of subsidised calories and as a poverty reducing instrument, the PDS is of much greater importance to female-headed households than it is to the rest of the population. The results of this study call for a better targeting strategy than simply restricting the PDS to BPL households, and, thereby, overlooking all undernourished "above the poverty line" (APL) households. The significance of this implication is heightened by the finding that the PDS does play a prominent role in enhancing calorie intake and reducing hunger. The fact that the female-headed households and the backward classes rely more heavily on the PDS than other groups provides further ground for the belief that, by simply restricting it to BPL households, the PDS may be losing its effectiveness in providing food and nutrition security.

The exercise by Ray (2007) documents the decline in cereal consumption, especially in the rural areas, with the decline being particularly marked in the case of items such as barley, maize and cereal substitutes such as tapioca. Since cereals

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[7]A household is said to be 'undernourished' if it fails to meet the minimum daily calorie requirements of 2100 kcals in the urban areas and 2400 kcals in the rural areas.

offer an inexpensive calorie source, this switch (forced or otherwise) in consumer preferences towards more expensive calorie sources such as vegetables and fruits resulted in large differences between the measure of undernourishment (POU) and that of expenditure-based poverty. Another important result is that, notwithstanding the sharp decline in their expenditure share during the 1990s, rice and wheat continue to provide the dominant share of calories, especially for the rural poor.

Table 3.1 compares India's per capita consumption of the five principal food items with that of Indonesia and Vietnam. These consumption figures were calculated from data sets collected in India's National Sample Survey, Indonesia's Susenas and Vietnam's Living Standards Survey for the years, 2009, 2010 and 2011. Three features stand out from this table. (a) India's consumption of Rice, an inexpensive source of calories, is the least among these three Asian countries. (b) Rice is primarily consumed in India's rural areas with the urban consumption at nearly half the rural consumption. (c) While India's consumption of Milk and Vegetables far exceeds that in Indonesia and Vietnam, India lags behind the other two countries in her consumption of Meat. Fish, Meat and Eggs are more important sources of calorie and protein intake in Indonesia and Vietnam than in India. While for religious and cultural regions, much of India is vegetarian, the relative absence of Fish, Meat and Eggs in the Indian diet may be a source of inadequate protein intake and deficiency in several key micronutrients that needs to be addressed via information campaigns. Ray (2007) documents the success of Vietnam in this respect, and contrasts with India's failure to promote awareness of the need for a more balanced and protein-rich diet. This has led to adverse health consequences, a subject that we turn to in the following section.

3.5 Disparity Between Regions in India on Selected Health Indicators

In nearly all the discussions on India's economic performance, the country is treated as a single homogeneous entity with uniform performance in all the regions and states. This section examines if this is really the case and provides evidence on sharp regional differences on child health during the post-reforms period.

The depiction of India as a 'giant' of various descriptions is based on macro indicators such as GDP growth rates, growth of real income and of foreign direct investment. However, as already discussed, the macro performance during this period did not match with several other indicators such as measures of under-nourishment and child health. Nowhere is the mismatch more dramatic than in the case of child health. Notwithstanding an uninterrupted record of high growth rates over the past decade, India has recorded one of the worst performances on undernourishment and child health. Her child health statistics are not only worse than those in neighbouring countries in South Asia but also that in many countries in sub-Saharan Africa which are much poorer than India. According to the latest figures in the "India: Malnutrition Report" available in the World Bank, South

Asia website, 48 % of children in India under the age of 5 are stunted, 43 % are underweight and more than 1 in 4 infants are born with a low birthweight. Ray and Sinha (2011) compare the state of child health of young children, aged 0–3 years between China, India and Vietnam, and report that China and Vietnam easily outperform India on both stunting and wasting. Ray and Sinha (2011, Table 12) report that, over the period, 1992/1993–2005/2006, while there has been a marginal improvement in stunting in India with the proportion of stunted children dropping from 50.20 to 41.40 %, wasting remained virtually static at around 20 % throughout this period. One gets a true perspective of the dismal nature of these figures in India by noting that the comparable rates in China were 21 % for stunting and 6.50 % for wasting. It is clear that India will not meet MDG (halving 1990 rates of child underweight) on current trends. These figures are matched by equally dismal figures on maternal health.

Apart from the dismal nature of the child and maternal health statistics in India that are grounds for concern, per se, there are several adverse effects of a poor state of child health that should add to such concerns. A state of poor health of infant children, if not corrected in the early days of the child's life, tends to persist into adulthood and this, in turn, entails costs of low productivity on the economy. As noted in Mishra and Ray (2012, Table 7), there is evidence of negative association between mother's BMI and child wasting in India, but not in China. The strength of this association has increased in India over the period, 1998/1999–2005/2006, and reflects a policy failure in India to delink mother's health from that of her off springs through a nutritional programme of antenatal and post-natal care. India did not have in place the nutritionist programmes in China. The failure becomes all the more striking over a period when India was recording impressive growth rates.

This section provides evidence on the state of child and maternal health in West Bengal and how it compares with other regions in India. The economics literature on child health in India is not as large as one would expect given its obvious importance. The literature at the regional level on under nutrition, child and maternal health is still more limited. There is hardly any study that looks at the state of maternal and child health in West Bengal, let alone compare that state's performance with that in other regions, during the period of high growth in India in the late 1990s and beyond. West Bengal is a particularly interesting case since this state was ruled continuously by the same Left Front regime throughout this period. While West Bengal has been given considerable credit for the rural land reforms and several pro poor policies in the early days of Left rule, there has not been much attempt to see if this translated to improved health statistics. Any policy failure cannot therefore be attributed to changing political regimes. With that uninterrupted rule over more than three decades having recently come to an end, this is an appropriate moment to take stock of West Bengal's performance on these important welfare indicators. Given the close association between child and maternal health, we look at both these aspects in the context of West Bengal vis-a-vis the rest of India, and we do so in conjunction with infant mortality.

The three most commonly used measures of child health are height for age, weight for height and weight for age. Low values of these variables define, respectively, stunting, wasting and underweight. The height for age is expressed as a z-score defined as the difference between the child's height and a recommended norm for a child of that age divided by the standard error of the height values. The weight for height is similarly measured by the z-score defined as the difference between the child's weight and that recommended for a child with that height divided by the standard error. Traditionally, the recommended norm has been based on anthropometric data collected in the US by the National Center for Health Statistics (NCHS). In response to criticisms of basing the norm on the health data of US children, in recent years the WHO has based the norm on a more representative sample. Children whose z-scores for height for age and weight for height fall below −2 are considered to be stunted and wasted, respectively. While height for age is a measure of the long run health status of a child, weight for height and weight for age are measures of the short term health status. Economists have usually taken the weight measures more seriously since low weight is regarded as exposing the child to death. A child is said to be under nourished if her/his z-score is less than −2, and severely under nourished if her/his z-score is less than −3. A child's status on under nourishment will depend on the z-score that is being used.

Neonatal mortality (NM) is defined as the number of deaths during the first 28 completed days of life per 1,000 live births in a given year or period. Mortality during neonatal period is considered a good indicator of both maternal and newborn health and care. Infant Mortality (IM) is defined as the number of deaths (1 year of age or younger) per 1000 live births. IM reflects the state of medical services at the time of the birth of the child. Child Mortality (CM) is defined as the number of deaths of children (5 years of age or younger) per 1000 live births.

The study by Maitra and Ray (2013), that this section draws on, was based on the information contained in the second and third rounds of the National Family Health Surveys (NFHS-2, NFHS-3). NFHS-2 was conducted in 1998–1999 in 26 states of India with extensive information on population, health and nutrition with an emphasis on women and young children. NFHS-3 was carried out in 2005–2006 with added information on the anaemic status of children. The present study takes advantage of the disaggregated information by states to pay special attention to the nutritional status of women and infant children in West Bengal over the period spanned by NFHS-2 and NFHS-3 and compare the state's performance with that in the rest of India. The NFHS data sets also provide information on the educational status of the child's mother and the wealth status of the child's household. These are used to provide evidence on the questions on whether maternal education and household affluence have any impact on the child's health status.

Maitra and Ray (2013) compare the average z-scores of children (0–3 years) in West Bengal with India (overall) and the different regions.[8] Figure 2 in Maitra and Ray (2013) presents and compares the corresponding stunting and wasting rates between the various regions in India with special attention paid to how West Bengal fares with respect to the rest of the country. Along with the rest of India, West Bengal experienced an improvement in child stunting and a worsening in child wasting during the period, 1998–1999 to 2005–2006. Neither in terms of stunting nor in terms of wasting, does West Bengal fare any worse than the all India average. Indeed, West Bengal fares much better than the rest of Eastern India on stunting, though less so on wasting. Southern India fares the best among the regions especially on stunting, Eastern and Northern India fare the worst.

Table 3.2 presents the "height for age" and the "weight for height" z-scores in the various regions along with that in West Bengal and the country as a whole. Table 3.3 presents the corresponding rates for child stunting and wasting in the last two rounds of NFHS. These tables confirm the pictures portrayed in Figs. 1 and 2 in Maitra and Ray (2013) in showing a statistically significant improvement in child stunting in most regions including West Bengal, and a statistically significant worsening in child wasting in most regions again including West Bengal. The improvement in stunting and the deterioration in wasting in West Bengal during this most recent period, 1998/1999–2005/2006 was highly significant (at 1 % significance level), consistent with the all India picture. Note, however, from Table 3.2 that, in terms of magnitude, while West Bengal's improvement in 'stunting' was lower than that in the Eastern region as a whole, the deterioration in 'wasting' outstripped that in the East and in India (as a whole).

Table 3.4 presents a more disaggregated picture of the extent of malnutrition, captured by stunting and wasting rates by gender, rural/urban, wealth quintile and mother's education. In West Bengal, there is a gender divide in child stunting (against girls) in NFHS II, however this pro-male bias appears to have diminished over the period (and is not statistically significant in NFHS III). Rural children do much worse than urban children in stunting in West Bengal but not in child wasting. This essentially implies that the long-term health of children is considerably worse in rural areas compared to that in urban areas. Both stunting and wasting rates diminish as households become richer—we find evidence of strong wealth effects in that stunting and wasting rates both decline as we move up the wealth distribution. There is a large reduction in the stunting rate as we move from Q4 to Q5: stunting rates drop from 29 to 9 % in NFHS II and from 23 to 10 % in NFHS III as we move from Q4 to Q5. The drop is not as dramatic in the case of wasting, but even here there is a large wealth effect. Mother's education has strong and positive effects on the health of her children. Here as well, the effect is monotonic and interestingly the effect of mother's education on the health of children is stronger

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[8]To be specific: *North* consists of Haryana, Himachal Pradesh, Madhya Pradesh, Punjab, Rajasthan and Uttar Pradesh; *South* consists of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu; *East* consists of Assam, Bihar, Orissa and West Bengal; and finally *West* consists of Gujarat and Maharashtra.

Table 3.4 Stunting and wasting for different population subgroups

	All India (major states)			West Bengal		
	NFHS II	NFHS III	Difference	NFHS II	NFHS III	Difference
Panel A: stunting						
Male	0.44	0.36	0.08***	0.34	0.30	0.04
Female	0.46	0.37***	0.10***	0.43	0.32	0.11***
Rural	0.49	0.40	0.09***	0.45	0.38	0.09***
Urban	0.35	0.30	0.05***	0.25	0.23	0.03
Hindu	0.46	0.37	0.09***	0.34	0.27	0.07***
Other religion	0.42	0.36	0.06***	0.48	0.37	0.11***
Wealth quintile 1	0.57	0.50	0.08***	0.58	0.45	0.14***
Wealth quintile 2	0.53	0.45	0.08***	0.43	0.36	0.08*
Wealth quintile 3	0.48	0.38	0.10***	0.35	0.28	0.07
Wealth quintile 4	0.40	0.32	0.08***	0.29	0.23	0.06
Wealth quintile 5	0.26	0.19	0.07***	0.09	0.10	−0.00
Mother: no education	0.54	0.47	0.08***	0.54	0.39	0.15***
Mother: primary school	0.45	0.39	0.06***	0.41	0.37	0.04
Mother: secondary school	0.31	0.26	0.04***	0.18	0.20	−0.02
Panel B: wasting						
Male	0.16	0.19	−0.03***	0.14	0.17	−0.03
Female	0.15	0.18	−0.02***	0.12	0.18	−0.06***
Rural	0.16	0.19	−0.03***	0.14	0.20	−0.06***
Urban	0.13	0.16	−0.03***	0.11	0.14	−0.03
Hindu	0.16	0.19	−0.03***	0.13	0.17	−0.04**
Other religion	0.14	0.17	−0.03***	0.14	0.20	−0.06**
Wealth quintile 1	0.21	0.24	−0.02***	0.20	0.22	−0.02
Wealth quintile 2	0.18	0.21	−0.03***	0.11	0.23	−0.11***
Wealth quintile 3	0.16	0.18	−0.02**	0.12	0.13	−0.01
Wealth quintile 4	0.13	0.16	−0.03***	0.11	0.12	−0.01
Wealth Quintile 5	0.10	0.13	−0.03***	0.07	0.14	−0.07**
Mother: no education	0.18	0.21	−0.03***	0.16	0.23	−0.07**
Mother: primary school	0.16	0.20	−0.04***	0.15	0.15	−0.00
Mother: secondary school	0.12	0.15	−0.03***	0.09	0.15	−0.06**

Source Maitra and Ray (2013)
***: $p < 0.01$, **: $p < 0.05$, *: $p < 0.1$
Comparing West Bengal to the major states of India

in West Bengal compared to India (as a whole). For example, in West Bengal, NFHS 2 records a sharp drop in child stunting rates from children of mothers with no education (54 %) to those with secondary education (18 %). At all India level, the corresponding stunting rates decrease from 54 to 31 %. In contrast to stunting, the decrease in wasting rates with increased education of the mother is much less.

Table 3.5 Neonatal, infant and child mortality rates for NFHS II and NFHS III

	Neonatal mortality			Infant mortality			Child mortality		
	NFHS II	NFHS III	Difference	NFHS II	NFHS III	Difference	NFHS II	NFHS III	Difference
All India	0.045	0.040	0.005***	0.075	0.060	0.015***	0.091	0.070	0.021***
North	0.051	0.044	0.006***	0.088	0.069	0.019***	0.106	0.081	0.025***
South	0.037	0.032	0.005**	0.054	0.045	0.009***	0.064	0.050	0.014***
West	0.036	0.037	−0.001	0.054	0.050	0.004	0.065	0.056	0.009***
East	0.045	0.041	0.004*	0.072	0.061	0.011***	0.090	0.074	0.016***
West Bengal	0.030	0.036	−0.005	0.049	0.049	0.001	0.060	0.057	0.003

Source Maitra and Ray (2013)
***: $p < 0.01$, **: $p < 0.05$, *: $p < 0.1$

In West Bengal, NFHS 3 records no change in the wasting rates (15 %) between primary and secondary educated mothers, though there was a noticeable drop in NFHS2 from 15 to 9 %. Two further (and interesting) observations are: first, the improvement in child stunting in West Bengal has been statistically significant in the bottom three quintiles (Q1, Q2 and Q3), but not in the top two wealth quintiles (Q4 and Q5). Second, the improvement in child stunting in West Bengal over the period, 1998–1999 to 2005–2006, took place only in households where the mother had no education. This contrasts sharply with the all India results which record improvement in stunting for children regardless of the level of the mother's education.

The neonatal, infant and child mortality rates in the two NFHS rounds, at all India level and disaggregated by regions along with that in West Bengal, have been reported in Table 3.5. The all India figures show a statistically significant improvement (i.e. decline) in all the three types of mortality rates between 1998/1999–2005/2006, as do North, South and East India. However, West Bengal is an exception. There was no noticeable change in either neonatal or infant mortality rates, and a very weak improvement in child mortality during this period. The silver lining was that for all the three types of mortality, the rates in West Bengal were much lower than in the country as a whole. It is interesting to note that, while South outperformed the rest of the country, especially, West Bengal on child health, the mortality rates in the South with respect to NM, IM and CM, are no better than in West Bengal—in fact, marginally worse. This suggests that while the quality of medical services in the form of neonatal and post-natal care in West Bengal compared quite favourably with the rest of the country recording some of the lowest mortality rates in all three categories, the same cannot be said of the state of child health in West Bengal vis-a-vis the rest of India, especially South India. Figure 3 in Maitra and Ray (2013) confirms the picture that is contained in Table 3.4. It shows that the mortality rates in West Bengal are no worse than in the rest of India—in fact, most significantly, they are marginally better than in South India which reverses the result on child health. Note, however, that while the South

witnessed a sharp improvement in the mortality rates during the period spanned by the NFHS 2 and NFHS 3, there was hardly any change in West Bengal. There was a small increase in neonatal mortality rates in West Bengal.

Table 3.6 presents the neonatal, infant and child mortality rates, disaggregated by the gender of the child, area of residence, religion, parental education and the wealth quintile the household belongs to. Table 3.5 allows a comparison of the performances of West Bengal and the rest of India. The following features are worth noting.

West Bengal has a gender divide in all the three types of mortality rates in NFHS-3, unlike the rest of India, with boys recording much higher mortality rates.

Table 3.6 Neonatal, infant and child mortality for the different population subgroups: comparing West Bengal to the major states of India

	All India (major states)			West Bengal		
	NFHS II	NFHS III	Difference	NFHS II	NFHS III	Difference
Panel A: neonatal mortality						
Male	0.048	0.042	0.006***	0.034	0.047	−0.013**
Female	0.042	0.038	0.005***	0.027	0.024	0.003
Urban	0.032	0.032	0.000	0.016	0.029	−0.012**
Rural	0.050	0.045	0.004***	0.038	0.040	−0.003
General caste	0.038	0.040	−0.002	0.028	0.036	−0.008*
Hindu	0.048	0.042	0.006***	0.029	0.035	−0.006
Muslim	0.036	0.036	0.000	0.034	0.039	−0.005
Other religion	0.031	0.028	0.002	0.030	0.000	0.030
Mother's education no	0.042	0.042	0.000	0.035	0.042	−0.006
Mother's education primary	0.031	0.032	−0.001	0.020	0.033	−0.013*
Mother's education secondary	0.022	0.016	0.006**	0.007	0.000	0.007
Father's education no	0.055	0.048	0.007***	0.040	0.041	−0.001
Father's education primary	0.053	0.047	0.005*	0.032	0.040	−0.008
Father's education secondary	0.039	0.037	0.002	0.026	0.032	−0.006
Father's education higher secondary	0.033	0.024	0.008***	0.017	0.018	−0.001
Wealth quintile: lowest	0.060	0.054	0.006**	0.039	0.038	0.001
Wealth quintile: second	0.051	0.047	0.004*	0.040	0.038	0.002
Wealth quintile: middle	0.048	0.041	0.007***	0.031	0.045	−0.013
Wealth quintile: fourth	0.036	0.036	0.000	0.018	0.041	−0.023***
Wealth quintile: highest	0.025	0.024	0.001	0.015	0.012	0.003
Panel B: infant mortality						
Male	0.075	0.061	0.014***	0.054	0.059	−0.005
Female	0.075	0.059	0.016***	0.044	0.038	0.007

Source Maitra and Ray (2013)
***: $p < 0.01$, **: $p < 0.05$, *: $p < 0.1$

Table 3.5 suggests that the gender disparity in West Bengal has increased between NFHS-2 and NFHS-3. This observation needs to be qualified by noting that NFHS does not provide information of deaths of children in the mother's womb, so these results are likely to be biased and should be treated with caution.

West Bengal is one of the best performers on all the three mortality rates, as already noted from Table 3.4.

There are strong wealth and maternal education effects on mortality rates in West Bengal, though the wealth effects do not seem to be felt until the third quintile. The superior performance of West Bengal on mortality is also seen from the fact that in each wealth quintile, or for each category of the mother's education, the mortality rates in West Bengal are well below the All India figures.

3.6 Concluding Remarks

This chapter reviews India's economic performance on a range of monetary and non-monetary indicators during the past two decades that followed the major economic reforms in the early 1990s. India's achievements have been many, including high growth rates, moving large numbers of people out of poverty, achieving self-sufficiency in food and even attaining the status of a food exporter, and a significant improvement in her living standards. This paper reports evidence that shows improved household access to a wide range of dimensions such as fuel, drinking water and electricity. There are two areas, however, where the high growth rates did not translate into significant improvements. These are: nutrition and child health. The article draws attention to the uniquely Indian paradox that while poverty rates have declined, the rate of undernourishment has increased. India lags well behind China on child health. The article also reports evidence on the sharp regional differences in maternal and child health during this period. The South, and not the economically prosperous West, leads the way on nearly all the health indicators. India's report card is therefore a mixed one, hence the title "uncertain glory" in Dreze and Sen (2013).

The BJP led NDA swept to power in May 2014, defeating the Congress led UPA which had been in power for a decade since 2004. The election has seen a vigorous debate on the economic record of the UPA government in the past decade. As I conclude this piece, I draw attention to a recent review of the UPA's economic record by Ghatak et al. (2014). In their words, "This article challenges the prevailing view that the diminished electoral prospects of the United Progressive Alliance government is the result of neglecting growth to launch populist welfare schemes. It looks at a wide range of economic indicators to argue that compared to the National Democratic Alliance regime, the UPA period has been characterised by faster growth, higher savings and investment, growing foreign trade and capital inflows, and increased infrastructure spending in partnership with private capital. The UPA's political troubles arise not from policies that hurt growth but from an inability to tackle the consequences of accelerated economic growth—increased conflict over

land, rent seeking and corruption in the booming infrastructure and natural resource sectors, inability of public education to keep up with increased demand and rising aspirations, and poor delivery of welfare schemes made possible by growing revenues" (EPW, 19 April, 2014, p. 34).

The Modi government completed a year in office on 26 May 2015. The report card shows mixed performance. On the positive side, the earlier policy paralysis that marked the closing stages of UPA rule has given way to a proactive spirit and a feeling that things are beginning to move. The government has launched several programmes such as "Swachh Bharat Abhiyan" (Clean India Mission) and the "Jan Dhan Yojana" which is aimed to give access to financial services by low income groups. On the negative side, there has been a deceleration in growth with the growth rate in the first quarter (April–June 2015) in the new fiscal year slipping from 7.5 % in the previous quarter (January–March) to 7.0 %. Investment has yet to show the steady and significant increase that many expected with the election of the NDA government. Severe infrastructural bottlenecks remain as the government tries to tempt foreign capital with its "Make in India" campaign. India's health spending as a percentage of GDP remains at levels that are much lower than in China and her record on several health indicators continues to be worse than even neighbours such as Bangladesh.

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Chapter 4
Post-industrial Development and the New Leisure Economy

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Abstract One of the central tenets of economic and political thinking in the Anglophone countries during the recent phase of globalisation has been the inevitability of a permanent shift away from manufacturing as the central plank of the economy in favour of a new scenario where technical innovation, creative performance and information management are the main sources of activity. A modernist worldview typical of the 1950s would likely characterise this as a process of 'undevelopment'. In a changing world, however, we might elect to see the de-industrialisation of the West as a necessary rebalancing of the uneven development of the colonial era. More commonly, however, the notion of a 'post-industrial' society has been postulated not as a lapse into a pre-industrial epoch or a lasting redistribution of productive wealth, but rather as marking a paradigm shift into a new stage of post-modern social and economic development (Bell 1973; Masuda 1980; Kumar 2005). By this reading, the most developed countries are deemed as having passed through certain stages in economic and social organisation (namely, agricultural society and industrial society) prior to the pursuit of a post-industrial society. This teleology naturally causes us to question the implications of this new paradigm for a country like India, which has invested so much in industrialisation as the ultimate goal of the development process.

Keywords Post-industrial economy · Development · Leisure · Consumerism · Contemporary India

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4.1 Chariots of Progress

Both the 'post-industrial society' of Daniel Bell and the 'knowledge economy' of Peter Drucker were primarily intended to recast the divisive politics of the industrial era (Bell 1973; Drucker 1969). In attempting this, they took note of the new body of knowledge produced by the expansion of mass marketing techniques and inverted the economic paradigm by giving primacy to consumption over production. In the developed world, these ideas provided an expedient intellectual framework for a new economic model following the intertwined crises of Fordism and decolonisation in the 1970s. In a world of increasing industrial competition and energy constraints, the wealth of the West sought perpetuity through a broad realignment towards consumerism, service-renting, out-sourcing, intellectual commodification and the rapid diffusion of information technologies. Since then, the extraordinary influence of neo-liberal politics (consistently masquerading as economics) has provided a highly conducive environment for post-industrial tactics to spread widely beyond their foundational circumstances. Confounding the motivations of its creators, post-industrialism has been adopted across disparate countries and economies, many of which are identified as traversing the earlier stages of the development process. India has been a high profile player in this post-industrial race, with a new image as a hi-tech powerhouse and long-distance service provider to the global economy taking the place of its erstwhile, and self-proclaimed, leadership of the developing world.

Needless to say, this is not a definition of development that would have resounded with the ideals of the founders of modern India, concerned variously as they were with industrial self-sufficiency, state socialism, democratic feudalism, scientific materialism and other paternalistic modes of modernisation. Development can be, and indeed must be, defined along a number of trajectories (variously technological, social, political, economic or intellectual) but the founding premise was the pursuit of a demonstrably modern society, as defined by the great reformist thinkers of the nineteenth century and the technocratic elite that sought to manage the emergence of a new political order in the middle of the twentieth century. In this 'Asian' century, however, the international policy frameworks for development appear to have ascribed to a revisionist goal of empowering a larger proportion of the world's population to become consumers. Logically, then, we could judge contemporary development programmes by the rapidity at which the world's poor are becoming reliable shoppers (and thereby providing value for those who supply the necessary credit). In doing so, given the implicit motivation to 'catch-up' that is inherent to developmentalism as a doctrine (and the Indian approach in particular) the viability of a great leap forward beyond the industrial age inevitably comes into play. Before rushing to score achievements in this regard, however, we should probably question whether a fully industrial society constitutes a necessary prerequisite for a post-industrial transition, or whether the industrialisation stage could be partial (or even bypassed entirely). Rabindranath Tagore was prescient, perhaps, in anticipating the obvious problem of an ill-defined end goal for modernity's progressive agendas (Tagore 1924).

4.2 India at Leisure

Looking at India in the broadest sense, this contemporary ideal of promoting intangible creative labour and directing purchasing power towards recreation and popular culture seems somewhat anachronous. After all, this is still a developing economy where disposable incomes are typically marginal at best, and where the majority of the population lacks the most basic provisions of drinking water, sanitation and a sufficient diet. Further, some very fundamental questions remain about the implicit assumptions of the post-industrial paradigm and its recent application in the developed world. Seemingly, no one has assumed that material production is no longer necessary to sustain a post-industrial society. Rather, the notion has been that, within the new economic geography of globalisation, the developing countries would be happy doing the polluting, labour-intensive industrial work for the benefit of thinkers and shoppers in post-industrial countries. In the aftermath of the recent financial crisis, however, it has become clear that the proponents of the knowledge economy significantly understated the West's diminishing advantages in knowledge production (and in productive capacity overall). India, with its long-term focus on technical education and its advantages in manpower, has certainly proven itself adept in competing in the supply-side of the knowledge economy. The confluence of information technology and offshore processing is now a widely recognised component of India's very own 'New Economy' (Ahmed et al. 2010; Mascarenhas 2010). What concerns me here, however, is an equally, if not more, significant characteristic of India's engagement with globalisation: the push to transform India into a society of consumers.

Beyond the abstract arguments and on the ground, post-industrial utopias inevitably encounter the stark realities of material lack in any society where development is uneven in its progression and distribution. Under such conditions, consumption naturally appears a luxury. In India, 'discretionary spending' has long been cast as a leisure activity within a political economy overwhelmingly defined by scarcity and immediate necessity. In this context, conspicuous consumption was, at best, bad taste and, at worst, an incitement to social discord amongst the impoverished masses. It was by such logic that the Congress justified austerity for India's middle classes during the socialist decades. In India, discretionary consumption has been associated with privilege and higher social status. In the post-industrial West, by contrast, proletarian consumption has long been understood as an economic necessity, and even as a civic responsibility. Nonetheless, despite the vocal distaste of both Gandhi and Nehru for such frivolities, modern India has always had a large consuming economy. As in so many aspects of Indian society, by merit of the sheer size of the population even marginal activity becomes substantive in aggregate. It is equally evident that the everyday field of consumption has always extended well beyond material goods to accommodate the intrinsic cultural needs of complex social organisation. The enthusiasm for a range of pursuits (from sports to movies, from pilgrimages to elaborate weddings and from texting to eating out) has formed an ever increasing

constituent of the nation's social and economic life since independence. That is why one of the most striking features of India's engagement with liberalisation and globalisation has been the runaway success of a sector that was long seen as a marginal concern by India's economic planners. This is India's leisure economy, a vast network of businesses of all sizes and shapes engaged in soliciting the disposable income of a vast country.

4.3 The Media Industries

The Indian media industries have certainly been one of the most visible components of the post-liberalisation leisure economy. The expansion of disposable income, a shift in emphasis from industrial to post-industrial production and the fundamental role of media (as carriers of advertising) in fostering a consumption driven market have all provided support for two decades of very rapid growth in India's media industries. With private capital granted access to areas such as television and radio that were long state preserves, and the granting of official industry status to content producers such as the film industries, a rising tide of investment has transformed India's media environment. Another salient factor in India's 'media revolution' has been the vocal encouragement of global consultancy firms such as PriceWaterhouseCooper, MacKinsey and KPMG, whose endorsement of the investment potential of India's media sector has been carried around the globe (Athique and Hill 2010, p. 59; Ganti 2013, p. 348). The newfound 'desirability' of investments in intangible industries in the developing world has fuelled the expanding global ambitions of the film industry, the domestic television boom, critical mass in ITES, the rapid diffusion of mobile telecoms and the explosion of cross-media advertising. Cohabiting with information technology and telecoms providers under the common umbrella of the entertainment and services category, media businesses have consistently reported a greater rate of headline growth than the rest of the economy (PriceWaterhouseCoopers 2008, 2010).

The media industries thereby constitute a critical component in the changing form of the leisure economy. Their ongoing transformation has been facilitated by significant structural changes in policy and governance (see Thomas 2010). Prior to the liberalisation era, there was a long-standing tripartite division in the Indian media. The primary division within the formal economy was between the state-owned industries and the privately owned business houses. In India, these are collectively referred to as the 'organised' sector. Prior to the 1990s, broadcasting, telecoms and documentary film were all state preserves. Publishing and the press, along with the manufacturing of consumer electronics, were located in the privately held portion of the 'organised' sector. Located across a second division was the 'unorganised' sector, made up of small businesses and traders reaching deep into the unregulated informal economy. Commercial films and popular music operated in the 'unorganised' sector, and therefore at the margins of the informal economy. The informal economy is itself far from marginal, since it is quite

possible that the turnover of such activity exceeds the state-owned and corporate concerns that constitute the 'organised' sector (Dutt and Rao 2000, p. 26). Equally, the term 'unorganised' could be misleading when we consider the great complexity of small-business activity in India. Given the considerable coordination requisite for any industrial mass-media system to operate, I prefer to use the term 'disorganised' in this instance, which implies a dispersal of organisation rather than a lack of it.

In that sense, the Indian film industry of old appeared to be 'disorganised' when compared with the model of formally integrated operations set by the film industry of the United States, where a handful of corporations control the entire product chain from production through to exhibition. By contrast, the 'disorganised' film industry in India was characterised by the dispersal of working capital and assets amongst large numbers of small, independent and highly-specialised operators with a common interest in the successful exploitation of public demand. Typically, these ventures were located across the delivery chain and often had competing interests. This 'disorganised' structure nonetheless made good sense against the backdrop of tight regulations applied to larger businesses and the various incentives introduced by Indira Gandhi in the 1970s for private businesses to remain relatively small. In that sense, the much-derided 'license Raj' of the pre-liberalisation era protected government industries through formal monopolies, protected India's larger private businesses from foreign competition and protected smaller private businesses from the bigger ones. At the bottom of the ladder, the 'disorganised' sector, when it was considered at all in policy schemes, was sporadically targeted for enforcement of regulations and for opportunistic taxation. Critically, it was this informal economy which provided video content, popular music, cable television and other forms of media content around which everyday leisure activity was enacted (see Sundaram 2010).

4.4 The Fruits of Liberalisation

The adoption of the liberalisation doctrine redefined this media environment, as the newly recognised investment potentials in media systems influenced a series of significant policy interventions after 1991. Private enterprise was given the lead in television (1997), telecoms (1999) and radio (2000). At the same time, other regulatory changes removed most of the disincentives for media companies to grow larger, as well as incrementally loosening the restrictions on international trade and investment that had previously kept the Indian media within what was, effectively, a closed market. Subsequently, the commercial application of digital technologies, a wave of domestic investment and the swift arrival of large, vertically-integrated media combines from abroad have invigorated the Indian market. In this light, it is unsurprising that the mass media have vocally celebrated the new regulatory outlook, becoming an exemplar and cheerleader for the liberalisation economy. Although India's business press has consistently

characterised these developments as an unfettering of market forces (and the middle classes) from state controls, it is equally plausible to see this process as one of re-regulation, where the guiding hand of the state switches priorities and creates newly favourable conditions by means of policy. This naturally directs us towards a question that is too rarely asked of neoliberal doctrine: what interests does the state pursue in winding back statism?

Without disregarding the broader 'push' of globalisation, we can identify some plausible 'pull' factors that may explain India's policy changes from a domestic perspective. Divestment of state monopolies in broadcasting and telecommunications has transformed costly public services into lucrative commercial services capable of attracting investment and generating headline growth for the economy. The facilitation of private investment has also been instrumental in shifting 'entertainment' areas such as film and music from the disorganised sector into the organised sector. The advantages of this lie in the revenue streams that were previously occluded within the notoriously tax-averse informal economy. The change of heart towards the commercial potentials of the media is also symptomatic of a broader shift from a formal economic logic centred on production capacity to one driven by consumption growth. For the state, this raises the possibility of a parallel shift towards a consumption-based regime of revenue collection, one which might perhaps mitigate the longstanding failures of income-based taxation in India. In a democratic society there is also an obvious need to demonstrate the fruits of liberalisation to the general population. Seven decades after independence, the perpetual deferral of the fruits of developments is no longer tenable at the ballot box. In this regard, intangible modernity is much cheaper to deliver than the old manufactured product was. The position of the media at the vanguard of economic growth makes perfect sense when you consider the continuing impediments to a Fordist mass market for consumer durables: cramped living spaces, unreliable electricity, import duties, distribution bottlenecks, etc.

By contrast, public entertainment, cellular connectivity and visual culture are all readily accessible and amenable to a wide spectrum of pricing points. Thus, the remaking of the media environment has facilitated new revenue streams that can transcend basic infrastructure shortages in ways that the old manufacturing economy could not. Equally, attention to post-industrial sectors such as advertising and information technology enabled services (ITES) has allowed India to leverage the commercial potentials of its large population and its investments in tertiary education. The shift from one to eight hundred television channels and the parallel expansion of the newspaper industry has also created a good number of middle class jobs. For all these reasons, it is worth paying attention to the degree to which the media revolution has not been so much grudgingly conceded to the market by a discredited state, but actively facilitated by government policy at the federal and state levels. As such, the phrase 'deregulation' is probably not adequate, since it is not simply the repeal of legislative obstacles that has benefited the sector but also the introduction of new legislation that has consciously favoured the development of a 'post-industrial' economic base in urban India. This intervention by government has functioned at a number of levels beyond media policy per se,

from various tax exemptions and investment incentives at the state level to federal schemes for urban redevelopment that reward re-zoning of residential, agricultural and industrial land for ITES, media and retail developments (Aranya 2003; Athique and Hill 2007; Shaw 2007; Sivaramakrishnan 2011).

4.5 The Global Order

While many facets of the liberalisation era do need to be understood within a national frame, it would be disingenuous to entirely disregard the intimate relationship between liberal political economy and institutional forces of globalisation such as the IMF and WTO. Equally, the geopolitical influence of transnational media and information technology corporations, the 'global champions' of the post-industrial economy, has been felt widely throughout the developing world. Thus, for many commentators, media liberalisation can be seen as having been more or less imposed on New Delhi by the balance of payments crisis and the 'invasion of the skies' by transnational satellite television in 1991 (Umchanda 1998; Thussu 2007). In that respect, it is obvious that the fostering of profitable creative and communications industries through the reworking of intellectual property legislation, financial regulation and spectrum sales operates as part of a wider strategic encounter with the globalisation experiment. This engagement also encompasses areas as diverse as biotechnology, pharmaceuticals, information technology, real estate and retail. The overall strategic balance in India's liberalisation programme has been 'opening up' these various markets in ways that foster strong domestic players capable of maintaining equitable partnerships within the global economy. As a sectoral reflection of this dynamic, the expanding interests of international media companies, along with increased foreign investment portfolios in their Indian counterparts, provide an indication of India's incorporation into a broader global media apparatus (see Punathambekar 2013). The close integration of the Indian ITES sector with the global IT industry is an even stronger example of this, evidenced by the operational presence of all the major multinational IT companies in India today.

Once again, this is a sea-change from the doctrines of self-sufficiency pursued in the first four decades of independence. Prior to liberalisation, the role of foreign companies in India was generally constrained to the marketing, importation or assembly of their products in a minority partnership with an Indian concern or through a part-stake in an Indian subsidiary. Two decades on, 100 % foreign investment is now permitted across the film industry, in television programming and in most forms of publishing aside from news. As such, the size and scope of foreign holdings in the Indian media sector has increased dramatically. Japan's Sony, for example, after entering the Indian television market in 1995 with Sony Entertainment Television (SET), has developed further subsidiaries in film production, radio and recorded music along with its core activity in consumer electronics. News Corporation has expanded its interests across the delivery

chain of television, from satellite broadcasting to programming, cable operation and direct-to-home (DTH) systems. Britain's Vodafone Group has become the second largest provider of mobile telecoms with 135 million subscribers through its majority-owned Indian subsidiary. The remaining restrictions on Foreign Direct Investment (FDI) in media, where they do not pertain to news services, are centred on ownership of delivery infrastructure rather than on content (see Kohli-Khandekar 2010). Accordingly, we can see the newly fashionable status of Indian popular culture carried by international media outlets as an indication that those companies now see (or would like to see) themselves as major players in the Indian market. For these foreign investors, it is the obvious saturation of markets for leisure and services in so many developed countries that is driving their search for new markets in the developing world.

We should be wary, however, of falling into the trap of characterising the media revolution as a triumphant parade of foreign capital. The careful handling, and more critically timing, of India's liberalisation programme has facilitated the establishment of dominant domestic players. India's media revolution remains primarily a story of domestic capital, and even some of the 'foreign investment' flowing in through the offshore investment hub in Mauritius seems more likely to be recycled Indian money than global finance (Hill and Athique 2013, p. 605). Nonetheless, overseas recognition has rapidly stoked the ambitions of Indian media companies and played a critical role in leveraging a higher degree of domestic investment from banks and business houses that were previously averse to media businesses. For domestic operators entering the media market, the change in overall policy direction offered fresh pastures on a packed farm, since a handful of established business houses and state companies still enjoyed a tight hold over many other sectors. Subsequently, the massive growth in Indian television provided the necessary bandwidth for the rapid expansion of the advertising industry, naturally predisposed towards backing the wider agenda for establishing Western-style retail businesses to serve an expanding middle class (Mazarella 2003). Elsewhere, the high profile success of the ITES and off-shoring experiment within 'Special Economic Zones' (SEZs) delivered a marked increase in disposable income to its employees, whose greater engagement with 'international' clients and lifestyles made them an obvious constituency for a new 'globalised' culture of consumption. In all these respects, I would argue that the overall influence of foreign companies has exceeded their formal business holdings by a considerable margin.

4.6 Becoming Corporate

It is not merely capital and new technologies that transnational corporations have brought to the Indian market, but also a new set of operational procedures, structures and terminologies. The inculcation of 'international' business models amongst Indian personnel at various foreign-backed operations has clearly been influential upon the overall business culture of the liberalisation period. Many of India's most successful

new media companies have been guided by former employees or business-partners of the multinationals. Naturally, since these business models were formulated under quite different socio-economic conditions, they have been subsequently adapted to the Indian context, what Robertson called 'glocalisation' (Robertson 1994). This diffuse influence upon the overall business culture has been strengthened by the longstanding convention for the Indian elites to seek an overseas tertiary education for their children. As India's middle classes have expanded, their upper echelons have sent their children to join this temporary diaspora, and in the process a growing cohort of students has come into contact with the new managerial disciplines that have formalised the world-view of contemporary American business culture within the university system. Upon returning to India, these overseas graduates have often been instrumental in redefining their family businesses towards this new terminology of commercial motive, innovation and operation. Thus, just as international companies have sought to 'glocalise', their Indian competitors have acquired, emulated and 'indigenised' international business models with considerable success. Following Polanyi, we could see this as an organic process by which the abstractions, and interests, of capital become embedded in extant and enduring social relationships (Polanyi 1944).

Traditionally, Indian commercial culture has been dominated by a family business model, from the lower reaches of the informal economy right up to the small number of big business houses that dominate commercial activity in the organised sector. Capitalisation through share markets has been far less commonplace than it is in developed economies. Organisational structures were often strictly hierarchical and feudal, with a small number of centralised decision makers and a public image that was significantly personalised in the social status of the business owners. The counterpart to this mode of operations was the public sector enterprises, where the stratified hierarchies of the civil service were reproduced within a more secular, but similarly top-down, mode of operations. In that sense, India's old newspaper families were 'press barons' in the older sense of the term, and the directors of the state media were bureaucratic managers rather than business leaders. As investors from India and abroad have begun to invest heavily in media platforms, however, these old operating logics have been infused with a commercial epistemology modelled on North American capitalism. In this implication, there is a significant divestment of operational control to an expanded management stratum, a fostering of internal competition and a greater focus on the projection of 'brand value' within the market. The media companies which are seen to exemplify this new ethos are now generally referred to as 'corporates' in commentaries carried by the media. As a signifier, this term denotes a larger publicly-financed company, a transparent business model and an impersonal, meritocratic operational structure.

This self-conscious public image is a direct result of the inflow of external investments and share capital into the media business, and the subsequent need to cultivate market confidence. Nonetheless, some might say that corporatisation is largely a branding exercise at the very top. Despite their public shareholders and vast size, many of the leading corporates continue to be overtly family concerns. Ambani's Reliance matches Murdoch's News Corporation in this regard. Equally, a strong corporate image can overlay manifestly feudal business practices, as it

became apparent in the Satyam scandal of 2009. Nonetheless, as Tejaswini Ganti notes, corporatization has been a long-championed cause in the Indian film industry, where legitimate finance, consolidation and 'professionalisation' were long seen as remedies for the dysfunctions of the established disorganised structure (Ganti 2013). When it finally came in the 2000s, however, corporatisation proved to be a mixed blessing (Thussu 2008). Well known figures in the film industry, such as Manmohan Shetty and Shyam and Balakrishna Shroff, were initially successful in raising public shares in order to finance the development of a revamped exhibition infrastructure. By the end of the decade, however, Shroff's Fame Cinemas was taken over by INOX Leisure Ltd., a diversification venture of Gujurat Fluorochemicals Ltd. Four years previously, Shetty's Adlabs was acquired by Reliance and incorporated into its BIG Cinemas venture. Thus, corporatisation has instituted a process by which highly specialised firms within the old dispersed structure are displaced by the entry of much larger players with much larger ambitions.

4.7 Integration and Diversification

An immediate consequence of corporatisation has been step-increases in scale and diversification across the previously 'disorganised' terrain, as well as a link up with the new pastures being auctioned by the state. Prior to liberalisation, there were clear distinctions between the major media industries, and it was entirely defensible to approach them as distinct entities with their own specialised markets. Within a decade, this was no longer the case because as corporate investors expanded their fortunes, their holdings become increasingly interlinked. One highly-visible outcome of the capital influx, therefore, was the rapidity of 'horizontal integration' where film and music producers found new profits in television schedules, TV companies began to invest in shopping malls and multiplexes, and advertisers appropriated film culture to market fashion and telecoms. In the absence of restrictions on cross-media ownership, the rise of large-scale media conglomerates under the auspices of business houses like Reliance ADA has co-located the entertainment media with mobile telecoms and ITES. At the technical level, commercial processes of integration and expansion have also been underpinned by the functional impact of digitisation upon the production and delivery chains of previously-distinct media forms. The growing accessibility of multimedia capacity in software and consumer electronics has simultaneously eroded the technical, commercial and aesthetic distinctions between media products. Thus, not only the business environment, but also the everyday experience of media consumption is now characterised by a sensory environment in which cultural goods and communication services are co-located.

The liberalisation doctrine has also furnished the strategic ambitions of these big companies to combine media interests with other sites of leisure such as food courts, shopping malls and theme parks. The diversification of companies such

as SUN TV into domestic air travel, and the co-location and personnel transfers between the media and hospitality divisions of the larger corporates further cements the place of media within the broader field of leisure consumption. Leveraging their capital finance and real estate divisions, corporate operators have held a wide range of interests in the shopping mall boom that has gripped India during the past decade. Here their ambitions have been given material form as a new wave of steel and glass infrastructure has provided suitable ambience for contemporary advertising, cheap floor space for more exclusive cinemas and a wide range of coffee, food and retail franchises for the middle class public. It is not insignificant in this context that the vast majority of purchases in these establishments have been for cinema tickets, food and beverages. This is a further indication of the growing interface between 'traditional' media and a larger and more tightly orchestrated leisure economy. Indeed, it is defensible to argue that these are primarily entertainment, rather than retail, developments. As a capacity-building programme for the consumer economy to come, the primary function of the mall revolution has been to provide comfortable and secure leisure space for time-pass by the more affluent sections of the population.

While Jawaharlal Nehru saw cinema halls as (literally) a waste of concrete, it has become abundantly clear that the leisure economy has to be understood as much more than an ephemeral activity. For good or ill, the status of the multiplex and mall combine in urban India today is a powerful indication of how the infrastructure of consumption has replaced industrial output as the symbolic measure of progress (see Athique and Hill 2010; Brosius 2010). In this new operating environment, the difficulty for media scholars in analysing those businesses in isolation from the interests of the wider leisure economy becomes acute. Equally, by consciously targeting the epicentres of the 'new economy' (such as software parks and orbital developments) as their target markets, the flagship leisure developments of the liberalisation era have underscored the perceived correlation between post-industrial production and recreational consumption. In that respect, the present contours of the leisure economy in India are being dictated to a significant extent by the dynamics of India's metropolitan real estate, comparable ambitions for the retail sector and the diversification projects of companies originating in previously favoured heavy industries such as textiles, chemicals, sugar and plastics. Therefore, as if the conceptualisation of a broad leisure economy was not sufficiently challenging in itself, we also increasingly need to be aware of the ways in which leisure activities are themselves being integrated into India's formal economy.

4.8 Consuming Culture

The very proposition of an Indian leisure economy indicates three major pairings of culture and economy: the political economy of the cultural industries, the anthropology of commercial activity and the cultural specificity of India which attaches particular symbolic meanings to leisure. Most likely, it is the interchanges

between these three pairings that will determine the future direction of the leisure economy. Having addressed the first two pairings to some extent, it is fitting that we now turn our attention towards the culture of contemporary media content, and the broader culture of consumption to which it relates. The aesthetics are, at least, familiar. The ascendance of the Bollywood brand, and its dominant position within an expanded field of popular culture, plays a central role in the promotion of a recreational consuming economy. As the pre-eminent resource within a restricted field of popular culture under the earlier paradigm of development, it was perhaps inevitable that the new outlets of commercial television and internet content would turn to the popular film for their central aesthetic. As much as the emulation of an international standard in the audiovisual field predisposed the adoption of Western media formats, it was the semi-illicit cultural capital of the Indian cinema, and its ritualised iconicity, that presented itself as the most suitable vehicle for the 'glocalisation' of those formats. On the big screen, the new hero, as he moves between businesses in New York, shopping in London and endless marriage celebrations in Punjab articulates an 'ideal' globalisation for the Indian middle classes.

Explicitly, these discursive attempts to stabilise Indianness via the paradigm of the global Indian are intended to assert cultural particularity against the tide of a material creed dominated by the West. Implicitly, however, the 'global Indian' as a newly privileged subject of popular culture marks the appropriation of occidental pleasures (Kaur 2002). This dual address, which is intended to mitigate the contradictions of globalisation within a consciously nationalistic frame, has also been identified as the most suitable vehicle for commercial persuasion in a developing society where the tradition/modernity binary still holds sway. Outside of the screen space itself, the limited availability of recognised celebrities has seen a small stable of Bollywood stars dominating the brave new world of commercial advertising. The huge painted images of movie stars that previously graced the facades of Indian cinemas are now replaced by countless billboards across the front of malls, where those selfsame faces now promote mobile phones, cars and cosmetics. Although it is not readily apparent whether Shah Rukh Khan advertising scores of different products really constitutes star value for the advertisers, as opposed to simply extending the brand value of Shah Rukh Khan, it is clear that the iconic status of the star image formally expresses the wedding of culture and commerce that guides the new leisure economy.

As Sudhanva Deshpande notes:, the 'new, consumable hero wears Gap shirts and Nike sneakers, and when he dances, it is in front of McDonalds outlets in white man's land, or Hollywood studios, or swanky trains, and has white girls— not Indian peasants—dancing with him (Deshpande 2005, p. 197). As with most aspects of the 'New India', the cultural field of the leisure economy is demarcated by a very particular social imagination. It is a worldview overwhelmingly determined by the perceived aspirations of a middle class 'unfettered' by liberalisation. Although longstanding speculation on the economic potential of India's middle classes has given us a textbook case of optimistic, and often self-interested, marketing literature, there is no doubt that the extent of the median ranges of India's population has grown steadily in recent decades. In the process,

the old, bourgeois culture of the neo-colonial class, and its autocratic socialism, has been supplanted by a more emotive, populist and middlebrow culture which is assertive in its material aspirations and highly conscious of its new found status. It is this group that now bears the burden of the development process, being given an instrumental definition as the 'consumer classes' by the National Council of Applied Economic Research (NCAER 1994). Under this scheme, India's middle classes, situated between the tiny elite and the utterly destitute have been classified under three bands, 'consumers', 'climbers' and 'aspirants' (Varma 1998, p. 171). According to Leela Fernandes, this 'culturally constructed' imagined community is intended to embody 'a cultural standard associated with the globalising Indian nation' which 'proponents of liberalisation have sought to deploy…as an idealised standard that other groups can aspire to' (Fernandes 2004, p. 2418).

In the early years of this century, Gurcharan Das' book India Unbound made a powerful case for rebuilding Indian economy and society around the industriousness and aspirations of these new middle classes (Das 2002). According to Das: 'When half the population is middle class, its politics will change, its worldview will be different…Thus to focus on the middle class is to focus on prosperity' (Das 2002, p. 351). In this context, it is perhaps unsurprising that the cultural form of media content in the present epoch has been particularly indicative of a consistent, if not always coherent, push to create a hegemonic cultural address that articulates the ideal of a 'globalised' consuming middle class. After all, it is the capacity and propensity of these groups to consume that underpins the business models for commercial media expansion, and which provides the 'eyeballs' that attract investment flows into the media. As such, the symbolic dominance of the consuming class in the social imagination is inevitably played out in both textual and material realms. It is the prevailing trope across the intertextual range of what Anustap Basu has called the 'geo-televisual aesthetic' of contemporary Bollywood style (Basu 2010). It is materialised in the new leisure infrastructure that allows the corporate leisure economy to physically distance itself from the chaotic 'Third World' economy of the recent past.

4.9 Limits of the Leisure Economy

The enlargement of the leisure economy under the corporate paradigm necessarily encounters the inherent dichotomy of the mass market. That is, in laying claim to a universal system of exchange they make an implicit commitment to the entire population, where in fact their commercial rationale and the interests of their investors do not extend beyond a fraction of that audience. To date, the liberalisation era has seen a rapid profusion of new media services, cafes, restaurants, bars and clubs become available for the high to middle income groups of urban India, but the same cannot be said for larger groups that are poor, rural or both. Nor can we say that the constellation of media and retail taking shape in the corporate sector is indicative of India's leisure economy as a whole.

For the urban poor, the continued existence of the old leisure infrastructure in the form of dilapidated family-owned cinemas, open grounds and street vendors alleviates to some extent their exclusion from the ambitions of the corporate operators. For onlookers, the differences in ownership, operation and, increasingly, content between the two infrastructures is glaringly apparent. In the organised sector, imported models of retail operation, American jeans and the multi-media Bollywood aesthetic rub shoulders with branded advertising, cell phones and Hinglish conversation. In the disorganised sector, the regional-language films that have been largely eschewed by the corporates are played for an audience that marks the intermission by chewing paan, smoking beedies and buying snacks from itinerant vendors on the pavement outside.

The present limitations of the constituency for the organised leisure economy, large as it may be in numerical terms, indicate the inherent difficulty of instituting formal consumerism in a developing country. Whether the corporate operators will eventually seek to service the bulk of the Indian population remains debateable, since it would be dependent upon the capacity (and the desire) of organised leisure to cater to audiences whose purchasing power is small. Since it is unlikely that the half a billion Indians living a hand-to-mouth existence are likely to join the consuming classes any time soon, we can reasonably expect to see the continuance of both tiers of leisure infrastructure for many years to come. At one level, we could see this positively as evidence of a more mature market where consumers can be targeted effectively on the basis of their interests and assets. More negatively, we could see this as the narrowcasting of divergent taste cultures separating the haves and have-nots in the new India. Looking forward, it certainly seems entirely plausible that the middle and lower classes will be formally separated in terms of their cultural environment and their leisure entitlements. Some would say, perhaps, that it has always been so. Nonetheless, access to communications and entertainment are basic necessities for participation in a modern society, and India's leisure economy therefore requires more serious consideration as an intrinsic component of social and economic development.

As with so many things, the sheer scale of Indian society also provides a useful illustration of the applicability of a post-industrial model of development. With its enormous human resources, India has demonstrated within a short space of time that it possesses the intellect, organisation and acumen to develop a sophisticated range of post-industrial activities. It is also clear that within the confines of the consuming classes there is sufficient wealth and demand to justify the ongoing formalisation of the leisure economy in India. This domain has already proved large enough to accommodate numerous major players alongside competitors from overseas. The seemingly successful translation of the overlapping logics of liberalisation, corporatisation and consumption into the Indian context would appear to indicate that the post-industrial model does have real economic potential for the developing world. It would also appear to answer my earlier question on whether such tactics are readily available to countries which have not yet achieved a fully-industrialised economy or a fully-developed national infrastructure. Along with rapid take-up of investment opportunities, new technological innovations

have clearly allowed India to quickly overcome the infrastructure bottlenecks that its critics incessantly point out.

On a more cautious note, the present form of the leisure economy also provides an indication that the post-industrial model can only be applied selectively. Just as the majority of India's post-industrial productive capacity serves overseas clients, it is equally apparent that the corporate leisure economy necessarily competes for the attention of an overall minority of the domestic population. After a decade of exuberance and investment, the hardships now being caused by the rising cost of basic foods threaten a contraction of the discretionary spending upon which the sector depends. All of these factors serve to illustrate that the post-industrial model of development remains very much dependent upon the prior, and continuing, sustenance of agricultural and industrial systems (see Dev and Chandrasekhara Rao 2009). As such, India is no better placed to make a transition into a putative post-industrial society than the world is as a whole. Accordingly, the uncertain fortunes of the post-industrial paradigm remind us of the inherent flaws in any 'staged' approach to development. In practice, the leisurely ideal of a post-industrial society can only be realised, in any part of the world, as a subset of activities within a larger and more diverse society. For the sensible, therefore, India's leisure economy should be seen as a component of the development process, rather than being its ultimate goal.

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Part II
Food Security

Chapter 5
India's Evolving Food and Nutrition Scenario: An Overview

Srikanta Chatterjee

Abstract After 60 years of planned economic development, the Indian economy has many achievements to its credit, but the ability to provide its vast population with an adequate, let alone balanced, diet is, sadly, not one of them. While India experienced widespread famines with surprising regularity in the past, independent India can be said to have avoided that. However, hunger and malnutrition have continued to plague India to this day, despite the dramatic improvements in its economic growth in recent decades. This chapter examines the evolution of India's food economy and its administration since independence in some of its relevant aspects. Its purpose is to understand the underlying issues by identifying the factors and forces responsible for the unresolved problem of India's food and nutrition insecurity and its concomitant, the widespread maternal and child undernutrition. It looks at the current situation in respect of the availability and affordability of food, and how they affect people at different levels of affluence in both rural and urban India. It then turns to the examination of food and nutrition policies and their interaction with poverty, its measurement and alleviation. The passing of the National Food Security Act in 2013, guaranteeing access to food as a right, is discussed next to assess how its provisions might influence India's quest for greater food and nutrition security. The chapter finishes on some general observations on the food sector of the Indian economy.

Keywords Food security · Nutrition security · Right to food · Child nutrition score (CNU) · Child undernutrition index (CUI)

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5.1 Introduction, Motivation and Outline of Study

5.1.1 Setting the Scene: Economic Growth, Hunger and Nutrition in Contemporary India

After four decades of relatively slow growth since the early 1950s, the Indian economy was subjected to a radical policy shift following a short-lived economic crisis in 1990/91. This policy shift involved the opening up of the economy to greater competition both domestically and, especially, internationally. In the new scheme of things of the post-reform era, the role of the private sector has come to be enhanced. Although the strategy of planned development was not abandoned, its prominence was reduced. After a period of adjustment following the reform programme, India's total and per capita GDP growth rates rose significantly above the long-term trend rates achieved in the past. India's GDP, valued in international prices, is currently the third highest in the world, and its GDP per capita has more than doubled in a relatively short period of time. Despite the relative slackening of the growth rate in the last couple of years, the prospects of returning to higher growth remain good.

While this 'economic boom' has drawn admiring attention from the rest of the world, perhaps a less publicised aspect of India's recent economic transition has been the persistence of widespread hunger and malnutrition. The reasons for this unwelcome state of affairs are many and complex. This paper examines the factors and forces, both domestic and global, which have contributed to this continuing 'boom' in hunger. The global food economy too has been facing some serious problems in recent years as evidenced by the upward trend in the price of many food items, particularly staple food grains. Although the rising trend has eased somewhat, there is no certainty that the prospect of hunger and malnutrition that many countries face, especially in sub-Saharan Africa and South Asia, will ease off in the near future.

The main focus of this chapter is hunger and malnutrition in India as part of a global phenomenon. India's economic performance is only a related side focus. In light of the ongoing changes in the world food economy, this chapter addresses several interrelated issues relating to the global and Indian food situation. In particular, it investigates the issues of hunger and undernutrition. After a broad-brush overview of the world food situation, it looks at the issue of hunger, its measurement, global incidence and mitigation targets. It then goes on to India's performance and policies in the area of food production and distribution as they have evolved over the years with a view to assessing the impact the policies have had on the availability, access and absorption of food in rural and urban India. As inadequate nutrition has been a persistent problem in India, the chapter takes up the issue of nutrition as a concept and its measurement, especially in relation to India. Indian policy-makers have always viewed undernutrition as an integral part of the conceptualisation, measurement and remediation of poverty. The chapter

examines this approach from the perspective of nutrition, to understand how India's efforts at measuring and alleviating poverty have shaped its attitude to, and performance in, the nutrition area, with a particular focus on child nutrition. An examination of India's recently legislated National Food Security Act and how it might help alleviate the problem of food and nutrition insecurity are discussed next. Some general observations on India's food sector and its remaining issues complete the chapter.

A note of clarification: the focus of this chapter is food and nutrition, not poverty, although the two areas are deeply interrelated, especially in the Indian context. The issues of poverty that this chapter covers are all related to its general theme of nutrition, and not as themes in their own right.

As one of the basic necessities of life, the availability, quality and affordability of food are of concern to individuals and nations alike. Following what has come to be called the Green Revolution, which started in the late 1960s, and involved the introduction of some high-yielding new seed varieties, better use of irrigation facilities and fertilisers, the world enjoyed several decades of relative stability in the price of basic items of food, including food grains. The period from the early 1970s to 1990 saw world food grains and oilseeds output rise steadily, by an average of 2.2 % a year, with periodic fluctuations. With the exception of parts of the African continent, the rate of growth of food crops exceeded that of the world population, leading to an increase in their per capita availability, and to their relatively stable prices. Indeed, world food prices in real terms were at their lowest in one hundred years in 2000 (Trostle 2008).

However, over the decade since the early 1990s, the rate of growth of grains and oilseeds production had declined, globally, to 1.3 % a year, and the projection was for it to decline further to around 1.2 % over the next decade. This and a few other adverse factors contributed to the rapid rise in the world market prices for major food products since early 2006, recording an increase of around 60 % in just 2 years to early 2008. Recent figures indicate some moderation in the global food prices. The United Nation's Food and Agricultural Organisation (FAO) regularly prepares and publishes various food- and agriculture-related statistics including the food price index (FFPI). Recently reported figures record the FFPI averaging 203.9 points in July 2014, down 1.7 % from the July 2013 index. Welcome as these downward price movements are, the general climate of food price movements continues to be worrying. Rising retail prices of food items around a fluctuating trend globally has raised the spectre of another global food crisis especially in the poorer countries where achieving food security remains an elusive goal.

5.1.2 Hunger and the Need for Food

The world food scenario continues to be volatile, at best, as the discussion above has alluded to. Clearly, policies are needed to alleviate the problem of hunger

and improve food security. Let us first consider briefly the issue of hunger and its measurement.

Every day, millions of people around the globe do not get enough food to eat and remain hungry. Hunger has been referred to as "the uneasy or painful sensation caused by a lack of food" and "the recurrent and involuntary lack of access to food" (Anderson 1990). There is no assurance that these hungry people will get the minimum required quantity of food on a daily basis anytime soon. This unpredictability about where the next meal will come from is called 'food insecurity' as a general concept. The FAO defines food insecurity as: "A situation that exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life." (FAO 2000).

Following this definition, people are hungry if they do not get enough energy supply from food, fewer than about 1,800 kcal a day, as per an FAO benchmark, and/or if the food they consume is not of sufficiently high quality, i.e. lacking adequate essential nutrients. Hunger is usually understood to refer to the discomfort associated with lack of food (IFPRI 2010).

5.1.3 Hunger Targets

Having thus defined hunger as an operational concept, it is necessary and useful to measure it and to track how it changes over time. This is probably better achieved if a target or targets are set, and the observed incidences of hunger are measured against those targets to ascertain whether the observed trends indicate an improvement or a deterioration. Two main hunger targets are currently monitored by the FAO. They are the World Food Summit (WFS) target and Goal 1 of the Millennium Development Goals (MDGs).

During the World Food Summit in Rome (1996), the world leaders made the commitment to decrease the number of undernourished people to around 425 million by 2015 (considering 850 million undernourished people as the baseline during the period 1990–1992) (FAO 2011).

At the 2000 Millennium Summit in New York, this objective was reiterated when the eight "Millennium Development Goals" (MDGs) were introduced. The first goal pertains directly to hunger, which is the fundamental global issue of concern for FAO. It aims to reduce the number of people suffering from hunger between 1990 and 2015. "Goal 1 of the Millennium Development Goals (MDG) calls for a reduction by half of the proportion of people suffering from hunger between 1990 and 2015. Rather than setting a definite number to be reached, this hunger objective therefore depends on the size of the future world population" (FAO 2011; United Nations 2010).

5.2 Hunger and Undernutrition Status: Measurement and a Global Perspective

5.2.1 Global Hunger Index (GHI): Measurement and Regional Distribution

The International Food Policy Research Institute (IFPRI) has introduced the "Global Hunger Index" (GHI) tool to measure and track global hunger. The index combines three hunger indicators, which are: (1) the number of the undernourished as a proportion of the total population; (2) the proportion of underweight children under the age of five and (3) the mortality rate of children under the age of five. The three indicators are assigned equal weights. On a 100-point scale, the higher the value of the index, the worse is the incidence of hunger, implying that a score of 0 indicates no hunger, and 100 indicates the worst possible hunger—both of these extremes are, obviously, just 'notional', not observed in practice. Different hunger scenarios are defined with the help of the GHI. An index value less than 4.9 indicates 'low hunger'; values between 5 and 9.9 'moderate hunger'; between 10 and 19.9 'serious hunger'; 20–29.9 'alarming hunger' and values in excess of 30 indicate 'extremely alarming hunger'.

5.2.2 The Regional Dimensions and Distribution of Hunger and Undernutrition

According to the FAO estimates, the level of global hunger has been declining since 1990, but was still stubbornly high in 2013, with 805 million people, or about one person in every eight in the world, remaining chronically undernourished, i.e. "not getting enough food to conduct an active life" (FAO 2014). As measured by the Global Hunger Index (GHI), the state of hunger in the developing countries as a whole is now 39 % lower—from a score of 20.6 to 12.5—than in 1990, when the GHI was first introduced; 26 countries have achieved a reduction in their GHI score by 50 % or more. But, despite the overall improvement, there remain significant regional variations in the incidence of hunger. Sub-Saharan Africa and Southern Asia remain the regions with the highest hunger levels, even though they have both achieved the highest absolute improvement since 2005. The largest number of undernourished people lives in the developing countries where chronic hunger still afflicts a significant proportion of the population. Despite the steady decline in the incidence of undernourished, the rate of this decline has not been fast enough to enable the target set by the 1996 WFS of halving the number of hungry people to be met by 2015. The 2001 MDG hunger target for hunger reduction by 2015 in the developing regions is less ambitious, and may only be missed marginally.

Hunger levels as indicated by the GHI scores for 120 countries in 2013 place 44 countries in the low hunger, 21 in moderate hunger, 39 in serious hunger, 14 in alarming hunger and 2 extremely alarming hunger categories.

The IFPRI (2014) Report on global hunger points to the prevalence of another kind of hunger, which it calls 'hidden hunger', as reflected in the micronutrient deficiency affecting some 2 billion people around the world. These are deficiencies in the diets of essential vitamins and minerals which have irreversible health and socio-economic consequences.

5.3 Hunger and Nutrition in India: A First Look

5.3.1 Counting the Hungry: India's Dismal Rank

India ranks 55th out of the 120 developing economies and economies in transition. Between 2003–04 and 2008–12, the hunger index value for India had declined from 24 to 21, with all three components of the index declining in proportionate terms. The undernourished had declined over this period from 21 to 17.5 %; underweight children from 43.5 to 40 % and under-five mortality from 7.5 to 6 %. But, with new estimates of the incidence of India's child underweight—the first since 2005–06—showing a significant improvement, India's GHI score of 21 in 2012 has fallen to 17.8 in 2013. As a consequence, India is now in the category of 'serious' hunger, an improvement from being in that of 'alarming' hunger in 2012. The prevalence of hunger at India's state level is also quite widespread.

The India State Hunger Index (ISHI), constructed in 2008, is directly comparable with the GHI as it too used the same indicators to construct the hunger index, viz. undernourishment, child underweight and child mortality. The ISHI used a calorie norm of 1,632 kcal per head, per day. Out of the 17 states for which the ISHI was computed, 12 were found to be in the alarming category, i.e. with scores of between 20 and 29.9; one in the extremely alarming category, with a score above 30, while the remaining four were in the serious category, with scores between 10 and 19.9 (Menon et al. 2009). There was not a single state with low or even moderate hunger. More than one-third of the Indian adults were found to be consistently underweight, i.e. below the standard defined as 'normal' (11th Five year Plan, Govt. of India).

The basic issue in these grim statistics of course is 'food' in a broad, if a little crude, sense. Let us therefore consider the food situation in India, which is our primary focus, in some of its relevant aspects. A slightly more nuanced approach to examining food in the present context would be to consider it in its relationship to nutrition and the question of security in respect of both. Three interrelated components affecting food and nutrition security are the availability, access and absorption, or the three 'A's, of food (Swaminathan and Bhavani 2013). Net availability of food in any given year would be determined by domestic production plus net imports and the use of any existing stocks, less seed and wastage. Using

food grains to indicate food, changes in food grains in this context would allow monitoring net food availability. Given the way the food sector of the Indian economy had come to be organised since the early 1950s, the availability of food and the access to it for a large section of the population are closely intermingled. A brief look at how the food economy of India has evolved over this period would therefore be instructive. This will shed light on the interrelated issues of availability and access, the issue of food absorption will be taken up later in connection with nutrition, which is more closely linked to the absorption aspects of food and nutrition security.

5.3.2 Food: Production, Access and Availability

Indian planners had an almost obsessive concern to achieve self-sufficiency in food. The production, price and distribution of food had, therefore, always been closely watched by policy-makers. Over the period 1950/51–2006/07, India's population grew at an annual rate of 2.1 %, while the production of food grains grew by 2.5 % a year. This led to a steady increase in the per capita availability of food grains and a decline in India's dependence of imported food grains. However, something rather unusual happened over the period since 1990 when India pursued major economic reforms, and achieved a much higher growth rate of GDP, total and per capita. The annual growth of food grains production over the period 1990–2007 fell to 1.2 %, against an annual population growth rate of 1.9 %, leading to a decline in their per capita availability by some 13 %—from a peak of 468 g a day per head in 1990/91—412 g in 2005/6 (Patnaik 2007). The situation has improved somewhat since then as per capita availability has increased to 438 g per day by 2011. At the same time, India has emerged, more recently, as a net exporter of food grains which have come to account for a large proportion of its agricultural exports, thanks in no small measure to WTO-compatible subsidies paid to exporters (Chatterjee et al. 2010).

5.3.3 Food Policy and Institutions for Implementation

The economic reforms of 1991–93, alluded to earlier, did not contain any specific policies for the agricultural sector directly, but changes taking place in other sectors of the economy have had several significant effects on Indian agriculture, both in respect of production and consumption. Two main objectives of agricultural policy in India since the early days of planned development have been to (a) increase food production and (b) improve food availability for the consumers. The overarching aim of these policies, it is useful to remember, has been to ensure food security through mainly domestic arrangements. Policies used to achieve these objectives included (i) the use of minimum support prices (MSPs)

via regular and guaranteed procurement of specific food grains; (ii) the use of open market operations to maintain seasonal and year-to-year price stability; (iii) the maintenance of buffer stocks of food grains and (iv) the use of the public distribution system (PDS) to make food grains available at affordable prices to ensure a degree of food security for poorer people in particular.

The administrative set up to implement these measures consisted mainly of two institutions, viz. the Commission on Agricultural Costs and Prices (CACP), which sets the appropriate MSP, and the Food Corporation of India (FCI), which is responsible for procuring the food grains, at prices that are not below the MSP. Revised annually, the MSP for fair-to-average quality (FAQ) grains has been used by the government to procure wheat and rice in the surplus areas during harvest either directly from the farmers or from farmers and millers, the latter through a system of levies on the millers (Jha et al. 2007, p. 4). The grains so procured are stored by the FCI for distribution to the state governments to ensure adequate supplies through the subsidised PDS. Sufficient buffer stocks are maintained by the FCI to support the PDS, and to permit exporting any surpluses, when appropriate.

The economic reforms of the 1990s ushered in a more open economy which saw reductions in the protective structure supporting industry. This helped improve agriculture's domestic terms of trade, thus providing greater incentives for investment in this sector. More importantly, with reduced border controls, the MSPs, for the first time, started taking international prices into consideration. The more liberal import regime made the generally lower domestic MSPs of food grains to face more competition from often-cheaper imports. This led to intense lobbying by (big) farmers to increase the MSP to protect domestic farming against cheaper imports. The procurement prices of wheat and rice have been raised sharply through the 1990s and beyond. While this benefited a small proportion of farmers who received the higher MSPs, it had a seriously detrimental effect on the consumers who faced a sharp rise in the prices of wheat and rice, their staple diet.

One consequence of this rather perverse incentive structure in an economy seeking to become more open had been a burgeoning of the buffer stocks of wheat and rice, procured at raised MSPs. At the same time, wholesale and retail prices of wheat and rice in the private markets rose through the 1990s as larger government procurement combined with an often-stagnant per capita production of these crops started having their impact. All this had combined to result in the ominously paradoxical development of a decline in per capita cereal consumption against the backdrop of India's faster economic growth in recent decades (Rakshit 2003). As indicated above, the situation with regard to the per capita availability of cereals has improved somewhat in more recent years. The underlying uncertainties in this area have been compounded by the rise and fall of the rupee against most major currencies over the last few years causing the landed costs of imported grains to, also, fluctuate.

India's food policy has always had a strong government involvement in the form of the PDS, as discussed above. The Government of India's Economic Survey 2007–08 summarised the objectives of food management in India as follows: "procurement of food grains from farmers at remunerative prices, distribution of

food grains to the consumers particularly the vulnerable sections of the society at affordable prices, and maintenance of food buffers for food security and price stability" (Government of India 2008). Thus, access to some basic food items for a large number of people was underwritten by the government. As observed earlier, the PDS, with a network of nearly half a million fair price shops (FPS), had long been the backbone of India's food safety net and a major instrument in the government's anti-poverty programme.

In mid-1997, this universal system was changed to make it a Targeted PDS (TPDS) which introduced the distinction between 'below-poverty-line' (BPL) and 'above-poverty-line' (APL) households in setting the quantity and issue price of the subsidised food grain items. This was further tightened in December 2000 with the introduction of another food-based welfare scheme, the Antyodaya Anna Yojana (AAY), which made the TPDS even more targeted—in favour of the very poor, i.e. the destitute, who constituted some 10 million, out of around 65 million BPL households, covered by the TPDS. These changes had the effect of depriving many poor households of subsidised basic food items—in many instances their only affordable access to food. Let us therefore examine the evolving scenario of India's food consumption and nutrition, especially child nutrition. But, first, let us take a quick look at some conceptual issues of nutrition and its measurement.

5.4 Nutrition as a Concept and Its Measurement

5.4.1 Food, Diet, Nutrition and Health as Scientific Concepts

Nutrition provides the energy, which is the key to leading a healthy and normal life, i.e. performing the tasks an individual needs to perform on a daily basis. Energy is derived from the consumption of food, and is usually measured in units of calorie contained in the food consumed. However, since individual lifestyles vary and bodyweight and physical activities undertaken are also not the same for everyone, the dietary energy needs of people also vary. International expert bodies like the World Health Organisation (WHO) and the FAO have produced recommendations on human nutrition requirements for adult men and women and also for children. In preparing these recommendations they take into consideration such factors as age, height, bodyweight, levels of activity of people, and also other special physiological conditions such as pregnancy and breastfeeding. These factors can of course vary across countries because of differences in their other, non-physiological, attributes. Measuring undernutrition with common weight/height standards can therefore be misleading. Recognising this, different countries have come to develop what are referred to as the recommended dietary allowances (RDA) for their own populations.

Nutrition specialists in India have a long tradition of monitoring the changing demographics of the country, as well as the changes in the lifestyle and other factors relevant to people's energy requirements. This information has then been used to

develop the RDAs for people in specified categories such as age, gender and the level of activity. The RDAs are usually expressed in terms of kilo calorie per day required by an individual in a specified category. A gap in the daily calorie intake, measured as the difference between the recommended and the actual intake of calorie, may be an indication of food insecurity, especially if it is observed for a sizeable population cohort and over a period of time. The idea of a 'healthy diet' of course involves more than just a certain amount of calories consumed; it needs to be 'balanced', with the inclusion of other nutrients such as protein, fat, vitamins and minerals. It depends also on the absorptive capacity of the individual which, in turn, can be compromised by the state of the individual's health. A distinction therefore needs to be drawn between food security, as defined above, and nutrition security. There are several dimensions of these issues which are addressed below.

5.4.2 Some Anthropometric Measures of Nutritional Status: A Brief Note

To assess human health, nutrition and growth status, nutritionists traditionally use anthropometry, defined as "measurements of the variations of the physical dimensions and the gross composition of the human body at different age levels and degrees of nutrition" (Jelliffe 1966). For adults, body weight is often used as a broad indicator of 'health'. By comparing an individual's bodyweight against some given or accepted 'ideal' or 'desirable' height-to-weight ranges, it is possible to categorise him/her as underweight, overweight or obese. Another commonly used method which compares an individual to a population group is the body mass index (BMI), which is an index of weight adjusted for physical stature. It is calculated by dividing weight in (say) kilogramme by height in (say) metres, squared and multiplied by 100. Of course, other factors such as a person's age, gender and ethnicity need also to be taken into consideration in the application of the BMI as a diagnostic tool. For infants and children under the age of five, measurement of the physical growth has been the single most important method of assessing their nutritional status. Inadequate or nutritionally poor food and adverse environments such as unhygienic living conditions in which a child grows up combine to diminish a child's resistance to infections and, together, they inhibit the child's physical and cognitive growth. These conditions are closely related to the general standard of living which the child is born into. Indeed, even a well-fed child might fail to be well nourished if its capacity to absorb the nutrients from food is restricted by the prevalence of diseases or lack of hygiene and sanitation in its living environment.

Taking these factors into account, a WHO Working Group (1986) decided that stunting or long-term growth faltering can be measured by appropriate height-for-age of a child, and wasting can be measured by appropriate weight-for-height of a child. The former can be said to measure the linear growth and the latter the body proportion of a child. The two are then combined to give weight-for-age as a

convenient way to diagnose underweight children. The incidence of undernutrition in a cohort of children is assessed with the help of the three anthropometric criteria—weight-for-age, height-for-age and weight-for-height. There are internationally accepted reference standards originally set by the National Centre for Health Statistics (NCHS) of the USA and the WHO, and specified deviations from these standards are used as indicators of stunting or wasting in a given population of children. Nutritional anthropometry lends itself also to categorise survey results according to specified social and demographic characteristics such as age, sex, region of residence and ethnicity, for example. Because the NCHS reference standards are based on the health status of a particular country, the USA, their applicability to populations of other countries has come to be questioned on both biological and technical considerations. Accordingly, the WHO has gone on to develop more refined international global database on malnutrition (De Onis et al. 1993) based on representative data from surveys worldwide. These are not of direct relevance to the present research the focus of which is India; so let us return to the theme of India.

5.5 Hunger, Nutrition and Poverty: A Broad Survey of India's Post-independence Experience

5.5.1 A Calorie Measure of Hunger and Poverty

As a country with widespread and acute poverty, the issue of hunger and its remediation has always been tied up with the issue of poverty in India. It is not surprising therefore that attempts to define and measure poverty in India have involved the ideas of food consumption, nutrition and a balanced diet. The Indian Planning Commission appointed a working group in 1962 to examine the issue of poverty both as a concept and, particularly, as a tool for designing policies for its alleviation. In attempting this task, the group used the recommendations on a balanced diet made by the Nutrition Advisory Committee of the Indian Council of Medical Research (ICMR). By working out the money value of the minimum required consumption levels of food and a few other items of consumption of a household, the Group provided the idea behind a designated 'poverty line'. Using 1960/61 prices, the Group advised that the national minimum consumption need for each household of five members, or four adult-equivalent members, should be not less than one hundred rupees, or twenty rupees per head per month, in rural areas and one hundred and twenty five rupees in urban areas, to take care of the usually higher prices of goods and services. Households unable to afford these minimum consumption levels were considered 'poor'. These figures, it is worth noting, did not include expenditure on health and education as these were assumed to be provided by the state.

In the following decade, a seminal early academic research on poverty was conducted by Dandekar and Rath (1971). The study was wide ranging and addressed many issues relating to poverty in the Indian context. It also accepted the idea of a level of minimum expenditure per head per month as a measure of poverty. In its empirical computations, it used the data collected at regular intervals by India's National Sample Survey Organisation (NSSO) on the distribution of consumption expenditure on major items by households in the rural and urban areas. The NSS information on the consumption of 'food grains and substitutes' and 'other items of food' for the rural and urban populations, together with the recommendation of required nutrition by experts, enabled the authors to suggest that the availability of 2,250 kcal per head per day for both rural and urban areas was 'adequate at least in respect of calories' under Indian conditions. This calorie norm then becomes the 'poverty line', and anyone unable to achieve this is deemed to be poor. Taking the spending on food required to attain the level of calorie intake which defines the poverty level, and also to acquire the specified non-food items, the authors calculated the minimum expenditure required to stay above the poverty lines for rural and urban Indians. These were 171 rupees per head per year in the rural areas and 272 rupees in the urban areas at 1960/61 prices. Interstate variation in the prices of consumption goods was acknowledged in the study and poverty lines for different states worked out using the appropriate prices. Despite many criticisms this methodology was subjected to, it provided an analytical framework that enabled a money measure of poverty to be generated, embedding in it the notion of required nutrition, measured in food calorie, as recommended by experts.

5.5.2 Recalibration of the Poverty Measures Over Time

Several subsequent studies examining the issue of nutrition and poverty retained the idea of a daily calorie intake norm, but introduced some changes to reflect such variables as the changing prices and the changing household expenditure patterns as indicated in the NSS data. Allowances for differences in sex, age and activity also came to be introduced to make the calorie norm more realistic.

A Task Force, appointed by the Indian Planning Commission in 1977, with Y.K. Alagh as Chairman, to prepare projections of the "minimum needs and effective consumption demand", produced a new poverty line which used the daily average calorie allowances as recommended by the ICMR nutrition experts (Gopalan 1992). The measure took into consideration the age, sex and occupation of the consumers. It also chose to estimate the daily minimum calorie norms for the urban and the rural consumers separately. The estimated norms were a minimum of 2,400 kcal per day for the rural consumer and 2,100 kcal for the urban consumer. The prevalence of undernutrition (PoU) is then captured as the proportion of households not meeting their daily calorie requirement. The PoU measure is used extensively by the FAO in its various studies on hunger worldwide, and also by different countries and regions (Harriss 1990).

Converting the calorie measure into money, with the help of the NSS 1973/74 expenditure data, the Task Force worked out two new poverty lines in monetary units. These were the consumer expenditures of 49 rupees in the rural areas and 57 rupees in the urban, per head per month. Poverty lines for the states were worked out using state-specific prices to value the consumption baskets. The calorie-based PoU measure and the expenditure-based poverty measures are not, strictly, comparable as one is concerned with hunger and the other the inability to afford a specified consumption basket consisting of both food and non-food items. There have thus emerged two methods of measuring the poverty rate: a 'direct method', counting as poor those whose actual calorie intake is less than the recommended minimum, and an 'indirect method', counting as poor those whose actual per capita expenditure is less than the expenditure defining the existing official poverty line (Patnaik 2004; Ray and Lancaster 2005; Ray 2007). This has given rise to the anomalous situation in which one measure, the PoU, may show the poverty rate increasing, while the other, based on per capita expenditures, showing it to be declining or vice versa. A household can be above the expenditure-based poverty line, but still be 'poor', because of its inability to afford the minimum recommended calories (Ray 2007).

An Expert Committee, with D.T. Lakdawala as the chair, was appointed by the Planning Commission in 1993 (Government of India 1993). This body of experts, known as the Lakdawala Committee, accepted the PoU methodology but chose to use the quantities actually bought by the consumers whose observed per capita expenditures were around the poverty lines. And, instead of using the general consumer price index (CPI), this Committee recommended the use of the CPI for industrial workers (CPI-IW) and the CPI for agricultural labour (CPI-AL), respectively, for updating urban and rural consumption—the idea being to better capture the actual consumption patterns of the poor in the two sectors.

However, such periodic revisions of the parameters of India's poverty and nutrition calculations never considered the fact that food preferences also change over time, with rising incomes and changing food availabilities.

5.5.3 Changing Nutrition Scenarios and Policy Response

Successive Five Year Plans took notice of the changing food and nutrition situation in the country and formulated policies to address the remaining issues. A review of the progress over the seven five year plans was undertaken in 1991/92. The review considered that the country no longer faced the threat of any large-scale famine. It also observed that although there had been noticeable decline in severe forms of undernutrition, mild and moderate undernutrition and micronutrient deficiencies still remained widespread. It was felt by policy-makers that in light of the changes that had taken place in the country's food and nutrition areas, fresh thinking was called for to respond to the remaining challenges more effectively. To combat the problem of undernutrition and to generally improve the dietary standards several

policies were announced and strategies put in place over the next few years. A National Nutrition Policy, announced in 1993, adopted a strategy involving 14 selected sectors with direct or indirect connections with food, nutrition and diet. The aim of the policy was to initiate coordinated action to improve the nutritional standards of the population. The short-term goal included direct nutrition interventions where necessary, while, over the longer term, the goal was to help develop appropriate infrastructures and institutions able to respond to the changing nutritional needs of the population. A National Plan of Action was announced in 1995 to assist with the proposed intersectoral coordination, and a National Nutrition Council set up to formulate policies and oversee their implementation both at the federal and the state levels.

The next major review of the nutrition situation in 2000/01 found that, together with the ongoing health problems related to undernutrition and micronutrient deficiencies, there was also emerging a problem of overnutrition and obesity amongst sections of the society. A major change of emphasis, sometimes termed a 'paradigm shift' in the country's food access and nutrition policy, was foreshadowed in the 10th Five Year Plan starting in 2002. It involved a shift from household food security and freedom from hunger to nutrition security for the individual and the family, and from universal (untargeted) food supplementation to a selective one targeting those most vulnerable. It also aimed to identify the various levels of undernutrition and examine their management with a view to encouraging and promoting appropriate lifestyles and diets to prevent overnutrition and obesity. Because of large interstate variations in the incidence of malnutrition and hunger, the 10th Five Year Plan had set down goals at the state level with the provision of investments for the sector in the state plans.

A departure from the long-established practice of poverty estimation based largely on the consumption of food calorie came with the report of the next Planning Commission Expert Group (EG) set up in 2005, with Suresh Tendulkar as the Chair. This Group, known as the Tendulkar Committee recommended in its Report in 2009 the use of a much larger basket of consumption items than had been the practice before. In addition to the consumption of food items consistent with an 'acceptable' all-India urban poverty rate (of 25.7 % in 2004–05), the basket was to include the households' private expenses on education, medical care and entertainment. The India-wide urban poverty line consumption basket was used to construct the state-level rural and urban poverty lines. The use of this somewhat unusual measurement method quite possibly contributed to the set of rural and urban poverty line estimates the EG had come up with. These were widely considered to be too low.

The all-India poverty lines defined by this Group were 447 rupees per capita per month in the rural regions and 579 rupees per capita per month in urban regions. Incidentally, the poverty line expenditures thus defined did enable the urban consumer to consume the original calorie norm of 2100 kcal per day. It is also of interest to note that the actual consumption as reported in the 61st round of the NSS (2004–05), was observed to be 1776 kcal per capita per day, which is almost in line with the calorie intake norm of 1770 kcal, currently recommended

by the FAO, WHO and the United Nations University (Ramachandran 2013). Rural consumers with expenditures at the newly defined poverty line were observed to be consuming 1999 kcal daily, per capita, which is higher than the currently recommended FAO norm.

5.5.4 Poverty Measurement and Adequate Nutrition: The Link Restored

Because there is a public perception that the poverty lines define the entitlements to the subsidised PDS and TDPS consumption items, the poverty lines recommended by the Tendulkar Committee came to be seen by a section of the news media and political activists as an attempt to restrict the number of TDPS-eligible households. The stridency of such criticism would have impelled the Planning Commission into responding by, first, updating the estimates of poverty to 2011–12, with the help of the datasets from a more recent NSS round. It showed poverty rates declining at a faster rate over the 7-year period ending in 2011–12, relative to the previous 11-year period ending in 2004–05. The estimated decline was from 0.74 % points per year over the earlier 11-year period to 2.18 % points per year over the latter 7 years. As this latter period was one in which India managed to achieve growth rates which were faster than ever before, the new finding, showing a faster pace of poverty reduction, would have satisfied those who have long supported the strategy of rapid growth as a means to reducing poverty. The issue of food or nutrition was not considered in this exercise, so we do not pursue the findings further.

The Planning Commission then proceeded to appoint another Expert Group (EG), in June 2012, headed by C. Rangarajan, a former governor of the Reserve bank of India with a wide-ranging terms of reference (ToR) "to review the methodology for the measurement of poverty" (Ray and Sinha 2014, p. 44). This Report of this EG, released in July 2014, has revised the poverty cut-off points to monthly per capita expenditure of 972 rupees for the rural areas and 1407 rupees for the urban areas. More importantly for the purposes of this chapter, the Group restored the nutrition dimension of poverty measurement, and recommended a new set of calorie norms as part of a minimum consumption basket defining the poverty lines.

In determining what the consumption basket for establishing a poverty line would contain, the EG was "of the considered view that it should contain a component that addresses the capability to be adequately nourished as well as some normative level of consumption expenditure for essential non-food item groups (education, clothing, conveyance and house rent) besides a residual set of behaviourally determined non-food expenditure" (Govt. of India, Expert Group Report 2014, p. 54).

The components of the food part of the recommended poverty line basket were based on the daily average requirement of calories, proteins and fats, for the rural and urban sectors for 2011–12; these are, respectively, 2155 and 2089 kcal. These

values are lower than the 2400 and 2100 kcal, the average norms for rural and urban populations, respectively, set by an earlier EG, the Lakdawala Committee. The consider-ation behind this lowering of the calorie consumption requirements has been that "the proportion of population engaged as heavy workers has reduced over time, while that of moderate or sedentary workers has increased". The lower energy needs of the non-heavy workers relative to the needs of the heavy workers prompted the EG to recommend the lower average norms for the entire population. In arriving at its own estimation of the recommended calorie norms the EG has taken note of the "latest estimate of the age-sex-activity-specific calorie norm as recommended by the ICMR" (Govt. of India Expert Group Report 2014, p. 56). Some of these recommendations of the ICMR are considered in the section below.

The food consumption norm used by this EG, again, does not include the idea of changing food preferences as must have been occurring with changing demographic structures and improving economic performance. It should also be pointed out that the justification used by the EG for the reduction in the recommended calorie norm, even if true on average for the population in general, there is no evidence to indicate that it applies to the population around the poverty line (Sen 2005, p. 4612; Ray and Sinha 2014, p. 45).

5.6 Changing Energy Needs and Revisions to the RDA

5.6.1 Changing Nutrition Requirements: A Nutritionist Perspective

As lifestyles change over time and understanding of human nutrition requirements improves, the recommended daily allowances for specific population groups also tend to alter. The ICMR has over many years monitored the energy needs of Indians in light of the changes in the many factors that affect the energy requirements. The most recently revised set of recommendations regarding the calorie norms, prepared by the Expert Group of the ICMR, are based on the acceptance that energy requirements are dependent mainly on an individual's bodyweight and level of physical activity. Released in 2013 (ICMR 2013), these recommended RDAs are: 2320, 2730 and 3490 kcal per day for adult men engaged in sedentary, moderate and heavy physical activity, respectively. Revised RDAs for women—including pregnant and lactating women—and for boys, girls and infants have also been estimated by the ICMR.

A very useful additional feature of these calculations is the computed energy requirements per kilogramme of bodyweight, which makes it possible to work out the energy needs based on physical stature and weight. This is particularly helpful in dealing with the emerging dual problem of undernutrition as well as obesity in India. Observed gaps between energy requirements and actual intake for specific age groups, bodyweights and other condition such as pregnancy and lactation, for example, can be used in combating deficiencies, especially in vulnerable

population groups, with more precision. Food supplementation programmes such as the Integrated Child Development Services (ICDS) and the Midday Meals (MDM) for primary school children are likely to have used this information in designing their food-based nutrition schemes.

5.6.2 Child Undernutrition in Multiple Dimensions: Measurement and Policy Implications

Applying the child growth standards recommended by the WHO, India's most recent National Family Health Survey (NFHS-3) puts the proportion of underweight children from birth to 59 months at 43 %. This implies that, on average, some 53 million very young children in India suffer severe undernutrition which puts their survival and growth to healthy adulthood in jeopardy. The survey also reports considerable variations in the prevalence of child undernutrition across the Indian states. Of course, child undernutrition is a much wider concept than can be captured in terms of only the deficiency in the weight of the children. Incidentally, a noteworthy improvement in this area of child health has been achieved, as reported in a recent survey (UNICEF 2013): the proportion of underweight children has fallen by 12.8 % points, about 30 %, since 2005-06, helping India's GHI score to improve too, as noted earlier.

A recent study (Aguayo and Badgaiyan 2014) has developed a measure with four carefully defined indicators to capture the dimension of undernutrition in selected developing countries in Africa and Asia and also across selected Indian states. These indicators are the prevalence of: (a) low birth weight; (b) moderate-to-severe wasting; (c) moderate-to-severe stunting and (d) moderate-to-severe anaemia in the population of children aged 0–59 months. Combining the scores in these four equally weighted indicators, the study develops a child undernutrition index (CUI) which captures undernutrition more comprehensively than a simple calorie deficiency measure would. The computed CUI scores of a number of developing countries and also of the different states in India indicate how effective India has been, vis-à-vis the selected other countries, and how the states within India have been in their efforts to alleviate the problem of child undernutrition through the various food and nutrition intervention programmes long in use in the country. This latter investigation involves the use of another index, a child nutrition score (CNS), developed by the study to rank the performances of the states. The findings provide interesting insights into the way the various factors contributing to the prevalence of undernutrition interact amongst themselves and impact on the problem of widespread undernutrition and its attempted remediation. It shows, first of all, that India's CUI is among the highest, ranking fourth, out of the 20 developing countries of Africa and Asia examined by this study. Some of these countries have poorer growth records and lower per capita incomes than India's. These findings clearly indicate that achieving nutritional security does not depend only on the level of a country's per capita income or economic

growth performance. How well a country identifies the nature and the dimensions of its nutritional problem and how efficiently it targets and delivers the necessary remediation matter a great deal. The experience of the different Indian states in this respect provides further evidence of this: the states that have in place proven and well-run nutritional intervention programmes, i.e. a high CNS, invariably have low CUI, the study finds.

In the process, the study provides a possible resolution to one of the so-called 'enigmas' the literature on India's poor nutrition performance has thrown up (Ramalingaswami et al. 1996; Jose 2014; Haddad 2011). One of these concerns the unexpected disconnect between India's rapid economic growth of recent decades and its continuing poor performance in respect of food and nutrition security for the major bulk of its population, especially for some of the more vulnerable sections of it.

5.6.3 A New Twist to the Old Story: Is Stunting Better Explained by Genetic Predisposition?

Although the incidence of stunting and chronic energy deficiency amongst a large proportion of India's adult and child populations is usually sought to be explained in terms of inadequate and nutritionally poor diet, there are other factors that also play a part, as identified above. The endemic poverty of India compels many Indians to live in environments which are unhygienic and lacking in even the barest of sanitary infrastructure. Interacting together, these factors contribute significantly to the observed high levels of stunting and CED.

A somewhat new line of thinking on this phenomenon has emerged in recent years (Nube 2009) Panagariya 2013) raising questions about the applicability to India of the international standards by which undernutrition is diagnosed. International research on CED and nutrition, as already observed, has shown up India's performance in respect of nutrition to be poorer than that of many other countries, including some in sub-Saharan Africa (Osmani and Bhargava 1998). This has prompted some researchers to suggest that the measures of stunting and undernutrition generally used for the detection of these physiological conditions (BMI statistics, for example) may not be appropriate for India. For example, in his somewhat provocative essay, Panagariya proposed that the widely reported and 'nearly universally accepted' narrative that India has a worse child malnutrition problem than many countries which are poorer than India and which have not experienced India's recent rapid economic growth, 'is false'. He judges this narrative to be "the artefact of a faulty methodology that the World Health Organisation has pushed and the United Nations has supported". He goes on to suggest that there may be specific genetic factors which make Indians prone to inherit lower birth weight and shorter stature. Therefore, different measurement standards that take into consideration the "…environmental, cultural and geographic factors" specific to India need to be developed and used in the diagnoses of undernutrition amongst

Indians accurately, asserts Panagariya. He cites the findings of several other studies (especially Nube 2009) which seemingly support his hypothesis that, even with nutritionally appropriate food, the height and physical stature of Indians will not match those of similar populations elsewhere which differ in their genetic make-up. He does accept that such differences might tend to reduce over generations, but he does not think there will ever be a complete 'catch-up', i.e. the height and weight differences will be completely eliminated. This leads Panagariya to question how sensible it is to target policies to combat malnourishment if "differences in height and weight can only be bridged over future generations", regardless of how well-nourished populations get to be.

Not unexpectedly perhaps, Panagariya's thesis has not remained unchallenged; several strong rebuttals have emerged. And they all emphasise the importance of creating a better living environment as a means to avoiding the "high incidence of infections, poor maternal nutritional status, female disempowerment, high socio-economic inequity, pervasive poverty, poor health services, very poor sanitation and weak governance" (Gillespie 2013). Drawing on the evidence of a fairly large number of studies on the subject of poverty and undernutrition, Gillespie is emphatic in rejecting the genetic determinism as suggested by Panagariya: "the bottom line is there is no genetic reason for cross-country differences in child stunting prevalences". He goes on to quote from a WHO study of 2006 which reinforces his own finding: "the new standards confirm that children born anywhere in the world and given the optimum start in life have the potential to develop to within the same range of height and weight".

Along very similar lines, Jose (2014) cites evidence from several Indian states which show that an environment of better hygiene and sanitation can even overcome the disadvantage of poverty and help minimise the prevalence of CED. The study summarises one of its findings across the wealth groups within and among the states of India thus: "the poorest men from Punjab with CED prevalence rate of 26.8 %, who are closely followed by those from Kerala (29.3 %), outperform the richest men from several states: Rajastan (32 %), Madhya Pradesh (31.5 %), Jharkhand (26.4 %), Uttar Pradesh (27.5 %) and Odisha (27.2 %)". The study suggests that the following factors have helped to make these results possible: access to toilet facilities, the level of literacy, the degree of female autonomy and mean age at first marriage and the mean age at first birth. It too rejects the ethnic predisposition hypothesis.

5.6.4 Growing Economy, Declining Nutrition: India's Persistent Quandary: Another Puzzle?

Despite the many changes to India's food and nutrition situation over the last several decades, the problem of hunger and undernutrition continues to be a matter of concern, as the discussion above has indicated. So how has India's faster economic growth in recent years been affecting this very basic problem facing large numbers of Indians?

Over the period from 1983 to 2009, the average calorie consumption in rural India fell by around 16 %, despite an increase of about 28 % in the real average monthly spending per head by rural households (Basu and Basole 2012). Households in urban areas too experienced a decline in their calorie intake although a smaller one. If one examines the food consumption patterns over the period 1993–2009, a period that saw India' per capita income growth accelerate, calorie intake was still observed to be declining, albeit less strongly, by 6 %. The real average expenditure per head increased over this period by 17 % in the rural areas. These are a paradoxical result because, with rising income as reflected in the increased per capita real expenditure, the expectation would be for households' spending on food to increase, at least for the poorer expenditure deciles. The decline in calorie intake applies, even more paradoxically, over most of the expenditure deciles, including the lowest ones whose consumption of food continues to fall short of the recommended calorie norms. As this finding continues to attract a lot of attention in the literature which is easily accessible (Deaton and Dreze 2009, 2010; Patnaik 2007, 2010; Gaiha et al. 2012; Haddad 2011), it is not being addressed elaborately here. It is however useful to note in brief the possible explanations of this apparent paradox. These run in terms of: the perceived reduction in the need for calorie with reduced physical activity; increased rural poverty resulting from the reduction in rural development spending per head of population exacerbated by the reduced access to subsidised food as a result of the introduction of the TDPS, referred to earlier; changing relative prices of food to non-food items—the latter rising faster, squeezing out the average spending on food, and substitution away from cheaper calorie cereal diets to more expensive non-cereal ones. It has also been suggested that the NSS expenditure surveys do not capture adequately the shares of food acquired outside the home such as that consumed as part of the food supplementation programmes like the Integrated Child Development Services (ICDR) and the Midday Meal Scheme (MDMS) (Ittyerah 2013).

One implication of this apparently unexpected phenomenon of falling calorie intake coexisting with rising real per capita spending is that it results in a disconnect between the expenditure-based measures of poverty and the calorie-based measures of undernutrition. It becomes possible for calorie undernutrition to rise even if the number of poor people as measured by the expenditure-based poverty lines declines. This possibility seems to confirm the observation made earlier, in Sect. 5.1, concerning the potential anomaly resulting from the two methods of measuring poverty—one based on the calorie deficiency and the other on the below-poverty-line per capita expenditure.

Going beyond the changes to the consumption of calorie in general over time, Gaiha et al. (2012) estimates the changes to the consumption of protein, fats and other nutrients covering the period 1993–94, 2004–05 and 2009–10. Using information from three rounds of the NSS (50th, 61st and 66th), the study applies demand theoretic techniques to work out how the observed changes in calorie consumption were distributed over selected food items, defined broadly. In rural India, the reduction in calorie intake from 1993 to 2004 came largely from cereals

and, to a smaller extent, pulses; the trend continued but slowed somewhat over the next 5 years to 2009. Calories shares derived from milk, sugar, fruits and vegetables did not change much over the entire period, but those derived from cooking oils increased significantly. A similar pattern was observed in the urban areas: protein intake declined and the intake of fats increased, especially from cooking oils. The intake from meats and dairy products increased moderately in the urban areas.

The study found evidence of a gradual slowing down of the reduction in calorie intake in both rural and urban India. It also found that changes in food prices and in expenditure influenced the changes in demand for the different nutrient sources. The observed slowing in the reduction in calorie intake over the latter sub-period 2004–09, which saw India's growth accelerate, may point to the positive impact growth-assisted improvement in living standards is beginning to have on the consumption of calories. It will probably take a little longer for this conjecture to be confirmed, but if it is true, then the apparent puzzle of falling calorie intake coexisting with rising incomes will have resolved itself.

5.7 Access to Food as a Right: India's Bold Initiative?

5.7.1 The National Food Security Act 2013: The Background

After a long period of deliberation and nationwide debate, the Indian Parliament passed by voice vote in September 2013, the National Food Security Act (NFSA) making the right to food a legal entitlement and proposing provisions to make staple food grains available at subsidised prices to some 67 % of India's entire population.

The Indian Constitution guarantees Indians the 'right to life'(Article 21), among other Fundamental Rights. As detailed in the discussions above, state involvements in the production, procurement and distribution of some basic food items, at subsidised prices, have always been a feature of independent India's food policy. The basic framework for such involvement was codified in the Essential Commodities Act (ECA), 1955, although a system of food rationing had been in place before this Act, indeed even before independence. The changes to the existing PDS, making it the TPDS, alluded to earlier, were introduced in 2001 through a Control Order affecting the provisions of the PDS which emanated from the ECA. The Control Order established the procedures for the implementation of TPDS in respect of the identification of the beneficiaries; the methods to be used for procurement, storage and distribution of the items covered under the scheme, and the division of responsibilities between the Central and the State governments. While the PDS and the TPDS had generally been functioning in accordance with their statutory responsibilities, their performance in several areas had been considered weak, wasteful and inefficient (Govt. of India, Planning Commission 2005). Attempts to address some of these problems have also been made from time to time with limited success.

An organisation known as the People's Union for Civil Liberties (PUCL) has been active in promoting several causes related to economic and social justice in India. They took up the 'right to food' as a cause (http://www.righttofoodind ia.org/case/case.html), and submitted a writ petition to the Supreme Court (SC). This petition helped to start a litigation against the Union of India in 2001 seeking an order guaranteeing access to food as a right. While the legal processes are yet to be completed, the SC has issued several interim orders over the years directing the Indian government to introduce schemes to improve access to food and rural employment opportunities. Several schemes have come to be introduced or extended in pursuance of these order, such as the Midday Meal Programme and the Integrated Child Development Services, for example, to ensure better nutrition supplementation and livelihood support for sections of the population identified as vulnerable (Ittyerah 2013).

These measures, though somewhat ad hoc in nature, were generally seen to be effective in improving the access to food and rural employment generation. The momentum they generated led eventually to the passing of the ambitious, if controversial, NFSA, defining the State's responsibilities in the area of food access more precisely.

5.7.2 The Major Provisions of the NFSA 2013

The Act states that its objective is "to provide food and nutritional security in human cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity and for matters connected therewith and incidental thereto".

The task of guaranteeing access to food to around 67 % of the country's population—made up of 70 % of the rural population and 50 % of the urban—involves changes to the existing organisational arrangements in the areas of production, procurement and distribution of food grains.

On the production side, the Act underlines the need to increase investments in agriculture, including research, extension services micro and minor irrigation projects and power supply to achieve the necessary improvements in productivity and output of food grains. It aims to adopt measures to protect the interests of small and marginal farmers; to ensure security of livelihood for farmers by assisting with facilities such as bank loans, crop insurance and input subsidies; paying remunerative prices for their crops, and preventing diversion of farm land and water away from food production.

On the procurement and storage side, the FSA accepts the need to improve the existing practices in the area of procurement, storage and transport of food grains. The steps to be taken in this regard include: decentralising the procurement activities; diversifying procurement operations and storage of food grains geographically by setting up and expanding storage facilities in the States; improving transport arrangements by rail for moving food grains from surplus States to the

others. It is useful to note that the programme will need to procure an estimated 70 million tonnes of food grains, most of it rice and wheat, annually. Although admittedly a massive logistical exercise, it is worth noting that the existing PDS arrangements have actually managed to procure around 30 % of the production of food grains annually over the past decade, reaching some 70 million tonnes in 2012–13 (Balani 2013).

Effective distribution system is the key to the success of the NFSA proposals. To this end, the Act recognises the need to reform the PDS arrangements in collaboration with the States to achieve doorstep delivery of food grains; utilise information and communication technology (ICT) to identify eligible beneficiaries and their entitlements more accurately; improve transparency of records; diversify the range of commodities distributed under the existing PDS, and empower women by, inter alia, transferring the management of fair price shops to women or women's collectives.

5.7.3 Food Grain Eligibilities and Delivery Responsibilities

The Act defines *eligible households* as all those which are entitled to the subsidised food grains, i.e. 67 % of the country's population. This group is then divided into two groups, the Antyodaya Anna Yojna (AAY) population, i.e. the poorest of the poor group, and the *priority group*. The former would receive 35 kg of food grains per household per month, and the latter 5 kg per person per month, at Rupees 3, 2 and 1 for rice, wheat and millets, per kilogramme, respectively. As a step in the direction of improved women empowerment, the ration card will show the oldest woman in the household, if above the age of 18, as the head of the household. The existing food supplementation and other maternal welfare programmes for pregnant and lactating women and preschool and school children will continue and, in some cases, extended. For example, women at child birth will receive maternity benefit of 6,000 rupees, to be paid in instalments.

However, there will be both gainers and losers from the proposed arrangements as some BPL individuals will receive 5 kg of grains at a lower price, instead of 7 kg, as they have received under the TPDS arrangements. Reviewing the effects of the new proposals Mishra (2013) observes: "overall, out of the current population covered under the existing TPDS, 46 % will be strictly better off, 14 % will be equally better off, and 40 % will be strictly worse off" (p. 29). The poorest of the poor, the AAY beneficiaries are fully covered, both as to their entitlements and the prices they will pay.

The responsibility of running the programme will be divided between the central and the state governments, the former will procure, store and transport the grains to the states, and the state governments will arrange their transport to the village/urban wards through the existing TPDS arrangements. The local self-government (Panchayati Raj) institutions will have the responsibility for proper implementation and monitoring of the scheme in their respective areas.

Generally welcome as these bold provisions of the legally binding NFSA are, their help is confined to little more than the subsidised supply of the very basic ingredients of a daily diet food grains—to most of the beneficiaries. Undernutrition and malnutrition are among India's chronic problems as the discussion above has highlighted. Assistance in the form of food grains, based on India's calorie-centred food policies, still shies away from accepting the importance of a balanced diet. The food subsidies do enable the poor and low-income people to acquire the food grains they need; the savings they make in the food budget would improve their ability to acquire other food such as pulses and vegetables to make their diets a little more varied and balanced. Public education and mass communication alerting people to food, health and nutrition issues would however be required to improve the level of public awareness to achieve changes to existing practices.

5.7.4 The Constraints

Understandably, a plan as ambitious as the NFSA will not come without involving some major potential hurdles. Quite possibly, the most significant of which are its budgetary implications. The costs of running India's PDS and TPDS schemes involve the costs of acquiring the grains from the farmers and/or millers; the costs of storage; the costs of transporting the grains to the states and, most importantly, the subsidy element in the arrangement. This is made up of the difference between the minimum support price (MSP) at which the grains are procured and the central issue price (CIP) at which they are sold by the central government to the states for distribution under the schemes. As observed earlier, the MSPs, which are kept at levels higher than the open market price of the food grains so that the farmers have the incentive to produce more and to sell to the government, have risen over recent decades. The issue prices however have been kept unchanged over the same period to protect the beneficiaries of all categories from the rising trend in the open market prices of food grains. The subsidy element has therefore been steadily rising, having quadrupled over the decade ending 2012–13 (Balani 2013). In the 5 years since 2007–08 the GDP share of food subsidy increased from 0.5 to 0.8 %. The additional food subsidy arising out the NFSA provisions is estimated at around 0.2 % of the GDP (Mishra 2013) Of course, with the extension of the food security programme, the costs will increase, both from the subsidy element and also from the expected increase in the administration and storage costs, both at the central and state government levels. The size of the deficit in the government budgets has been a constant source of concern in policy-making circles. The fiscal provisions of NFSA will only add to that concern.

A further constraint concerns the availability of the required additional storage capacity across the regions. The states where procurements are large have larger storage capacity, but some states which are large users of the subsidised food

the capacity is limited. At the same time, the existing storage capacities are not always utilised efficiently so that, while the undistributed grains in store in some states deteriorate in quality, in some others the capacities remain under utilised. To remedy this mismatch, the allocations and storage capacities will need to be better coordinated—a task that will require regular monitoring and, almost certainly, additional investments.

The TDPS arrangements have always been subject to 'leakages' of food grains along the supply chain, i.e. discrepancies have been observed to exist between the allocation of food grains by the FCI, their lifting by the states from the FCI and their actual distribution through the TDPS. The leakages, sometimes as high as 40 %, imply transfer of the missing grains to the open market where the prices are much higher. With increased supply of subsidised grains, the opportunities for larger leakages are likely. Additional layers of administrative control to limit the leakages will simply add to the costs.

5.7.5 Where to From Here in India's Food and Nutrition Security: Some Concluding Observations

The detailed discussion above makes it clear that, despite progress in some areas, India still remains insecure in respect of both food and, especially, nutrition. The efforts at the governmental levels have shown encouraging success in some areas, such as for example the rapid reduction in child underweight figures referred to above, but many other areas continue to show poor results. The passing of the NFSA, making access to food a legal right, may be a further step in the right direction, but much more would need to improve before the benefits of a better diet are within the reach of most people.

The phrase 'inclusive growth' has come to be used by policy-makers everywhere around the world. For India, real inclusion in the growth process for the bulk of the population can only come from vastly increased and improved livelihood opportunities, affordable access to education, health care and other amenities of modern life, particularly, but not exclusively, in the rural areas.

It must be recognised that the problem of food and nutrition insecurity is multifaceted, requiring a well-coordinated approach to achieve improvements. Some of the relevant issues are briefly touched upon below to highlight the nature of the tasks that need continuing attention.

Obviously, with a large and growing population, India will need to produce more food, both in quantity and variety. With its emphasis on cereals—almost exclusively rice and wheat, India has encouraged monocropping which, agricultural scientists believe, has adversely affected soil nutrition Ramachandran (2013). With 170 million hectares of cropland, India has the second largest arable area in the world, but its total and per hectare crop yields are low by international standards, and the rates of growth of food grains production had declined over a period

leading to a decline in the per capita availability, as noted earlier. Although this trend has now reversed, issues of rural investment and support services necessary to maintain and enhance production and productivity still remain. The low per hectare productivity can be taken as a positive factor as the prospects for improvement remain potentially better.

With the need to diversify the daily diets as a means to improving nutrition, the strategy for India's agriculture needs to include food crops other than rice and wheat. The neglect of pulses—possibly an unintentional consequence arising out of the successful Green Revolution, has had the effect of reducing a major source of protein for the poor, especially in a country with a culture and practice of vegetarianism. Likewise, the relative neglect of vegetables has contributed to the micronutrient deficiency, which the IFPRI has come to term 'hidden hunger', afflicting some 2 billion people around the world, including India. The deficiencies of some micronutrients in Indian diets have prompted the use of several nutrient supplementation programmes over the years. It is however increasingly recognised that food-based approaches to micronutrient balance in diets work better as they function synergistically within the human system. For example, the decline in the consumption of millets from Indian diets, nutritionists point out, have removed a relatively inexpensive source of nutrition which also has a low glycaemic index, beneficial for long-term health (Ramachandran 2013).

Better food absorption is necessary for nutrition, but the ability to absorb food depends as much on the quality of the diets as on the state of the consumer's health and on environmental and hygienic factors affecting the consumer. The latest report on India's progress towards the MDG goals in the area of eradicating extreme hunger shows it to be 'on track' to reach the target by 2015, and that of ensuring environmental sustainability, 'moderately on track'. In respect of the targets to halve by 2015 the proportion of people without sustainable access to safe drinking water, the progress, again, is 'on track', but ensuring basic sanitation, the progress is 'slow' (www.mospi.nic.in). The picture in regard to improving the conditions that help better food absorption is thus a mixed one, at best.

A country in which more than one-half of the population are engaged in agricultural and allied activities (Census Report 2011), the importance of India's rural economy cannot be overstated. Part of the problem of India's food and nutrition deficiencies stems from the relative neglect of the rural sector especially in the decade of the 1990s, as documented in Patnaik (2007). There have been some noticeable improvements in more recent years in the performance of India's agricultural sector and the 12th Five Year Plan (2012–17) aims to improve on that by addressing several specific issues of agriculture and the rural sector in general. There are also the global problem of climate change and increasing scarcity of fresh water which have the potential to affect Indian agricultural practices adversely. Indian policy-makers seem to be aware of the seriousness of these issues, as the Five Year Plan and other public documents testify. Whether the available scientific and technological knowledge and expertise can be harnessed to seek solutions to these problems must remain an open question.

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Chapter 6
Beyond Basmati: Two Approaches to the Challenge of Agricultural Development in the 'New India'

Graeme MacRae

Abstract Over the past quarter century Indian economy and society have been transformed, qualitatively as well as quantitatively. On one hand there has been sustained economic growth, but on the other growing inequality (D'Costa, Ray in this volume). Redressing these inequalities is the key development challenge now facing India. A key dimension of this transformation has been a shift of the centre of gravity of the economy to the manufacturing and especially services sectors, creating a huge and growing urban middle class, increasingly cut off from the agrarian traditions of their forebears. Nevertheless, agriculture remains the main livelihood of over half the population, and India is still a major agricultural producer. The challenge of redressing this specific imbalance is the focus of this chapter. Since the 1960s, agriculture has itself been transformed technologically and economically. The results have ranged from the growth of successful multinational corporations to multi-suicides of small farmers, from new commercial crops to environmental degradation. Indian agriculture is now poised between two futures—one of increasing technology-driven intensification and integration into national and global markets—the other a neo-Gandhian vision of local communities renewed by ecologically based forms of small-farming producing for more local consumption. This chapter reflects on the development challenge posed by this critical moment, through the lens of a point where these alternative visions meet and interact—the dynamic border-zone between the irrigated plains and the foothills and valleys of the Himalayas, where old varieties and practices meet global export markets.

Keywords Mountain agriculture · Agrarian crisis · Lopsided growth · Hybrid economy

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Over the past quarter century Indian economy and society have been transformed, qualitatively as well as quantitatively. On one hand there has been sustained economic growth, but on the other growing inequality. A key dimension of this transformation has been a shift of the centre of gravity of the economy to the manufacturing and especially services sectors, creating a huge and growing urban middle class, increasingly cut off from the agrarian traditions of their forebears. Nevertheless, agriculture remains the main livelihood of over half the population, and India is still a major agricultural producer.

Since the 1960s, agriculture has itself been transformed technologically and economically. The results have ranged from multi-national agri-food corporations to multi-suicides of small farmers, from new commercial crops to new environmental degradations. Indian agriculture is now poised between two futures—one of increasing technology-driven intensification and integration into national and global markets—the other a neo-Gandhian vision of local communities renewed by ecologically based forms of small-farming producing for more local consumption.

This chapter reflects on this critical moment, through the lens of a frontier where these alternative visions meet and interact—the dynamic border-zone between the commercial production of basmati rice on the irrigated plains and the foothills and valleys of the Himalayas, where old varieties and practices meet global export markets.

6.1 The New India and Lopsided Growth

India has enjoyed an extraordinary period of high economic growth (5–10 % p.a.) over three decades.[1] This growth has transformed Indian society, creating unprecedented prosperity among a growing urban middle class and spectacular wealth for a small minority. This is widely recognised as a success story in terms of raising average incomes and standards of living (Dreze and Sen 2013, p. 19; Bhagwati and Panagariya 2013, p. 31; D'Costa 2012, p. 25). However, it is equally clear that the benefits of this growth have not been evenly distributed. The industrial and services sectors have grown much faster than agriculture, where real wages have grown more slowly than GDP (Dreze and Sen 2013, pp. 23, 30). Consequently real prosperity gains have been largely in urban rather than rural areas. For most small farmers, subsistence agriculturalists and tribal minorities as well as the urban poor, conditions have not improved and poverty, social distress and even levels of basic nutrition have actually worsened. This "enigma of lopsided growth" or "islands of California in a sea of sub-Saharan Africa" (Dreze and

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[1]The term "New India" has become a shorthand, especially in the media, for aspects of India which have come to prominence since the economic reforms of the 1990s—economic growth manifesting in a huge and growing urban middle class. For a critical discussion of the term see D'Costa (2012, pp. 1–4).

Sen 2013, p. ix) have been the subject of considerable critical reflection and debate (Ahmed et al. 2011; D'Costa 2012; Pritchard et al. 2014, p. 3; Ray (in this volume)). Rebalancing this pattern of unbalanced growth is arguably India's most critical development challenge.[2]

The debate about economic development in India has been highly polarised as in two recent books, both by reputable economists: *Why Growth Matters: How economic growth in India reduced poverty and the lessons for other developing countries* (Bhagwati and Panagariya 2013) and *An Uncertain Glory: India and its Contradictions* (Dreze and Sen 2013). The first is essentially an apology for and defence of the neoliberal policies of the past two decades and their consequences for poverty reduction and human well-being. The second takes a more nuanced approach, but its overall focus is on the failure of the same policies to achieve levels of well-being commensurate with the economic growth.

They exemplify fundamentally different approaches to development—one which takes for granted the benefits of (conventionally defined) economic growth and the other which questions these benefits and argues for a more socially and environmentally based approach to development. But they concur that growth has been accompanied by increasing inequality. The inequalities range along several axes, including long-standing ones such as caste and gender. The axis with which we are concerned here combines a spatial one—rural versus urban with a socio-economic one—employment in agricultural rather than industrial or service sectors. While this axis has received surprisingly little attention in the higher level analyses of economic growth referred to above, the rural/agricultural end of it has been widely described elsewhere in terms or rural or agrarian "crisis" (Reddy and Mishra 2010; Siddiqui 2015).

Despite its near invisibility in "the new India", agriculture remains the main livelihood of more than half the population, the majority of whom still live in rural areas and India is still a major producer of agricultural goods. But these facts of quantity are not matched by ones of quality, let alone equality.[3] While the rural majority feeds the growing appetites of the urban minority, it struggles to feed itself. Growth in the agricultural sector through the decades of growth has been around half that of GDP and this proportion has been falling steadily (Dreze and Sen 2013, p. 23). Likewise real wages in the agricultural sector have fallen even further behind, reflecting the fact that even this small growth has not benefited the ordinary labour force (Dreze and Sen 2013, p. 30). The fruits of growth have been concentrated in urban areas and especially in certain sectors, notably IT, and the

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[2]By 2014, even dedicated promoters of economic growth such as the Asian Development Bank (ADB) had recognised that inequality was "undermining" the benefits of growth and that "globalisation, technological progress and market reform" actually "exacerbate inequality" (ADB 2014, p. xviii). The special theme of its annual outlook report was "Fiscal Policy for Inclusive Growth."

[3]At the turn of the millennium, "72 % of population and 76 % of the workforce were rural," but accounted for only 20 % of national income (Reddy and Mishra 2010: p. 4). It has also been argued that rates of "urbanisation" in India been overstated (Kundu 2011, pp. 58–59).

services sector in general. Rural areas and especially the agriculture sector have been neglected by government policy and development initiatives since the 1980s and left to fend for themselves.

The new opportunities for entrepreneurial enterprise created by the liberalisation policies of the early 1990s were not entirely restricted to urban areas. Agriculture has, in many parts of the country, been "neo-liberalised" by opportunistic and speculative investment in commercial crops (e.g. cotton, ginger) of ever-higher potential profit, but also ever-higher risk. This has led to a new crop of agro-entrepreneur millionaires, but a larger harvest of indebtedness leading in many cases to suicides, with a majority somewhere between, struggling to survive from season to season (Münster 2012). Simultaneously, in other parts of the country, such as the Punjab, it has led to corporate control of post-harvest processing, marketing and supply of inputs. This has enriched large landowners, mill-owners, traders and agricultural corporations, but at the price of landlessness and proletarianisation of an increasing proportion of the rural population. Here too debt, loss and suicide stalk the agrarian landscape (Singh 2010; Gill 2014; Singh et al. 2014).

While details vary across the country, the overall patterns of rural economies and agriculture are widely described in terms such as "distress" and "crisis".[4] At the same time, with steadily rising population, standards of living and consumption patterns, there is a renewed sense of need for increased productivity and production to maintain national food security. It is assumed by policy-makers that consolidation of landholdings, market-oriented approaches and new technologies are the answers to increasing productivity (Bhagwati and Panagariya 2013, pp. 144–145).[5]

The aim of this chapter is to consider this critical moment in Indian economic history, when both the place and form of agriculture in India are poised between two alternative paths. One is the default setting of further integration into translocal markets for agricultural produce, industrialisation of production methods, commercialisation of crop choices, corporatisation of ownership of the means of production and speculative capitalist investment—in short a neoliberal capitalist model. The alternative path begins from the bottom up—with the social and ecological realities of small farmers, local markets, and sustainability of local ecologies, combining, in various proportions, elements of traditional agriculture, a neo-Gandhian vision of village-based economies but also drawing on contemporary global concepts such as organic, slow-food, fair-trade and food sovereignty.

To do this, I focus on a ready-made laboratory—a border-zone where two agricultural economies have coexisted, side by side, in dynamic relationship, for several decades. This is also a geographical, ecological, economic and cultural border-zone, where the plains of Punjab and Haryana meet the foothills of the Himalayas and wheat and rice are grown in rather different ways. The research on

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[4]A quick search of Google Books shows 16 recent volumes about Indian agriculture with variants of these terms in the title.

[5]These policy settings remain essentially unchanged in the 2014–5 national budget (Banerjee 2014).
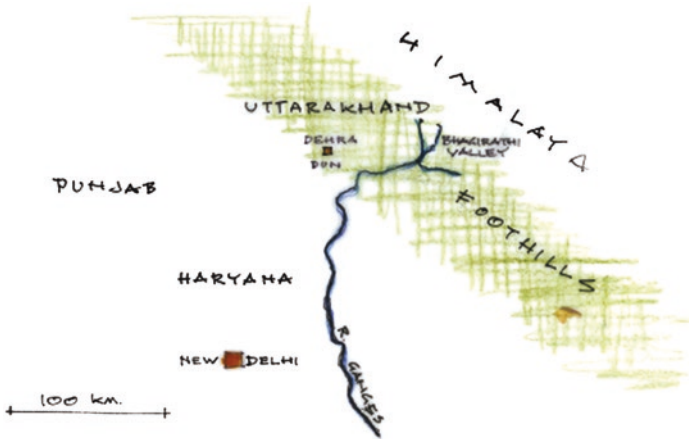
Fig. 6.1 Map of North India

which this chapter is based includes 6 weeks of ethnographic fieldwork in this area in April 2012 and January–February 2013.[6]

My point of entry into this agro-ecological frontier is *basmati* rice, native to the valleys between the foothills, but expanded during the twentieth century onto the plains where it became a cash crop and is now a global export commodity. The story of *basmati* is a minor and atypical case study in the story of Indian agriculture, but may also be read as a metaphor for uneven development in India and for alternative futures, but first, some historical and geographical background (Fig. 6.1).

6.2 Post-colonial Transformations

At the moment of independence, the economic landscape of India was, notwithstanding decades of colonial interventions, largely one of small-scale agriculture, primarily for subsistence. The prime minister of the new republic, Nehru, did not share Gandhi's vision of reinvigorating this agrarian landscape as the basis of national economic development, and his Congress government presided over a fairly centralised state-guided form of industrial development—"trying to catch

up … with the Industrial Revolution … in Western countries" (cited Ramakumar 2012, p. 45). Agriculture received relatively little attention and support. By the early 1960s rural economies were in decline, and a combination of increased population growth, reallocation of productive resources to wars, a series of droughts and repressive aid and trade policies by the USA created serious hunger (Pritchard et al. 2014, p. 44). India became a global metaphor for food insecurity and a national preoccupation with food security began.[7] These problems set the stage for two transformations which radically altered the Indian agricultural landscape.

The first was the Green Revolution (GR), from the mid-1960s until the 1980s. This was essentially a technological and ecological transformation, replacing traditional crops with new engineered varieties of key grains (first wheat then rice), which grew faster and produced higher yields, as long as they were supplied with sufficient water, petrochemical fertilisers and pesticides. The GR had the intended effect of increasing productivity and production enormously, but at the price of significant economic, social, health and environmental side effects. Large farmers prospered at the expense of small ones. Money lenders, landlords and tractor salesmen prospered at the expense of farmers. International seed, fertiliser and pesticide manufacturers prospered at the expense of everybody. Soils were depleted; natural and agricultural biodiversity were reduced; water tables were lowered and polluted. By the late 1980s the initial productivity gains had become dependent on ever-increasing inputs of fertilisers and pesticides, which were maintained only by increasing subsidies (Gulati and Fan 2007, p. 31; Pritchard et al. 2014, pp. 42–55; Reddy and Mishra 2010, p. 14; Singh 2010, p. 265). By the 1990s subsidies and production levels became unsustainable and both reversed. Farmers' incomes declined while costs and environmental side effects increased.[8]

Through this period, Indian agriculture and food markets had been subject to a high degree of state control and support by tariffs and subsidies, aimed primarily at maintaining domestic food security and affordability for the poor (Bhalla and Singh 2012, p. 3; Gulati and Fan 2007, pp. 29–31). The second transformation was the dismantling of this regime in a series of liberalising reforms of trade policies which began in 1991, under pressure from the IMF and World Bank (Dreze and Sen 2013, p. 27; Gulati and Fan 2007, p. 32; Peet 2011, p. 25). While agriculture was not a specific target of these reforms, the economic growth they kick-started led to increasing incomes for the urban middle class, and increased demand for food and for a wider range of food products. At the same time, the loss of protection for domestic industry tipped the profitability of investment toward the agriculture sector (Gulati and Fan 2007, p. 34). The sector grew, but primarily through diversification into new commercial crops and markets (Münster 2012). Three years later, following the Uruguay Round of WTO agreements, restrictions on

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[7]Children of my generation in Australia and other western countries remember being told to eat all the food on our plates "because of the starving children in India."

[8]For a critique of the Green Revolution in India see Shiva (1991). For a more balanced account see Pritchard et al. (2014, pp. 42–48).

exports of food grains were lifted (2007, pp. 35–36). These were key factors in the second transformation of the food and agriculture sector—into wider circuits of market exchange, on both the input and output sides. While the overall pattern was toward commercialisation and increased production of selected crops, the effects of and responses to these changing conditions varied considerably between individual farmers, communities, ecosystems and crops. The story of *basmati* rice, while far from typical, provides an illustration of gains and losses during this period.

6.3 Basmati

The term *basmati* refers to a family of rice varieties characterised by long grains, which grow even longer on cooking, as well as distinctive fragrance and flavour.[9] They are native to the foothills and valleys of the western Himalaya, but were also a minor crop for decades on the northern fringe of the Indo-Gangetic plains, which span northwest India and northeast Pakistan. As late as the 1960s, *basmati* was grown strategically by only a few farmers in this region for its price advantage (Leaf 1984, p. 49). Since then, *basmati* production has expanded twice: first from a local delicacy enjoyed by the affluent classes, to a large-scale commercial crop, enabled by expansion and intensification of irrigation in the 1950s and 60s; and again since the liberalisation of trade, to a global commodity, of which some 75 % is exported (Singh 2010, p. 116) largely to the Middle East, Europe and US markets. While rice became a major target of the Green Revolution in the 1970s, this did not directly affect *basmati* production, because the GR technologies designed for new high-yielding varieties (HYVs) were less effective on (more or less) traditional *basmati* ones. Since then, however, *basmati* varieties have been "improved" by selective breeding and are now grown largely with petrochemical fertilisers.[10]

Today most *basmati* is grown, along with more common rice varieties, in seasonal rotation with wheat and/or sugarcane, throughout the states of Punjab, Haryana and western Uttar Pradesh. Farms range considerably in size—from less than a hectare to over 10 ha. Contrary to what might be expected, average sizes of holdings have not increased over recent decades (Sidhu 2005, p. 199) but overall larger growers have prospered at the expense of smaller ones.

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[9]The boundary between *basmati* and other long-grained and aromatic varieties is not easily definable by any testable biological boundary—and it has relied traditionally on aesthetic judgement, and more recently, certification of geographical origin. Recent work has, however, enabled physio-chemical identification (Kamath et al. 2008).

[10]Most currently exported "basmati" is actually Pusa 1121, a high-yielding and high-value hybrid variety engineered at the Indian Agricultural Research Institute around 2003 and subsequently approved as "basmati." Production of traditional varieties has declined correspondingly. Since then a new, faster-maturing and even high-yielding variety, Pusa 1509 has been developed and is expected to replace 1121 in the near future (Oryza 2014).

Harvested grain is sold through local markets (*mandi*) to mills and then to traders in regional centres and to Delhi, from where it is distributed through retailers across the city and beyond. Each step in this process is mediated by brokers and dealers (the details of these systems vary regionally) all of whom add (surprisingly small) increments of value. The export sector is dominated by corporate producers, the largest of which have their own processing and packing facilities and operate transnationally, with regional branches in their main market countries.[11] While the economy of basmati is now firmly based on the plains, as a commercial cash crop grown with industrial scale and methods, its origins and culture are rooted in the mountains.

6.4 Basmati Stories

Many *basmati* lovers have a preference for Dehraduni—an old variety native to the fertile Dun valley between the Shivalik foothills. Older residents of Dehra Dun remember *basmati* fields on the edge of town and the aroma that enveloped the whole town as the crop ripened. They also tell stories about it.

One is from the mid-nineteenth century when Britain was competing with Russia for control of central Asia. Their main access was through Afghanistan, via the Khyber Pass. A ruler of Kabul (presumably Dost Mohammed Khan) was not sufficiently co-operative, so the British captured him and exiled him to India, where he was imprisoned somewhere in the foothills around Dehra Dun in a spare palace owned by the local king. Dost Mohammed wished to give his brother king a gift to acknowledge his hospitality. His temporary home reminded him of one of his favourite places back home, probably in the hills north of Kabul, where a particular fragrant rice grew. His gift was some seeds of this rice. The seeds took to their new home and flourished—and spread up into the hills, but also down onto the plains. It is now known as (Dehraduni) *basmati*.[12]

Another recurrent story is of people who have taken seeds out of the valley and planted them elsewhere—where they have grown and produced crops, but the aroma and flavour are never the same—it is no longer true Dehraduni *basmati*.[13] These two stories reflect two sides of the larger story of *basmati*—both its localness and its globalness. On one hand it is a travelling crop, moving on and taking

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[11]For example see the websites of major exporters such as Kohinoor or KRBL.

[12]According to an interview in a local newspaper, with descendents of the exiled family (Sharma 2009), Dost Mohammed was held in a palace in the hills above Mussoorie (see also Dalrymple 2013). But it is clear also that he was only there for a few months, after nearly 2 years in exile elsewhere, which makes the story of the rice seeds somewhat less likely. Local stories, however, do not name the king, but insist that he was held at Tapovan, just upstream from Rishikesh. But *tapovan* means "forest of ascetics" and there are many places of this name in the Himalayan foothills. See also Singh et al. (2000, p. 164) for a different version of this story.

[13]This story is widely known locally and there is also empirical evidence of it (Singh 2000, p. 163).

root in new places. On the other, its essence lies in its rootedness in local soil and climate. These two faces of basmati are reflected not only in its cultural celebration, but in its contemporary political economy.

In the mid 1990s a US company, Rice Tec, applied for patents for new hybrid rice varieties they had developed, and which they wanted to call "basmati". This resulted in widespread outrage in India and an NGO, brought a case in the Supreme Court of India, which forced the Indian Govt to take a case to the US Patent and Trademark Office. By 2001, Rice Tec had been forced to withdraw all their claims and the case established basmati in the global market as a product defined, like champagne, by way of Geographical Indication. The globalisation of basmati as a commodity has been accompanied by and even intensified its identification with its place of origin.

6.5 The Border-Zone

While *basmati* is a crop both of the mountains and of the plains, its spiritual home, the Dun Valley, lies between the two and elements of both agricultural ecologies and economies coexist here. Farmers in this border-zone, where plains and mountains meet, have developed a range of strategies positioned variously between those of the adjacent zones. For example, a few kilometres west of Dehra Dun are two households which have responded to these changing conditions in different ways.

One is the extended family of Anand L.K. They are fairly well off by local standards, with 3.5 ha of land, a few cattle and their own water supply (from a hand-operated tube well). They rotate wheat (in the season known as *rabi*) with *basmati* (in the *kharif* season) with brief green manure crops of mustard between.[14] They never used significant amounts of petrochemical fertiliser and have now returned entirely to manure from their own cattle. Apart from a small amount of sugarcane for home consumption, both main crops are grown for sale, albeit only in the local market (Figs. 6.2 and 6.3).

A mile or so down the road lives Idris, a Muslim farmer of about the same age as Anand's father.[15] He has less land, just under two ha (20 bigha) and less water, because he shares a community tube well. But he grows a much wider range of crops—wheat, maize, chickpeas, mustard, garlic, soya beans, *basmati* and another variety of rice—the same ones he has grown all his life. When he was young, he recalls, the only things his household could not provide for itself were salt and

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[14]*Rabi* is the dryer, cooler season from December till May. *Kharif* is the monsoon season, from June till November. Both words are Persian, introduced in Mughal times, but in some areas local indigenous names are still used.

[15]Idris is a pseudonym, but Anand is not, because parts of his story are already the subject of public record (Bija 2006).

Fig. 6.2 Anand's farm

Fig. 6.3 Idris farm

kerosene. But the other difference from Anand's farm is that he grows primarily for subsistence and sells only his surplus, also in the local market.[16]

Apart from minor differences of landholding and water supply, these two farmers operate in the same ecological conditions, but they have, over the years, developed divergent economic strategies. Idris has continued farming the way he and indeed most Indian farmers did until recent decades. Anand's family, on the other hand, has reoriented their production almost entirely to the market. While their basic stock of crops is the same, Anand's family has radically simplified this range to seasonal monocrops of the two (wheat and rice) with most market value. In other

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[16]Over the past few years both of these farmers have been selling their crop to Navdanya, a locally based NGO which supports small farmers by marketing their organic produce through their high-end outlets in New Delhi. I am grateful to Naveen at Navdanya for introducing me to both of them and translating my conversation with Idris.

words, they have repeated in microcosm the history of north Indian agriculture over the lifetimes of their patriarchs. But this divergence of strategies reflects geographical orientations as well as historical ones.

Anand and Idris farm in a fertile, well-watered valley where plains and mountains interpenetrate and *basmati* has long been the dominant crop. Anand's orientation has shifted downhill to the plains, where commercial production has become the norm, and multi-crop subsistence cultivation has virtually disappeared. Idris remains a downhill outpost of the mountain ecology where multi-crop subsistence cultivation remains the norm. While these two strategies may be linked to the past and present, mountains and plains, subsistence and cash-cropping they also reflect two models of the future of agriculture in India.

6.5.1 Two Agricultures: Two Models of Development

In 1920 Percy Wyndham, the Commissioner of Kumaon (a mountain district of Uttarakhand), observed an ongoing conflict of interest and priorities in his jurisdiction "… between the villagers and the Forest Department; the former to live, the latter to show a surplus and what the department looks on as efficient forest management" (cited Guha 2005, p. 185). This fundamental tension, between local subsistence and translocal demands for growth of production and profit, is still being played out in Uttarakhand nearly a century later, with farmers like Anand and Idris at its frontier. It is also being played out on a grander stage in a struggle for the future of agriculture in India—the national version of a global struggle for the future of agriculture.

Notwithstanding the evidence of agrarian crisis, influential market-oriented economists insist on:

> …..… much greater competition in the market for agricultural produce… take full advantage of multiproduct foreign retailers and facilitate the growth of modern … supply chains. …measures aimed at increasing productivity … including giving land titles to farmers and simplifying the laws relating to renting and selling land. …investment in new seeds and methods of cultivation … to obtain the productivity gains that genetically modified and Bt seeds promise.
>
> (Bhagwati and Panagariya 2013, pp. 144–145).

What they are recommending is essentially intensification of the range of policies of recent decades—new technologies, reduced regulation, increased orientation to markets and public subsidy of private enterprise. Current government policies likewise promise more of the same:

> 4.79 … growth in food grain production must be a central policy focus. However, food grains account for less than 25% of the value of output in agriculture and allied sectors…. …. The focus should be on diversification to augment farmers' incomes and to accelerate growth.

> 4.82 … development of (the) high-value segment of agriculture … pursued as a demand-led strategy, … linked to modern logistics, processing and organised retailing, all as … one integrated agri-system ….

4.108… make the system more market-oriented …abolition of all levies …(and) export bans … must be removed in the interest of both the farmers and the final consumer.

4.111… Linking small and fragmented farms with large-scale processors and retailers …

4.113 … restrictions on FDI in organised retail (multi-brand) need to be eased to create competition … (and) to bring in new technologies and management practices…. Small farmers need to be 'clustered' … to create a scale in marketing their produce.

(Government of India: Planning Commission 2011).

This in turn mirrors the policy orientation of international financial institutions:

Enhancing agricultural productivity, competitiveness, and rural growth …… a more productive, internationally competitive and diversified agricultural sector … a shift … away from subsidies towards productivity enhancing investments. ….removing the restrictions on domestic private trade to improve the investment climate and meet expanding market opportunities. …..

(World Bank 2012)

This view is shared also by the international system of agricultural research institutions. For example, the International Crops Research Institute for the Semi Arid Tropics (ICRISAT), part of the CGIAR network, located in India and focused on the very areas in which the agrarian crisis in India is most acute, advocates what it calls Inclusive Market Oriented Development (IMOD) which means "… a wider range of innovations that can harness markets to improve farmer incomes … to achieve …prosperity". ICRASAT is, like other elements of the CGIAR network, funded largely by government development agencies and private charitable foundations, but also lists among its "partners" private businesses such as Hindustan Petroleum, irrigation system manufacturers, seed and biotechnology companies, Tata Chemicals, minerals and metal processing companies, grain millers, "agribusiness incubation" and innovation" programmes as well as academic and other research institutions (http://www.icrisat.org/icrisat-partners.htm).

Two assumptions are built into this approach to development, but rarely highlighted by its advocates. One is that "development" of the agricultural sector involves "a broader diversification, known as the agribusiness transition, involving input providers (farm equipment producers, logistics firms, and other business service providers) as well as agro-processors, distribution companies, and retailers" (World Bank 2009; cited Briones and Felipe 2013, p. 8). However, any increased revenues and profits in the sector tend to accrue in the agribusiness subsector rather than in primary production. The other assumption is that a decline of the agricultural sector is an inevitable, even "natural" part of economic growth, as people move to more lucrative employment in the growing manufacturing and service sectors (e.g. Briones and Felipe 2013, p. 16).[17]

My point here is not critique of this policy orientation, but simply to illustrate aspects of it relevant to my argument: its hegemonic hold on Indian agricultural

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[17]A backdrop to Minter's (2013) account of the growth of the recycling sector in China is that, despite appalling health and safety conditions, even the relatively "… low wages … exceeded the subsistence-level living earned working in the fields" (2013, p. 133) while the *nouveau riche* are farmers turned waste recyclers (2013, pp. 199–201).

policy, its reflection of a wide and pervasive pattern of policy embedded in a powerful global network of institutions, its commonality of interest with private agribusiness corporations and its continuity with the dominant policies of the past half century.

Variants of this model have dominated development thinking in India for decades and while they have increased production (of some crops) and led to considerable prosperity for agribusiness corporations and a minority of larger and wealthier farmers they have not solved fundamental problems of inequality and food security. There is in fact a significant body of expert opinion to the effect that the present agrarian crisis as well as indicators such as poverty and malnutrition in rural areas are direct results of these policies and that what is needed is not more of the same but that "a reversal of neo-liberal policies …to revive the livelihood systems of rural households in India" (Ramakumar 2012, p. 66). Or, in the more generalised words of Pritchard et al. (2014, p. 53) "… the agro-technological model set in train by the Green Revolution appears ill-suited to the challenges of the twenty-first century". This view is consistent with two other bodies of critique: one of the neoliberalisations of the Indian economy in general (Peet 2011; Dreze and Sen 2013), and the other of rural crises following neoliberal globalisation of rural economies all over the world (e.g. McMichael 2009, p. 3). Together they constitute an opposed mirror image of the dominant policy orientation described above.

Again, my task here is not to evaluate these claims and counter-claims, but to return to the development challenge of correcting imbalances of development and maintaining food security. My point is not that economic growth is good or bad, or even whether it is possible for it to occur in ways that distribute benefits evenly and fairly. It is simply that the dominant models of the past half century have failed to achieve this, and this failure alone seems reason for serious consideration of alternative models.

India, unlike many other countries, has the advantage not only of a rich body of historical precedent, but of (at least) one living tradition that offers a model of and perhaps even a working foundation for a sustainable agrarian economy, ecology and society that could begin to redress the problem of unbalanced development.

6.5.2 Beyond the Border: Mountain Cultural Ecologies

The story of *basmati* is usually read as a case study of commercial success and a model of appropriate market- and technology-led agricultural development (Kulkarni and Damodaran 2014). It could, however, be read in a different way: as a story of lost opportunity. It was a crop deeply embedded in local ecology and economy, history and culture which could have been developed in ways that strengthened local economies and communities, but whose economic success has been at the price of its complete disembedment from these contexts to the benefit of distant corporations and urban elites rather than local economic development. But the model from which *basmati* was disembedded is still there.

In the early twentieth century Sir Albert Howard observed of Indian crops that their "...chief characteristic … is the great number of different kinds found in almost every field" whose "primary function is to supply the cultivator and his cattle with food" (Howard 1927, pp. 4, 10, 36). Here he identifies key elements of Indian agriculture, multiplicity of crops, their integration with animals and the primacy of subsistence, all of which have since been radically changed by the two transformations described above, but less so in the mountains.

The household-based multi-crop subsistence agriculture practiced by old farmers such as Idris in the Dun Valley is in many respects a survival of the agricultural pattern described by Howard. Prior to the expansion of irrigation and the GR, agriculture across the northwestern plains was oriented largely to subsistence and was based on rich mixes of crops, varieties, rotation systems and animals, all essentially similar, but varying from village to village. While the GR did increase productivity of wheat and rice enormously this was at the expense of many other crops, the biodiversity of the whole system and diversity of human nutrition.

However, the GR never penetrated far into the Himalayas immediately to the north. In this area, traditional agricultures have remained relatively undisturbed until very recently. Conservative farmers in border zones such as the Dun Valley represent the downhill end of this pattern, while their market-oriented neighbours represent the uphill extent of the commercialised monocrop agriculture of the plains.

"Mountain agriculture" is in fact a mosaic of variations on a common pattern, varying from valley to valley, even village to village. These agricultures are best understood in terms of a wider system of human interaction with local ecology, by way of integration of multiple species of plants and animals with soil and water, topography and seasons.

This country consists of a series of steep ridges and deep valleys, in which rivers run down from the glaciers and snows to the plains. Along the riversides are small areas of fertile alluvial soil, but most of the lands are steep hillsides which have been terraced to provide thousands of small fields, following the contours. Houses and villages also sit on these terraces. The steepest or highest land above the villages is covered in what remains of the forests that once covered the whole area (Fig. 6.4).

The front cover of Arun Agarwal's book *Environmentality* (2005) bears a photograph of a lean, muscular woman, somewhere in the hills of Uttarakhand, striding along a rocky path, carrying on her head a bundle of tree branches. These are firewood for her family and fodder for her animals, maybe one or two cows. These animals are valued for their milk and for pulling ploughs and carts, but not least for their dung, which is the primary means by which her fields are fertilised. Women like this are a ubiquitous sight on the hillsides and roads of Uttarakhand (and other hill states) and provide a metaphor for the cultural ecology of these hills: its richness, complexity and inherent sustainability.

The fodder these women collect is the first step in the recycling of renewable forest biomass, via the digestive system of cattle, onto fields, combining with sunlight and water into crops and ultimately into the bodies of humans and other animals. This cycle has formed the basis of a cultural ecology that has sustained

Fig. 6.4 Field, forest and village

significant populations and maintained environmental balance in the mountains for centuries and continues today.

For example, in a hillside village of 25 households above Chandrapuri, in the Mandakini valley, a widow called Y. Devi works over a hectare of land (5 *nali*) with her son and his wife. This is an average size holding and they have two or three cows, a buffalo with calf and three chickens. In the *kharif* season she grows rice (one *basmati* variety and one non-*basmati*), soybeans and several other legumes, plus several varieties of millet. In *rabi* she grows wheat, lentils, mustard and barley. She also grows vegetables including radish, peas, garlic, onion, cabbage and potato across both seasons. These provide most of the family's foods, as well as medicine and ingredients of ritual offerings. She grows mostly for household consumption but exchanges surpluses, especially of soya, lentils, millet, rice and vegetables for salt and sugar in the local market (Fig. 6.5).

Y. Devi's life is, like that of most mountain people today, neither prosperous nor easy, not least because so many of their most able-bodied workforce are in paid employment in downhill towns, but they are relatively secure and they are masters (or often mistresses) of their own land, livelihoods and fortunes. There are no agribusiness corporations or millionaire agro-entrepreneurs in the mountains, but neither are there suicides. It offers a (blurred and faded) window onto past cultural ecologies all over India, but also a vision of an alternative model for the future of Indian agriculture.

Fig. 6.5 Y. Devi displays her harvest

6.5.3 Divergent Paths

An obvious question is why the paths of agricultural development on the plains and in the foothills have diverged so radically since the 1960s. The answer begins with the Green Revolution, which transformed the plains but had little effect in the hills. But this does not explain why, since the economic liberalisations of the 1990s, capitalist forms of agriculture—whether of the corporate type or the entrepreneurial "neoliberalised" type, never took root in the hills. Beginning analysis with the GR tends also to obscure important differences in pre-existing agrarian formations in the two zones. While the cropping systems of the two zones were fundamentally similar, agrarian relations and ecological conditions were less so.

Deep inequalities of land tenure have long been a dominant feature of rural communities on the northern plains. For example, as late as 2000, in a village in the Punjab, of 31 caste groups, only three owned land and of these three, one (Jat) owned "almost the entire agricultural land" (Arora 2008, p. 87). Only about two-thirds of these landowners worked the land themselves while the majority of land was worked by tenant-farmers of other castes. Agrarian relations of this kind are beyond the scope of this chapter, but they are an important part of the picture and it has been argued that the neoliberal transformations have built on the foundation of "landlord and upper class hegemony" and that resolving this "old agrarian question" is essential to resolving the current rural crisis (Ramakumar 2012, p. 67).

In the hills by contrast, while land ownership was never equally distributed, the vast majority of households owned, or at least had, secure access to cultivable land and very few households are entirely landless. According to Guha (2005, pp. 17–20) this represented a concrete reality approximating much more closely the "egalitarian peasant community" than even the idealised and romanticised representations of other such communities. It also formed "the basis for a sense of solidarity within the village community" manifest in the fact that village councils (*panchayat*) dealt locally with a wider range of issues, including ones raised by lower castes (2005, p. 21). Guha goes on to relate this political-economic form directly to the material conditions of hill cultural ecology: the shape of the land itself, the limited irrigation, fragile soils and limited communications serving as "constraints to the generation of surplus and consequently to the emergence of social classes" (2005, p. 28).

Notwithstanding these constraints, hill communities generally produced sufficient to live securely, even comfortably, and the difference in equality of access to productive land and other resources created a less conducive environment for the logics of the GR and subsequent liberalisations to play themselves out. Mountain communities today continue to survive and indeed to "live well"[18] notwithstanding relatively primitive material conditions, significant degradation of ecological resources, few opportunities for earning cash incomes and consequent out-migration.

6.5.4 A Model of Economic Development?

There is no need to romanticise mountain life today. It is materially hard and cash-poor and its young people do not migrate to the towns and cities without reason. Even less does it have the potential to feed levels of economic growth that the country as a whole has enjoyed for decades. But the problem we are addressing here is not economic growth itself the unevenness of growth.

Mountain communities are hardly "islands of California", but neither are they "sub-Saharan Africa" and compared with the socio-economic distress and ecological unsustainability in the vast sea of rural India, they look more like solutions than problems. And given the failure of mainstream development models to produce acceptable levels of balanced growth and food security, any alternatives would appear worthy of serious consideration. Making alternative visions real, or even imagining the form they might take in rural landscapes already transformed and dominated by the mainstream model, is not easy. There are two main questions to consider: first, how to maintain and develop mountain cultural ecologies to a level of economic sustainability and second, to how to apply the model they provide to other parts of rural India. This work has already begun.

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[18]The image of living well was one I have heard several times in discussions in Uttarakhand about economics and agriculture.

6.5.5 *NGOs, Basmati and Hybrid Economies*

A number of organisations share this view and are already working to support and maintain mountain agricultural systems, but also to enhance mountain livelihoods in other ways. The famous Chipko (tree-hugging) movement of the 1970s has been the subject of multiple interpretations (Brown 2015, p. 640) but it is understood by many of its veterans primarily as a local movement to protect local ecosystems on which local livelihoods depended. After their success in keeping commercial forest exploitation at bay, many of these veterans had become intensely aware of the mutual dependence between communities and ecosystems and their sustainable integration by way of cultural practices, including the material ones of agriculture. Since then they have worked to protect their ecosystems from further abuse and to maintain and develop traditional "biodiversity based" agricultural systems which they believe "... can indeed be an important tool for evolving "modern" approaches of sustainable development" (Beej Bachao Andolan). Their organisation *Beej Bachao Andolan* (Save the Seeds Movement) takes as its primary practice and key metaphor for local sustainability, the collection, saving and local exchange of seeds of traditional varieties.[19]

Vandana Shiva was a leading critic of the costs of the Green Revolution on the plains (1991) and since then has continued to critique the corporatisation and globalisation of agriculture and biological resources. At the same time she has established a research and rural development organisation (*Navdanya)* which also seeks to maintain biodiversity and local communities by way of enhancing traditional agricultures. Navdanya is a national organisation working in several states, but its home base is in Shiva's hometown of Dehra Dun. While its focus is not mountain agriculture as such, much of its practical development work is with farmers in the border-zone between mountains and plains and the kind of agricultures it works to preserve are those practiced further uphill. It is no coincidence that Navdanya too uses the term "biodiversity-based agriculture" and seed saving is at the core of its practice and ideology.[20]

Also in Dehra Dun is the *Peoples Science Institute*, who work primarily in mountain districts of Uttarakhand, on a broad range of resource, environment and livelihood problems. While they do not see agriculture as the only or primary source of economic development in the mountains, they have been involved in promoting SRI (system of rice intensification) technologies into mountain farmers.[21]

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[19]My knowledge of Beej Bachao Andolan comes from Biju Negi in Dehra Dun, Raghu Jardhari and Suresh Negi in Chamba, Atul Kumar in Delhi and their website http://beejbachaoandolan.org/. See also Brown (2015).

[20]My knowledge of Navdanya comes from visits to their farm outside Dehra Dun in 2012 and 2013, and especially from discussions with Dr. Vinod Bhatt and visits to local farmers with Anand Lal Kumar. See also http://navdanya.org/home.

[21]My knowledge of PSI comes from visits to their offices in Dehra Dun, but especially from a tour of some of their projects in the mountains led by Debashish Sen. See also http://www.peoplessscienceinstitute.org/index.html.

Other organisations are working on similar projects throughout the Himalayas, but this is not the place for a detailed examination of their work. My point here is simply that they believe in the sustainability of mountain cultural ecologies as viable alternatives to the mainstream model and are working to maintain and develop them. In this respect their aims, philosophies and methods are similar to organisations working with and for local agricultures all over the world.

Conserving and developing mountain cultural ecologies is one thing, but expanding the model they represent into other economies and ecologies is a larger task which has not, to my knowledge, been systematically attempted anywhere in India. However, to return to our point of departure, the development challenge and the failure of the mainstream model to meet it, any alternative seems worth considering.

While *basmati* is hardly a model of the kind of alternative agricultural development envisaged here, what it does represent is a traditional crop that has survived and thrived within new technical, ecological and economic regimes of agriculture. This has not been without a price, in terms of selective breeding, industrialised petro-chemically driven cultivation and corporate control of post-harvest processing and distribution, but what it offers is not only a missed opportunity, but a glimpse of other opportunities not taken.

In faraway Australia, where remote aboriginal communities may seem rather different from Himalayan ones, the problems they face are in some ways similar— of negotiating pressures for economic development that threaten traditional ways of life and livelihood. Jon Altman (2009) has for some years been arguing for what he calls "hybrid economies"—solutions motivated less by ideological concerns and more by pragmatic ones—initiatives that strategically combine elements of traditional lifestyle and values with responses to market opportunities and government initiatives. His argument is that these begin to create spaces in which indigenous Australians can begin to have some control over their own economic development even within a dominant environment of neoliberal market and policy.[22]

Further discussion of Altman's model is beyond the scope of this chapter, but it resonates with Akhil Gupta's observations of the way in which the thinking of farmers in Uttar Pradesh (at least in the 1980s) "displayed a distinct lack of fit with the dichotomy of 'modern and traditional'" and their practices were in fact pragmatic amalgams of new technologies grafted onto a framework of traditional agricultural knowledge and practice (Gupta 1998, pp. 9, 5). Pritchard et al. (2014, p. 54) have noted the same passage as well as observing in more general terms that

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[22]Altman's use of the term "hybrid" is inspired by Mayfair Yang's (*) analysis of the ritual dimensions of rapidly transforming economies in contemporary rural China. Yang in turn draws from Bakhtin's celebrated (*) use of the concept in relation to forms of multivocal literary voice. While the term itself is (in my view) inherently problematic, with its questionable borrowing from biology of the metaphor of crossing between species, and the consequent (but largely unrecognised) implication of reproductive sterility, this should not obscure its utility for thinking about economic practices that exist often on the margins of capitalist development and that disrupt monolithic interpretations of development possibilities.

"understandings of agricultural change premised on reified (traditional vs. modern; outsider versus indigenous, global versus local) … do not reflect the agency held by farmers as they navigate … changing social and economic landscapes".

While Gupta is referring to culturally embedded understandings of agriculture, what Altman is proposing is a formula for remedial practice. In more concrete terms, his suggestions correspond fairly closely to what the Uttarakhand NGOs referred to above are already doing: preserving the ecological and cultural bases of local agriculture, connecting its surplus produce to translocal markets and developing small commercial enterprises to supplement subsistence good with cash incomes. NGOs elsewhere in the more transformed rural landscapes of India are working on similar projects, but often without the benefit of a strong existing model.

While there is something like an emerging consensus among academic analysts, NGOs and farmers themselves toward if not an alternative model, at least a hybrid one, what has yet to happen is recognition and support of such models from the institutions in which resources and power over agricultural development are concentrated. Farmers' advocacy groups across India have long been calling on the government to modify agricultural policy in ways that protect their interests over those of corporate ones. At the WTO meeting in Bali in December 2013, the Indian delegation, argued and won, against stiff opposition, the right to subsidise farmers' incomes above market prices. While this may well have been motivated primarily by the size of the rural/agricultural vote, and hardly constitutes the death of the mainstream model, it does run counter to the direction of that model and raises the possibility of policy more responsive to grass-roots concerns.

6.5.6 Coda: Alternatives Lost?

On 14 June 2013 it started raining in the mountains of Uttarakhand. By the 17th rivers, lakes and dams were overflowing, mountains were beginning to slide and roads were disappearing. This was the peak of the pilgrimage season, and tens of thousands of pilgrims from all over India were in Uttarakhand, visiting the headwater shrines of Kedarnath, Badrinath and Gangotri. They became trapped in a nightmare landscape of moving rock and water: thousands died and despite a massive rescue effort by the Indian army and local people, many more are still missing. Apart from the loss of human lives, it has since become clear that at least 4200 villages were affected, 9,200 cattle lost and 3,320 houses destroyed (Uttarakhand 2013). In higher, more remote parts where people depend on mules for transport at least 5000 were lost (Phoenix Uttarakhand 2013).The amount of crops and farmland washed away or rendered unusable is impossible to quantify, but one early estimate is 753,711 ha (Shankar 2013).

In September 2013, the World Bank made available $250m of funding (interest-free for 25 years) for the "Uttarakhand Disaster Recovery Project" (World Bank 2013). In February 2014 the Asian Development Bank loaned a further $200m

(Asian Development Bank 2013). The majority of funds were allocated to housing, roading, flood protection and disaster management. While this reconstruction of infrastructure is clearly warranted, no funds were allocated to reconstruction of agriculture or livelihoods. Recommendations have been made for the kind of hybrid agriculture-based reconstruction referred to above (Partnering for Rural Prosperity 2013b) and it remains to be seen what model will prevail in practice.

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Chapter 7
Millet in Our Own Voices:
A Culturally-Centred Articulation
of Alternative Development
by DDS Women Farmers' Sanghams

Jagadish Thaker and Mohan Dutta

Abstract Based on an ethnographic academic-community collaboration grounded in the key tenets of the culture-centred approach, this article outlines the discursive processes, practices, and resources utilised by DDS *Sangham* members, an organised collective of women farmers in Telangana, India to promote millets, a marginalised crop. The story of millets voiced by the women farmers is also a story of alternative rationalities to large-scale corporatisation of Indian agriculture; instead resisting the academic-industry-policy nexus by connecting local interpretations of food value to broader logics of development, nutrition, and hunger. The women come together in interpreting food as culture, rooted in local cultural understandings of health and nutrition. The processes of collective organisation rooted in this depiction of food value and health within local cultural logics draw upon identity formation, solidarity and collaboration with a variety of local, national and global actors.

Keywords Millets · Food security · Biodiversity · Gender · Agriculture · Community media

7.1 Introduction

Agriculture is the primary source of livelihood for about one third of the world population, with over 1 billion people employed in agriculture (www.ilo.org). Women constitute a majority of farmers practicing sustenance-based agriculture, and are often responsible to provide their families with water and food. Although

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women are primary food producers, they have been found to be most affected by hunger and poverty compared to men because of several factors such as unpaid labour working in farms owned by men, low ownership of land, and social and cultural factors that impede women's access to good food and nutrition (e.g., Dankelman and Davidson 1988). Moreover, global market prices for food also affect women's access to good food and nutrition. For example, an increase in food prices in 2007–08 led to an increase of 105 million poor, mostly in south Asia and sub-Saharan Africa (Ivanic and Martin 2008).

In India, about 50 % of workforce is employed in agriculture or allied activities, and with such a high proportion of population employed in food production, malnutrition should appear to be an insignificant problem. Yet, about half of India's children under 5 years of age are underweight, concentrated among poor, rural and marginalised communities (International Food Policy Research Institute 2012). India is home to about a quarter of world's poor, with the proportion of the hungry and poor increasing (International Food Policy Research Institute 2012) in spite of high economic growth in recent years, and increases in yields in agriculture sector, particularly of rice and wheat. Clearly, there is a missing link between the gains in economic and agriculture sector and its inability to solve the malnutrition problem in India. Perhaps, the disconnect can be found in shifting agriculture patterns and practices at both national and regional levels.

Agriculture, however, is closely connected with local cultural meanings and practices and so are food consumption rituals and practices. Agriculture practices, including specific crop choices, are embedded in the cultural meanings evolved over generations of observation, experimentation and evaluation. These meanings also evolve in response to larger social and political changes. Analysts in agriculture sector, and more importantly, the food sector, however, tend to focus on either yields, or number of calories a child is consuming, without emphasising the connections between local cultural practices, crop choices and its impact on food and nutrition security in local communities.

Helping us make these connections are women farmers from Deccan Development Society (DDS) *Sanghams* (collectives). DDS is a three-decade old grassroots organisation working in about 75 villages with women's *Sanghams* (voluntary village level associations of women farmers from *dalit*, low-income households) consisting of over 5000 women members in Medak District of Telangana. A majority of the women farmers belonging to *Sanghams* primarily worked as agriculture labourers, and with the help of *Sanghams*, were able to lease and later own small tracts of land. Many continue to work as agriculture labourers to supplement their farm income. The basic principle of DDS is "autonomous communities", where community members have access and control over food production, seed, natural resources, market and media.

In this paper, based on our ethnographic study in partnership with DDS, we argue that agriculture practices also constitute and in turn are constituted by gender relations, and gendered narratives of agriculture, food, nutrition, and development provide alternative openings to the dominant framing of corporatised biotechnology as a solution to problems of human health, food insecurity and

hunger. In the first section, we detail the key tenets of culture-centred approach (CCA) framework that help guide our partnership with DDS. Next, we detail key learning points on the discursive processes, practices and resources utilised by DDS *Sangham* members to promote millets, a marginalised crop. Specifically, we focus on narratives of women farmers on the benefits of millet crops for farm, health and biodiversity, and how they use community media, including community radio and video, to promote millets. At the same time, they also use these communication strategies to resist increased concentration of power in corporations, and government; instead highlighting the need for community ownership of seeds, farms, markets and media.

7.2 Culture-Centered Approach and Social Change

The culture-centered approach (CCA) foregrounds the voices of subaltern communities, particularly from the Global South, with the lived experiences of marginalised communities are key entry points to theorising and practice (Dutta 2008). Primarily developed in the field of health commination, the CCA draws from the traditions of critical theory, cultural studies, subaltern studies and postcolonial studies in critiquing the dominant Eurocentric understandings of health, disease and treatment. Instead, CCA co-constructs the meanings of health and knowledge with the marginalised populations (see for review Dutta 2008, 2011; Lupton 1994). That is, the CCA is engaged with questions of power, social constructions of discourses, as well as interrogate the absences of subaltern in dominant configurations of 'scientific' knowledge. The CCA framework, instead, builds the alternative knowledge systems by opening dialogic spaces with marginalised communities.

The central premise of the CCA is that although a majority of health and development campaigns are often targeted towards marginalised communities, such campaigns, however, do not seek to foreground community member's voices in conceptualising what constitutes a problem, and what solutions the community members feel will help them achieve their health and developmental goals. This communication disenfranchisement, CCA argues, goes hand in hand with structural disenfranchisement. The top-down interventions do not acknowledge the role of global economic and environmental structures that affect the vulnerability and adaptation responses of vulnerable communities. For example, communities in the Global South have often been the targets of communication interventions by framing culture of poor communities as primitive and their knowledge as archaic and in need of modernisation; the CCA inverts this logic by foregrounding the voices of local communities as entry points to knowledge and for seeking alternative development models (Dutta 2008).

According to Dutta (2008, p. 5), "the intersection of structure, culture, and agency creates openings for listening to the voices of marginalized communities, constructing discursive spaces which interrogate the erasures in marginalized settings and offer opportunities for co-constructing the voices of those who have

traditionally been silenced by engaging them in dialogue". In CCA, culture is conceptualised as the dynamic and localised spaces of meaning making within which concepts are articulated, shared, adopted and resisted. Structure refers to social and political edifices that constrain or facilitate access to resources, such as access to food production and distribution systems, communication channels and adaptation resources. Agency refers to the capacity of cultural members to engage with structures, such as the power to open discursive spaces, to make local meaning, and to resist the dominant narratives articulated by the structures. That is, CCA foregrounds the voices of the marginalised community members and seeks solutions through active participation of community members in designing, implementing and evaluating interventions that are rooted in the lived experiences of the community.

7.3 Site and Methods

Our collaborative project with DDS was carried around DDS *Sangham* office in Pastapur village, Medak district in Telangana, located about 100 km from the state capital city of Hyderabad. DDS is a three-decade old grassroots organisation working in about 75 villages consisting of over 5000 women members. The following work is based on on-going research partnership that began in 2012. Specifically, the following findings are based on 12 in-depth interviews and three focus groups conducted in the local language Telugu in and around the Pastapur village. Overall, 25 women farmers were interviewed as part of the initial phase of the project. In addition, field notes over several visits to the field sites, especially the annual biodiversity festival held in January–February every year, also helped the analysis. The important findings of this paper, in turn, were presented in focus group discussions to elicit more responses about the researchers understanding of local issues. All the participants belonged to lower caste in India, called as Dalit or untouchables, and were about 40–60 years old. All the participants were members of the DDS Sanghams, and their association with DDS varied from 5–20 years. Differences in opinion based on age, number of years in DDS, and location of their villages were investigated, but were not found in the analysis.

The semi-arid region of Telangana has one of the lowest indicators on health, livelihood, and wellbeing (see Kurian 2000; Vakulabharanam 2004), and as a result of people's protest over the past 50 years, it was accorded a status of a new state in 2014 to enable more localised governance. Medak is considered as a backward district, with about of 74 % of the populated designated as living below the poverty line, and about 78 % of the population engaged in agriculture activities. The region, however, has also seen major industrialisation in recent years, with more than 350 industries established in recent times, primarily pesticides, chemicals, pharmaceuticals and steel rolls industries, which have resulted in negative health outcomes due to industrial pollution (e.g., Larsson et al. 2007).

It is also important to situate the findings of this paper in the backdrop of emergence of DDS in Medak district. Several initiatives were launched by the DDS affiliated women farmers including establishing a seed bank where they collect

and store many varieties of millets and other food crops, providing loans to group of women farmers to lease land and grow food crops, among others. The seed bank also loans seeds to its members, and members repay the loan in seeds. In 1996, for example, *Sangham* members designed and managed an alternative public distribution system[1] (PDS) that emphasised local production and supply of food, unlike the Government run PDS that relies primarily on wheat and rice distribution, often procured from regions with high levels of irrigation and distributed across India (see DDS 2004). As part of the alternative PDS scheme, the *Sangham* members surveyed fallow lands that could be used for food cultivation. The *Sangham* also provided small loans to landless and small land farmers from lower caste communities, to improve their land, and to cultivate food crops that were suitable to grow in the semi-arid region—different varieties of millet crops. The beneficiaries of the PDS were identified using community consultation process, thereby reducing the errors of excluding households who need the food most, but are unable to provide proper paper work to get government benefits. The alternative PDS was found to generate employment, increase household income levels, increase agriculture productivity, and was able to address food and nutritional security (see DDS 2004). About 5000 acres of fallow land was brought under cultivation under the programme, generating 250,000 person days of employment every season, and helped to feed 50,000 poor households (DDS 2004). The *Sangham* members also organise an annual biodiversity festival, where the women farmers travel to different villages alongside bullock carts with seeds, emphasising the rich diversity of local crops, and the importance of seed and food sovereignty.

Moreover, identifying a need to communicate and articulate their concerns, women farmers have also participated in creating a community media space. The first community radio in India was started by DDS *Sangham* in 1998, with support from UNESCO (see Pavarala and Malik 2007). Similarly, the women farmers have also become documentary filmmakers with several documentaries to their credit. Two documentaries that have received wide viewership are *Bt Cotton in Warangal: A 3 year fraud*, and *Why are Warangal Farmers Angry with Bt Cotton*. The latter was translated to several languages, such as French, Spanish, Thai and German. The documentaries have been a key tool in building solidarity with other farmer communities in other parts of the world, particularly in Africa.

7.4 Results

In the following sections, we detail key learnings from our 2 year collaborative project focusing on millet cultivation as a climate change adaptation strategy for low-income households.

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[1]PDS refers to the Indian government initiative to distribute subsidized food and non-food items, primarily targeted for the poor.

7.4.1 Millet and Food Security

Millet is a general term for a diverse range of grass crops whose seeds are used as food or fodder. Its remarkable ability is to grow in adverse conditions such as low rainfall and low soil fertility, with little or no inputs. Some of the popular millets include pearl millet, finger millet, proso millet, foxtail millet, among others. In spite of millets being a low-input cost crop, it is very nutritious, and is rich in micronutrients like minerals and B-complex vitamins. In several participatory rural appraisals we observed, different varieties of millets were ranked higher than rice and wheat on several nutrition parameters. For example, one participant said, "The energy which we get from *Jonna* (*jowar* or sorghum) is not even available in buffalo milk. We should tell government which crop is good, which one is suitable. Some people do not even know the benefits of eating such good food as *Jonnalu*".

India is genetic home to several varieties of millets, and is the top producer of millets in the world (see National Academy of Agriculture Sciences 2013). However, the area of cultivation of millets, and, more importantly, consumption of millets, has been on a decline in India. For example, pearl millet, the most widely grown type of millet, saw a reduction of 3 million hectares of area between 1972–73 and 2004–05, primarily displaced by other crops such as wheat, rapeseed mustard, cotton, chickpea and groundnut. For example, Haryana saw a 50 % decrease in area between 1972–2005, accompanied by 85 % decrease in consumption of millets in both urban and rural areas, partly in response to Green Revolution that shifted cultivation of millets to high yielding, water and pesticide intensive, rice and wheat (Basavaraj et al. 2010).

In contrast to popular term of "coarse" cereals used for millets, DDS *Sangham* women farmers call some millets that grow in winter—sorghum, safflower, chickpea, mustard, linseed—*Satyam Pantalu* or crops of Truth, because of their ability to grow using moisture in the air during winter, and with minimum or no inputs: "Truth for them is the chance to survive without having to struggle" (Satheesh 2000, p. 182). Foxtail millet is described as *Barkat Panta*—tough crop—due to its ability to germinate even when it is roasted (Satheesh 2000). Similar other metaphors are used to describe the negative impacts of pesticide use in cash crop farms, unlike their farms which use only natural manure. For example, comparing the money paid for pesticides to that of hospitalisation charges, one farmer said, "Just like we pay 1000s of rupees for medicines to hospitals, similarly, by putting pesticides, it is like paying lakhs of rupees to the mother earth's hospitalisation".

Often, during adverse weather conditions, farmer's food and nutritional security is at risk. However, millet crops, because of their ability to withstand a variety of weather conditions, often ensure food and nutritional adequacy. A participant said that, "Some millets give good yields in times of low rainfall, such as *Padjonallu*, whereas other crops such as *Pesarlu* give good yields. If we plant *Jonna*, *Sajjalu* which requires very less water, even if there is less rainfall, we can still harvest some crops. We are confident that the kind of crops we grow can tolerate low rainfall. We have hard soil here, so *Jonnalu*, *Sajjalu* suits this region. Even if it rains more, some crops such as *Jonna* does not yield. *Togur* crop needs more water. So

some crops can tolerate more rain, and others less rain. So when we plant these varieties of crops, we at least get 2 bags when it rains less than usual, instead of 4 bags for normal rainfall. If we plant only crops that require rain, we may not have any yields (in low rainfall season)". Millet crops, in other words, not only ensure food sufficiency, even in times of bad rainfall season, but also nutrition security for low-income households.

7.4.2 Millet and Biodiversity

DDS *Sanghams* organise a month-long annual biodiversity festival starting on *Sankranti*—a festival of harvest celebrated in different parts of India. A procession of bullock carts, adorned with many varieties of millet seeds, and accompanied by song and dance, pass through several villages before culminating into a concluding ceremony near the Sangham radio station. In 2015, the focus of the festival was to highlight "life nourishing" crops as opposed to "life sucking" crops such as cotton that increases risks of farmers both from profits as well as nutrition access.

A millet farm inherently promotes biodiversity, as farmers plant about 20 varieties of millet crops in the same field. This multi-cropping system not only helps to reduce pest incidence and increase yields, and provide security due to changing climatic conditions, but also helps them access other important requirements. For example, yellow sorghum, provides not only nutritious food and fodder, but is also used in fencing and thatching of roofs (Satheesh 2014). In other words, the diversity of crops, in turn, sustains other life systems.

Recognising the importance of growing a variety of crops, one participant articulated that "The benefit is that now we will have four varieties of crops, four varieties of food, four varieties of seeds, four varieties of fodder…. Our crops grow because of our manure. Dung, compost …using all this we grow our crops, without using any external inputs". In other words, the diversity in food crops is recognised to be important to both human and animal health, and is also useful in a variety of farm and household needs, such as manure. Being diverse also helps them cope with the climate variations as each of the crops responds differently to different kind of weather, and is used as weather insurance.

Moreover, the multi-cropping system is argued to favour women farmers. As P.V. Satheesh, Director of DDS, explained, "There is a close relationship between multiple cropping system and gender relations. Multiple cropping systems compel you to physically go to field often to get different kinds of crops, as different kinds crops yield at different points of time. As a result, your relationship with the soil and farm grows. This is very important for women. Secondly there are leafy plants, which provides regular yields over a 6 months period. So it is also a multiple harvesting kind of crop. And a lot of different kinds of crops and yields gives them control over food. If it is a single crop, then it needs to go to the market. But this has whole different approach. So in terms of women and farming, this set of cropping system has clear advantages". Having control over food is

important for women, especially because, "Women have to wait for men to bring home food, and what kind of food will he get will only be made at home. But if women has access to land and farming, she can farm and cook out of her choice. She can decide what to cook today and tomorrow. Otherwise she has to wait for her husband to go to market and buy food. And till that time, she has to go hungry. Otherwise she can do everything on her own, without depending on anyone", as another participant noted. Unravelling this relationship between women and bio-diverse farming patterns, Satheesh explained. "Since the women is responsible for food and wellbeing of the family, therefore this kind of connection helps her maintain her responsibility. It is not always the women takes something away from the land, every time she is going to land, she will pick up cow dung and put it back in the land. So it is kind of give and take relationship and the frequency of visitations help the relationship grow".

7.4.3 Communication for Social Change

Many narratives shared by the women farmers reflected on the marginalisation of their voices in media and press; instead, argued for the need for communication spaces to articulate their concerns, and solutions. For example, the preamble of DDS Community Media Trust reads, "in fulfilment of the wishes of thousands of women from DDS *Sanghams* who wish to have their unrecognized voices heard and recognized by the world outside" asserting the right for their voices to be heard and recognised. Another participant mentioned:

On TV, they do not talk about good crops the kind we grow. I feel really bad about it. When the paper people came, I spoke in Pastapur. There is so much news about big celebrities. What we are doing is good work, protecting the environment, the earth and humans. So by eating such good food, we can be good. But they do not put such good work we do on TV. They have lot of programmes about fertilisers though. Fertilisers for mango trees, put DAP. But they don't show that eating Jonna is good for people's health and for animals. I told to paper people, the kind of work we do is good. So why don't you write in papers about our work more often? It should be shown in TV and be written in paper.

In 1998, the DDS *Sangham*, with support from UNESCO's 'Women Speak to Women' project (see Pavarala and Malik 2007), started perhaps the first community radio project in India which began with training of women in programme development, recording and broadcast. As Indian government did not yet have any community radio policy, the community radio station could not legally broadcast their programmes. Instead, programmes were recorded in a newly constructed radio station in Machnoor in audio tapes, and were played in audio players in several villages. The DDS has played a critical role in framing the Indian policy on community radio. In 2000, in an event DDS co-hosted a UNESCO sponsored workshop in Pastapur, a new report was released titled, 'Pastapur Initiative on Community Radio', recommending a new non-profit community radio policy. In August, 2000,

DDS formally applied for radio license which was denied by the government. Only 'well-established' educational institutions, such as university radio stations, were given licensing in 2002. With the new community radio policy released in 2006 allowing for community radio stations, DDS Sangham radio was the first to broadcast on 15th October 2008. It is run primarily by Algole Narsamma, and 'General' Narsamma, with help of about 12 rural reporters. The programmes are broadcast for 2 h in the morning, and evening, with a range of about 25 km.

Community media, by making the voices of women farmers audible through the participation of women in grassroots processes, also democratise the sphere of public debate and public participation (see Pavarala and Malik 2007). There is increasing recognition that community media can not only challenge the mainstream media's representations and stereotypes of vulnerable populations, but also co-create appropriate communication processes that are locally situated to meet their own cultural and political needs by voicing their local concerns on issues such as poverty, agriculture and development (e.g., Wilson and Stewart 2008). This locally situated ownership of communicative processes maps with the postcolonial endeavour to 'write back' (Prins 2004, p. 518, as cited in Wilson and Stewart 2008) or in this case 'talk back' or 'shoot back' by appropriating communication technologies that too have been directed toward subaltern communities. The local spaces of articulation voiced and shared through community media also emerge as sites of production of local knowledge constituted in resistance to neoliberal universals, simultaneously inviting possibilities for local-local networks of solidarity and resistance that emerge on global sites of knowledge production.

7.4.4 Resisting Corporate Control in Agriculture Sector

The women farmers narrated many campaigns they had initiated and implemented to raise awareness on the ill-effects of Bt cotton and promote cultivation of food crops using organic manure. These included radio programmes, documentary films and rallies in different villages as part of the Biodiversity festival they organise every year in January. One woman farmer talked about a recent campaign the women farmers implemented in January 2013, where they conducted night long discussions on the benefits of growing one's own food crops and the negative impacts of planting Bt cotton. We also had an opportunity to travel with women farmers to different villages during a month long Biodiversity festival, where the women farmers visit about 70 villages. In an example of direct intervention in 2002, when for the first time Bt cotton was planted in their area, the *Sangham* members went and uprooted all the Bt cotton crops. According to a women farmer who is a supervisor on horticultural issues:

> …in Kammulapalli village, there used to be an old person called Gouravva who was 100 years old. At that time, she went to the cotton farms and plucked them out and she warned the Andhra (land lords from other region in Andhra Pradesh) people not to grow cotton here. She said 'with whose permission you are growing this cotton, you spoiled

your crops and came here to spoil ours as well' she shouted at the Andhra people. And we used campaign against the cotton and for every village about 10–20 people used to go and pluck cotton plants.

Recounting her experience of shooting a documentary in Warangal, a woman farmer filmmaker said:

Woman filmmaker: They say that Bt cotton is a good seed, there are no pests and reap huge yields, and it is very helpful to farmers. So we went there and we covered the complete cycle from planting of Bt cotton seeds to harvesting the cotton crops. We worked there for 6 years in Warangal".

Interviewee: So what did you find out?

Woman filmmaker: There is only a minor difference in yields of Bt cotton compared to non-Bt cotton seeds, perhaps 1–2 %.

Interviewee: so you also covered non-Bt cotton in the same area?

Woman filmmaker: Yes, we followed farmers in the same area. We went to their fields, when they planted the seeds, when they spared "medicines" (pesticides and fertilisers), and when they harvested the crop. We also went to their homes. We checked how many times they spared "medicines" and what kind of fertilisers they used, how many varieties of fertilisers. Usually, they say that if you plant Bt, you don't have to use any pesticides, but why are they still using them. The farmers we spoke to said that there were other pests, and for better yields they were using such fertilisers. They said that they made a big investment in planting Bt seeds, so to ensure good returns they also used other fertilisers. But there was no major difference in yields between Bt and non-Bt cotton. So some people did get good yields, but others suffered heavy losses due to Bt cotton seeds. So such farmers (who had lost) did a lot of protest, and we videotaped them as well. Then, we called journalists and scientists to show our videos.

According to a woman farmer, Bt cotton decreases the area under cultivation for food crops, and has several interlinked consequences for low-income households. That is, an increase in the area of cultivation for cotton decreases cultivable land for planting food crops. Second, by planting more cotton and less food crops also reduces access to fodder for their livestock, which is an important source of nutrition and revenue for them. Third, reduction of livestock also results in decrease in access to natural manure, in the absence of which they have to buy fertilisers from the market. A woman farmer who is a supervisor overlooking horticulture issues shared that farmers who opt for Bt cotton often sell their livestock because they cannot find fodder for the animals. Alternately, if the farmer is planting food crops instead of Bt cotton, the livestock he or she owns could also be fed. Noting the changes due to Bt cotton, one woman farmer said,

Earlier, everyone used to have their own fodder in their own lands. If one has 50 acres they used to allocate at least 5 acres for fodder but now they are ploughing it and growing cotton for money. If we grow *chereku* (sugarcane), at least the straw will be used as a fodder. But by growing cotton, they have no fodder for livestock and they are selling their livestock.

Comparing the profits from Bt cotton to food crops, the woman farmer mentioned above said:

Let's say for one crop they may get 60,000 rupees and the amount they have invested will be 20,000 rupees and they get a profit of 40,000 rupees. They (other farmers) asked us which other crop can we get this much profit? Then we explained to them that if you go for Saijanna (Sorghum) crop, at least if you get 5 bags of crop and the Saijanna is sold for Rs. 3,000 per quintal and you will get Rs. 15,000. We can sell the straw as well and we will get Rs. 5,000/- out of it and we grow Kusama (Safflower) and that will come for another Rs. 4,000/- and if we calculate all this you are getting the same profit. In addition, the soil will be healthy and fertile. You will have food to eat all around the year, and your cattle will have fodder and if any relatives come to our house and let's say we will spend 10 kg of Jonnalu. If it is grown in our field we won't feel that bad for spending them. If we buy the same 10 kg in the market, it will cost us 300 and we will think we have spent 300 and we explained them all these things and they also agreed with us.

Bt cotton increases farmer's risks due to heavy investment in purchasing seeds and pesticides, and heavy dependence on rainfall for water access. Explaining the difference in the risk between food and Bt cotton crop, many farmers noted that even if the yield of food crops is low, they would still have something to eat, and would plant another crop in the next seasonal cycle. With Bt cotton, as the risks are high, the yields will determine if it is a profit or a huge financial burden. Even if there is profit, they still have to access food from the market.

Because many women farmers still work as agriculture labourers, one such farmer pointed out the difference between working in cotton fields compared to fields with food crops:

The money that we get (by working in cotton fields), will get over soon. But if we go to pick *Jonna*, we can get some back home and we can eat that at least for a week. If we get Rs. 300, the money will get over in an hour. If we get some *Jonna*, a married couple and their two kids can eat for 8 days. If we get *Chengalu* (Chickpea), we can cook dal for 2 months. Even if we get thousand rupees, it will get over in no time. People say that some have made lakhs of profits (due to Bt cotton), but that money will go in buying medicines (fertilisers), and paying agriculture labour. But if we have two-three bags of Jonnalu, some *Togadulu* (Redgram), *Minumullu* (Blackgram), *Pesarlu* (Greengram) then we don't have to buy anything for atleast a year. So we can also cook different *daals* (Pulses) on different days. Otherwise you have to go and buy. So we eat what we feel like cooking.

According to women farmers, unlike Bt cotton that is heavily reliant on rainfall, they plant a variety of food crops that are tolerant of both heavy and scant rainfall. By doing this, they are able have good yields with at least certain crops. Moreover, with livestock ownership, they are also likely to be able to access dairy products as well as natural manure for their crops. Cotton farmers, however, because of lack of fodder, often sell their livestock. And in the event of bad rains resulting in bad yields, do not have any other support to rely on after already incurring huge debts.

By resisting Bt cotton, the women farmers are resisting the agriculture-food system take-over by global agriculture corporations. Rapid adaptation of Bt Cotton has also resulted in agriculture deskilling (Stone 2011), where farmers are unable to adapt to increasing technological changes and are becoming completely

dependent on corporations for seeds and pesticide access, and markets to sell their yields. In the backdrop of the rapid corporatisation of Indian agriculture, by articulating seed and food sovereignty, women farmers are able to meet their immediate food and health needs, as well as contribute to long-term goals of sustainable agriculture. In place of development through monoculture and monopolisation by corporates, the women farmers champion biodiversity and community ownership.

7.5 Discussion

There are several key learning points from our collaborative project with DDS *Sangham* women farmers. First, is the magic of millets. We learnt of the nutritious value of the millet crops, and its linkages not only with the health of one's family, but as well as the health of the animals, soil and environment. In other words, millet is the central link in health, which is embedded in the interactions between human, animal and nature. The knowledge about the nutrition value of millets, however, emerges in the lived experiences of the farmers, which is collaborated by nutritional studies that show millets more nutritious than other staple crops in India such as rice and wheat (www.milletindia.org).

Shifting crop choices, from food crops primarily cultivated for domestic consumption to cash crops primarily cultivated for market consumption, has several impacts. One is changing gendered relations in agriculture work in terms of who makes farm-level decisions, and who benefits from such shifts. For example, key decisions on what crops to plant—food or cash crops—results in differential gender effects, shifting the burden either ways. Similar is the case of shifting nature of access to nutritious food, including access to nutrition from livestock, as the non-food crop farmer increasingly becomes reliant on government for subsidised food, often procured from elsewhere. Food crops are displaced locally and are replaced by crops that require different kinds of inputs, often expensive, increasing their risks during a bad season. Moreover, a new crop doesn't just affect the yields and economic gains of a farmer, it also affects how labour is organised and negotiated, which affects social relations between members in a community.

The agriculture sector is increasing centralised and specialised, with scientists, and agriculture corporations dictating the future of food resources at one end, and poor farmers seeking to secure their nutrition and development goals at the other end. Much of the research on agriculture sector, sponsored by big agriculture corporations, focus on narrow areas in the agriculture sector, primarily focusing on yields. Missing in this studies are issues that women farmers are most concerned about: accessing and securing nutritious food for family, impact of changing crops on gender-relations, and displacement of generations of community knowledge about seeds and localised agriculture technologies in favour of newer technologies that encourage agriculture practices with intensive inputs. For example, Kudlu and Stone (2013) point that the controversy over Bt brinjal (eggplant)—whose approval the Indian government has temporarily halted—not only results from

health risks of genetically modified (GM) food, but GM technologies incompatibility with the epistemologies of traditional Ayurveda medical establishment that emphasises complex relationship with nature and health, in contrast to chemical reductionism that is central to biotechnology.

At a broader level, there is need to interrogate the framing of agriculture technologies—developed in global North—as solutions to food and development challenges in global South, in the backdrop of increasing both centuries of colonial exploitation, and increasing corporatisation of agribusiness. Increased corporate control over seeds, food, farms and markets has displaced agriculture that has traditionally been intertwined with local culture and local community practises and norms. This displacement is part of the larger economic reforms to withdraw state and community control over resources, and at the same time, incentivise private ownership and wealth that has resulted in "internal colonisation" of the rural poor by the urban rich in India (Walker 2008, p. 606; also see Otero 2012). The genetically modified technologies should be placed along this continuum, and future research ought to interrogate the ways in which the benefits of newer agriculture technologies may result in increasing disparities between the rich and poor farmers, instead of reducing it. Women farmers' voices point towards an alternative to such innovations, both in the farm, and in the use of communication technologies to democratise the public sphere of participation in agriculture.

Recently, the agro-technology industries are increasingly using issues such as climate change and increasing population to argue for rapid introduction of GM crops in the global South (Qaim and Kouser 2013). However, farmer and women organisations are resisting the transnational agro-business companies through direct confrontation and through other local campaigns to highlight their concerns. *Sangham* women farmers appear to play an important role in this dialogue, co-creating local voices and sharing their local voices in global spaces of resistance against the corporatisation of agriculture. The voices assert their community's right over seed, food and markets, thereby asserting an alternative development pathway that is both sustainable and climate resilient. At a time when there is increased corporate control over of agriculture, in the form of patented intellectual property rights, spanning from manufacturing of seeds, pesticides, and markets for agriculture produce (Glover 2010), the women farmers' believe development to be a shared cultural practice of sovereignty over seeds and food crops, thus challenging the dominant ontologies of development. Although there are a number of research studies on the influence of digital forms such as online social media on participation in political resistance and change, there is lack of studies on more traditional forms of media such as community radio in organising and enacting political resistance rooted in the global South. This paper, through collaborative engagement with a community of women farmers in the global South, hopes to open up a discursive space for engaging with the roles of participatory media spaces as sites for resisting neoliberal hegemony.

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Part III
Activism, Development and Changing Technologies

Chapter 8
Investment-Induced Displacement and the Ecological Basis of India's Economy

Felix Padel

Abstract India's economic policies need to be reviewed holistically in relation to their impacts on ecosystems and communities and to ensure long-term sustainability. The term 'Development-Induced Displacement' adds insult to injury in a context where a majority of those displaced by industrial projects do not experience these as development at all, but experience a drastic drop in their living standards. What is indisputable is that this process is 'Investment-Induced Displacement', since financial funding is the driving force that makes projects happen; and Adivasis themselves often say 'We are being swept away by money'.

Keywords Investment · Displacement · Adivasis · Ecology · Economy

The food security of India's less affluent citizens is on a knife edge, in a context where globalising forces are rapidly widening the gap between rich and poor, as several other papers in this volume emphasise (Chatterjee, MacRae). Despite a high GDP and official statistics showing poverty as declining, many question this data and understand poverty as getting worse (D'Costa, Ray), with about 50 % of Adivasis and Dalits living in famine conditions.[1]

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[1] Binayak Sen has developed the argument in many places that according to data on body mass index and calory intake, at least 50 % of Adivasis and Dalits are living at a level of food deprivation that constitutes famine conditions according to UN criteria. 'Country Faces a Perpetual State of Famine', *The Hindu*, 21 January 2012, at www.thehindu.com/news/states/karnataka/article2819883.ece.

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Various causes combine to make it harder to maintain a livelihood through subsistence-based agriculture, while tens of thousands of small-scale farmers, including especially Adivasis, have been forced off their land recently, and even more are threatened with displacement in the immediate future. Though this is often termed 'Development-Induced Displacement', people at the grassroots often insist that, for them and their communities, displacing projects represent anything but development. What is beyond doubt is that financial investment is driving these projects, with a view to making substantial profits from their land and resources. 'Investment-Induced Displacement' is therefore a more proper term for this process.

'Accumulation through dispossession', the fashionable Marxist term for what is happening, is fine so far as it goes, and asserts an obvious truism—that a small elite is accumulating capital by dispossessing thousands of small-scale farmers, as also happened in Europe, as Marx analysed so well. What is needed, and urgently, is analysis of the precise financial/capitalist institutions and mechanisms involved, and a radical questioning of the investment process itself.

For right now, mainstream models of investment-based development are being promoted with increasing intolerance towards environmental and social activists, who are repeatedly accused of opposing India's development, for example in an Intelligence Bureau report made public in June 2014. To counteract this, a statement by Concerned Citizens was released on 25 June, signed by 70 prominent Indian activists, under the title 'Uphold Sustainable Development! Condemn "Foreign Funded" Destructive Development promoted by the IB!' (Concerned Citizens 2014). From its start in May 2014, the environment ministry of the new BJP government promised a better environment for business, through rapid clearances for industrial projects, in which 'growth and environmental protection would go hand in hand' (Aggarwal 2014).

At issue are the intrinsic rights of communities of Adivasis and other small-scale farmers. These communities are often perceived as 'backward' or 'uneconomic', yet in terms of long-term sustainability, many of them represent the most highly developed forms of long-term adaptation to ecosystems yet evolved by human ingenuity.

Also at issue is the present and future health of the country's ecosystems as a whole, on which the well-being of future generations depends. Mainstream economic thinking, which represents today's dominant ideology, prioritises a high GDP, 'growth', 'the market', and 'competition', at the expense of traditional values of sharing, co-operation and non-monetized exchange. Water sources, at the heart of every ecosystem, are under particular threat, with the metals and mining industry consuming and polluting inordinate quantities, effectively stealing ever-scarcer resources from agriculturalists.

By contrast, 'Adivasi economics' is based on ecological principles,[2] and the ecological basis of the wider economy needs to be recognised in policy if the acute poverty evident in India's cities (Walters, Gibson), as well as rural areas, is ever to end.

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[2]This argument is laid out in 'Adivasi Economics', Chap. 2 of Padel et al. (2013, pp. 21–46).

8.1 How can Destroying Livelihoods Through Displacement be Termed 'Development'?

In-depth acquaintance with less affluent people's situation on the ground in India's rural areas and cities—and the same goes for most other 'developing countries'—forces one to question fundamentally what 'development' really means. The vast majority of people displaced by 'development projects', such as dams, mines, power stations and other factories, suffer a momentous decline in living standards. At least 50 million people have been displaced by 'development projects' since Independence, of whom at least 40 % are Adivasis, representing roughly a quarter of India's total scheduled tribe population. While measurement of well-being and statistics of what happens to those displaced are notoriously poor, the literature, as well as shared experience, suggests that at least 90 % of displaced people—certainly most Adivasis—are worse off after displacement, most of them dramatically so.[3]

To take one example, the Upper Indravati reservoir project dammed five rivers in southwest Odisha during the 1980s–1990s, funded by loans from the World Bank, with turbines from Mitsubishi. Since the area is remote, the movement to try and stop the dam in 1989–1992 received very little national let alone international publicity, even though this was just the time when the Narmada Bachao Andolan was active against the Sardar Sarovar dam. At least 40,000 people were displaced by this reservoir. 50 % or more were Adivasis, and their situation continues to be appalling, with the majority far worse off than they were before, both among those who accepted resettlement in specially built colonies, and those who did not—many of whom were not considered eligible, for example when their villages remained while most of their land was submerged. Some were even marooned on islands.

Unusually, a World Bank consultant recorded what a man and a woman said to her on a visit to an affected village in 1993 that got published:

> If I starve you also bear a responsibility…

> We have nothing in our houses… You are a woman and we are women. You can see our situation and our children and you must understand. We can tell you things. Many things. You are a literate person from a big country. You understand these things that are happening to us. So please, as a woman, help us.[4]

But do literate people in powerful organisations really understand what is happening? If so, what have they done about the immense suffering and injustice perpetrated here and in hundreds of similar projects throughout India and other 'developing countries', by the World Bank itself, and dozens of associated institutions?

In the documentary *DAM-aged* (Sahu 2009), people from one Upper-Indravati-affected village speak out. Not one of the many promises they were made have been kept. No school, no health facilities, no safe drinking water, hardly any

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[3]Data on this dramatic decline in living standards of displaced Adivasis is available for example in Fernandes (2006, 2008), Mathur (2008, 2011), Padel and Das (2008, December 2008, 2011).

[4]Caufield (1998, pp. 227), Padel and Das (2010, pp. 95–100, 96 and 455 (quotations)).

cultivable land. 'If someone here gets ill, they wait here to die, unless they can raise the money from relatives or neighbours to travel the long way to town and visit a doctor and get medicine there'. As for electricity—the project was built for hydropower as well as irrigation—on paper it is there; in reality it is not, and since this scam has been done with all the proper paper work, politicians and bureaucrats alike wash their hands of trying to set it right. 'All our old people died within weeks of our forcible removal.' 'Before removal we lived like kings, we had so many kinds of food!' 'We so wish we could show our children how we used to live! Sometimes when the water recedes a bit we see the top of our temple and can't hold back our tears. How well we lived then! Water no problem. Food no problem. Medicines available in the forest….'

The degrading labour work that is the best most can do now, breaking stones for construction, is paid very badly indeed and barely keeps families alive. All around the edge of the 30 km long reservoir, forest has receded (on top of the extensive forest directly drowned) simply because illegally cutting a bundle of wood and carrying it to a distant town, is one of the few other ways of staving off starvation.

These kind of human details and voices from displaced people barely enter the Resettlement literature. There is a 'reality gap' between policy and practice when it comes to Resettlement and Rehabilitation, and in the 'development' discourse in general, especially when it comes to foreign-funded 'aid' by organisations such as the World Bank and Department For International Development (DFID) of the UK Government (Mosse 2005).

One manifestation is in mainstream policy and media discourse on job creation by 'development projects'. For example, Posco's planned steel plant cum port in Jagatsingpur district of Odisha is promoted as India's biggest FDI (Foreign Direct Investment) project, and was cleared under direct pressure from the Prime Minister's Office by Jairam Ramesh in April–May 2011.[5] It is projected as offering 48,000 direct and 830,000 indirect jobs over the next 30 years. Subjecting this to critical analysis, the Mining Zone People's Solidarity Group (Iron and Steal—the POSCO-India Story 2010, by a group of US-based Indian scholars in contact with grassroots organisations) estimates that 7,000–17,000 jobs would be created in the construction phase alone, with a very small workforce after this, while in the coastal area, the new steel plant and port would displace 20,000–40,000 farmers, fisherman and others, who would lose their land and established livelihoods altogether—an arithmetic the project report is silent on. Although the 'excellent package' for those accepting resettlement offers one job per family, with free 'training', the reality is that highly skilled livelihoods under people's own control are being destroyed, while similar projects show that such job guarantees lapse in practice after a few years, since there is no independent agency to enforce them. Moreover, a huge Adivasi population in 84 villages in Sundargarh district and 32 in Keonjhar would be severely impacted by

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[5]*Times of India* 3 May 2011, at http://timesofindia.indiatimes.com/india/Jairam-Ramesh-clears-Posco-project/articleshow/8148693.cms.

the basic resource Posco's project depends on—the iron ore, which is already being mined in the Kurmitar mine in Khandadhara mountain range.[6]

As we shall see, and several other papers in this volume also imply, the evidence that poverty is decreasing or has decreased in India is based on an outrageous manipulation of statistics and terminologies, in Government as well as World Bank, UN and other official publications.[7] Most evidence, in line with the hard realities anyone involved in grassroots India knows too well, suggests not only that the gap between rich and poor has hugely increased, but that poverty has increased, and is increasing vastly per se. If this is so, then the whole basis of what has been called 'development' is a lie. In particular, the ideology promoting colossal loans from the World Bank and other institutions is a lie in as much as it has failed, and is failing, to raise the standard of living for—figures are endlessly disputed—at least 50 % of India's population. As the argument on this gross manipulation of poverty statistics is presented by Devinder Sharma (2009, 2011):

> In a significant move, the Supreme Court in India has questioned the very basis of counting the poor in the country. Realising that the poverty line is a gross underestimation, the Supreme Court has done what economists had failed to see all these years…. 64 years after independence, poverty… is in reality increasing in a geometric proportion….
>
> The Planning Commission had worked out poverty at 27.5 per cent in 2004-05. An expert group set up by the Planning Commission again in 2009 to review the methodology for poverty estimates for the same year (2004-05) upped it to 37.2 per cent, which means a mere statistical readjustment added another 100 million people….
>
> … we now have the new Multi-dimensional Poverty Index (MPI) developed by the Oxford Poverty and Human Development Initiative for the United Nations Development Programme (UNDP) which pegs poverty in India at 55 per cent….
>
> What makes all these poverty estimates look unrealistic is the 2007 Arjun Sengupta committee report... which had estimated that 77 per cent of the population or 836 million people were unable to spend more than Rs 20 (less than 50 US cents) a day. This is more or less a correct reflection of the extent of prevailing poverty, and therefore needs to be accepted as the new poverty line. If India were to accept this as poverty line, the UN estimates of global poverty too would come under the scanner. (Sharma 2011)

In other words, over half of India's population struggle to get enough to eat, and the number of people living at starvation levels is not being reduced by 'development projects'—quite the contrary, since these projects are throwing people off the land in large numbers, substituting land-based food security with short-term labouring jobs that completely lack proper security (Bhaduri 2009, 2010).

The 'development projects' that bear most responsibility for this Investment-Induced Displacement and consequent impoverishment are above all from the mining and mineral industry, and from an accelerating surge in electricity

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[6]Mining Zone People's Solidarity Group (2010), Padel et al. (2013, pp. 96–100), Mukerjee (2012).

[7]Alternative Survey Group (2007), Bhaduri (2009, 2010), Sharma (2009, 2011), Deeming and Gobhaju (2014).

generation from new hydro-projects (big dams), coal-fired power stations (lignite and coal mines and plants), and nuclear plants.

Impoverishment takes many forms. Huge as the numbers are of people threatened with direct displacement, the number of people whose livelihoods or food/water security is being destroyed or under immediate threat from major new investments is far greater still. A few examples: the Polavaram dam project on the Godavari River in Andhra Pradesh is due to cause record displacement of 200,000–300,000 people. Thousands have already been forced off their land, and tell hair-raising stories of loss and injustice to anyone prepared to listen. Apart from a small minority of landlords, who have been able to negotiate for reasonable or even handsome compensation, the vast majority are people so marginalised that their voice is barely heard in the mainstream, literate world. Adivasis form the majority, mainly from the Konda Reddi and Koya communities, but countless Dalits and fishermen are not even counted in official figures—fishermen along the river's course as well as in the Godavari delta and neighbouring coastal areas (Umamaheshwari 2014).

Throughout an extensive stretch of coastal Andhra Pradesh, farmers are protesting strongly against new coal-fired power plants, where a record number are coming up, since the ecosystems they depend on are under threat. Police firing on villagers protesting at two separate plants in Srikakulam district in July 2010 and February 2011 killed several people (Sekhar 2011; Majumdar 2011; Padel et al. 2013, p. 122). Power plants and ports coming up along the Andhra coastline destroy and pollute previously excellent natural ground water systems, and are rapidly killing off extensive fish populations, destroying the livelihoods of countless farmers and fishermen alike (Dharmadhikary 2014). This is also a key reason for record protests against the Kudankulam and Jaitapur nuclear power plants on the coast in Tamil Nadu and Maharashtra (Ramana 2012, pp. 85–95).

Coal mines are expanding throughout central India, especially on Adivasi lands, and perhaps India's real coal scam is not 'Coalgate'—the biased allocation of coal deposits, avoiding competitive bidding, during 2004–2009, that was revealed in a draft report from the Comptroller Auditor General in March 2012—so much as the overruling of Jairam Ramesh's 'No Go Areas', by which the Ministry of Environment and Forests had attempted to place a moratorium on just over one third of India's coal deposits, lying under exceptional forest cover. The 'No Go Areas' were dramatically rejected under pressure from the Coal and Energy Ministries, with support from the Prime Minister's Office, during 2010–2011.[8] One of the main faults highlighted by 'Coalgate' is that many coal deposits have been kept idle and non-producing. But who says they should be producing?—that these coal deposits *should* be mined as rapidly as possible? Not the communities who are protesting against new coal mines in Singrauli (Madhya Pradesh) and Jharkhand for sure! The media-highlighted 'Coalgate' issue has thus masked the

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[8]'Jairam Ramesh and Coal Ministry in turf war', *Times of India,* Delhi, 29 December 2010; Siddhanta and Sinha (2011).

considerably more sinister implications of rejecting 'No Go Areas', confusing public perception of the numerous anti-coal-mining movements emerging as companies race to start mining 'greenfield' deposits.

The financial pressures are all too clear. With a view to gathering momentum from international investment, Coal India—the world's biggest coal-mining corporation—held an IPO (Initial Public Offering) sale in October 2010 that raised $3.43 billion, oversubscribing the shares on offer by fifteen times, with bids from leading US and other foreign banks and investment firms (Padel et al. 2013, p. 109).

But how long will India's coal deposits last? *India's Coal Deposits Are Vastly Overstated: Is Anyone Listening?*—a report by TERI (The Energy Resources Institute, formerly Tata Energy Research Institute 2011)—makes clear that at present rates of extraction, India's coal reserves can last just 45 years—and present rates are rising fast! Already, India is importing a large proportion of its coal—both thermal or 'steam' coal for power stations, of which Indonesia produces about 25 % of the world's supply, with India its biggest customer, at immense cost to Indonesia's forests and forest communities; and also bituminous, coking or metallurgical coal, of which Australia exports 50 % of world supply (Mines and Communities 2010). Even in Australia, many communities are resisting new coal mines, at great sacrifice (Movlan 2014).

When conservationists won a federal court case against Adani's Carmichael mine—projected as the world's biggest and a key foreign investment project for Australia—in August 2015, differences in perception were very revealing.

Queensland Resources Council chief executive Michael Roche said "legal loopholes" had paved the way for anti-coal activists to delay billions of dollars in investment and thousands of jobs. "It is preposterous that a technical administrative hitch could hold up billions of dollars in investment and thousands of desperately needed jobs," Mr Roche told the ABC.

What Adani and the Queensland Government call 'a technical administrative hitch' and 'legal loopholes', regarding two at risk-species, the yakka skink and ornamental snake, conservationists perceived very differently:

> The Mackay Conservation Group argued in court that [Australia's Environment Minister] Mr Hunt incorrectly assessed the mine's climate effects, ignored Adani's poor environmental record, and failed to consider conservation advice from his own department on the impact of the mine on the two vulnerable species. (McKenna 2015)

And what is left out here is crucial Aboriginal opposition to the mine and legal moves, which have also been highly effective (Tejas 2015).

Most of India's coal deposits have a high ash, moisture and sulphur content, making them suitable for power plants, but not for steel plants. Only 15 % is bituminous or coking coal. This is concentrated in the Jharkhand–West Bengal area around the Jharia coalfields, notorious for inextinguishable underground fires, and vast degradation of the natural environment and formerly forest-based tribal communities that live there. Since this coal is suitable for steel plants, and India's steel production is rising fast, pressure to mine these deposits is also rising fast,

and I have witnessed movements by Adivasi communities resisting this pressure through democratic councils—pressure which manifests in the form of threats and potential violence.

India's area of highest concentration of coal mines and power stations is Singrauli in Madhya Pradesh.

> Singrauli, the energy capital of India, stinks. It stinks of human degradation and it stinks of the negligence of the Indian government and the World Bank which together have created an environment described here as the lower circle of Dante's Inferno ….. [where] 70,000 contract labourers now work in semi-slave conditions under corrupt labour contractors. (Rich 1994, pp. 38–40)

At least 20,000 people had already been displaced by 1994. Current investments for new coal mines and power plants were estimated in 2011 at 45,000 crore rupees, with a view to generating 11,000 MW of power. Over 3,000 MW of this planned capacity is to come from an Ultra-Mega Power Plant called Sasan being built by Reliance, in mining partnership for developing three 'captive mines' with North American Coal Corporation.

Mahan Forest is another area in Singrauli where communities that have voted against new coal mines are being over-ridden, threatening another 14,000 people with displacement (Greenpeace and Kalpavriksh 2012), with a view to serving Hindalco's aluminium factories at Renukoot (just across the border in UP), and Essar Energy, which gathered huge investments by listing on the London Stock Exchange in April 2010.[9]

> Now the company people don't allow us to enter the forest. They say the forest is now theirs. How can it be? If the government gives away these forests, we have no other means to live, and we will not even get any compensation…. (Suchitra 2011)

Forest of an estimated 500,000 trees is to be cut for the project, affecting the livelihood of 54 tribal villages, whose 'consent' is claimed as fraudulent. With the High Court in Jabalpur seeking an enquiry into this claim, a Collector about to hold a new Gram Sabha vote on the issue, in Amelia village, was transferred in August 2014. Essar and Hindalco say they have already invested Rs. 20,000 crore in the project (Mandavia 2014). Hindalco is part of the Birla Group, which was the biggest single contributor to the BJP in the 2014 election (Dhawan 2014).

The situation of new mega-dams, under rapid construction in the Himalayas and elsewhere in India, is just as bleak for ecosystems and communities. Among the most controversial are Renuka in Himachal, on the Giri, tributary of Yamuna, which would drown a Wildlife Sanctuary, several monster-size dams on the Teesta River in Sikkim, and many in Arunachal Pradesh and neighbouring parts of Assam, all on Brahmaputra tributaries. Several of the main Northeastern dams have come up against sustained protests. Lower Subansiri and Lower Siang have met particularly heated protest, with the latter threatening the very existence of the remote Adi tribe, and the CRPF (Central Reserve Police Force) tear-gassing and

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[9]Caufield (1998, pp. 180–188), Padel et al. (2014, pp. 108–126).

lathi-charging a crowd of demonstrators at Pongging on 26 May 2010—unprecedented violence for Arunachal.[10]

As for the Teesta dams, they threaten the Tibetan Buddhist Lepcha people who live in Dzongu, the sacred, fragile region around Kanchenjunga (the world's third highest mountain), whose ecosystems, formed into a Biosphere Reserve and National Park and long safeguarded by Lepcha traditions, are also under threat. Lepchas have held a continuous relay fast for several years, to deafening silence from the national and international media. Local communities have strongly contested these dams' application for international funding through the 'Clean Development Mechanism' (CDM) scheme, which emerges in critical analysis by Lohmann (2006) and others as a scam of epic proportions. As Dawa Lepcha, an elder in the community, poses the question:

> The entire Teesta river is being tunnelled. The main river of Sikkim is disappearing. Is this development?[11]

How are these dams being financed? An 'MoU virus' is sweeping Arunachal and other states in the form of advances (and allegedly bribes) paid to politicians by construction and energy companies and their investors, pouring finance into the region to 'develop' it with a view to reaping financial profits through the complex business of selling electrical power—and financing this, since 70 % of investment in a dam normally takes the form of loans, accruing interest through debt.[12]

How democratic and environmentally sustainable is this whole process? Not at all, according to an Independent People's Tribunal on Dams in Arunachal Pradesh (Benjamin 2008) and a multitude of other sources, including the Lepchas. Needless to say, this is also the case regarding coal and other mining projects, including new projects in India's rapidly expanding steel and aluminium industries.[13]

Surveying these vast areas, it is evident that an institutionalised usage of 'development' has in effect hijacked the concept into an extraordinarily narrow range of meaning, focused on changes, usually imposed top-down on communities rather than democratically decided on among themselves, that are dependent on massive financial investment. The strength of local opposition to a large number of 'development projects' throughout India and other 'developing countries' shows that for many affected populations, these projects do not constitute development at all. In the words of Bhagaban Majhi, an Adivasi leader from Odisha whose community in Kashipur faces multi-level impacts from the Utkal Alumina Project, another Hindalco project, asking about people who have already been displaced:

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[10]Indigenous Peoples Issues and Resources (2010).

[11]Mitra (2006); see also Sharma (2003).

[12]On the Northeastern dams and their funding, Dharmidikay (2008), Chakravartty (2011), Rajshekar (2013).

[13]Centre for Science and Environment (2008), Padel and Das (2010), Padel et al. (2013, pp. 80–118).

> How many have been properly rehabilitated? You have not provided them with jobs. You have not rehabilitated them at all. How can you again displace more people? Where will you relocate them and what jobs will you give them? You tell us first. The Government has failed to answer our questions. Our fundamental question is: How can we survive if our lands are taken away from us? We are tribal farmers. We are earthworms [*matiro poko*]. Like fishes that die when taken out of water, a cultivator dies when his land is taken away from him. So we won't leave our land. We want permanent development. (Das and Das 2005)

In the Adivasi case, the word 'development' has a particular irony, since their societies are highly developed in terms of the skills of long-term sustainability, living in resource-rich areas without basically depleting these resources. This history of indigenous development is obliterated by displacement, along with communities' rootedness to particular lands and free access to mountains, water and forest—what are now termed 'common property resources'. Most 'development projects' start with a land grab in many ways and means, very often strongly resisted by local communities and of questionable legality, yet backed up by police, often with lethal force.

In line with this is Gustavo Esteva's questioning of the key concept of 'underdevelopment'. Ever since President Truman introduced the term in his inaugural address in January 1949, introducing a new age of US-led imperialism, 'For those who make up two-thirds of the world's population today, to think of development—any kind of development—requires first the perception of themselves as underdeveloped, with the whole burden of connotations that this carries' (1992, p. 7). Is the whole IMF- and UN-promoted classification of countries into 'developed', 'developing' and 'underdeveloped' pushing an ideology of development actually guaranteed to dispossess subsistence farmers and increase, rather than diminish poverty?

8.2 Rolling Back Basic Safeguards for Environment and Land Rights

In general, it has seemed that the larger the foreign investment involved, the harsher the use of force against local people protesting against any project. In Odisha, protests against the Tata Steel plant at Kalinganagar and the Posco steel plant cum port in Jagatsingpur district have been particularly brutal. In Kalinganagar, a notorious police firing on 2 January 2006 killed over a dozen Adivasis and wounded over 50, with more firings and violent actions by massed police in 2010—shortly after the Chief Minister publicly thanked the steel companies for paying for a new police station in December 2009!—that secured village land for construction to get under way. Villages resisting Posco, India's 'largest FDI', remained under police siege for nearly 10 years, with numerous actions by massed police, several deaths, and forced takeover of village lands during 2013.

Few projects have seen more violent police actions against huge protests than those at two nuclear power sites. Kudankulam, in Tamil Nadu, where Russian investment has built new power stations, has seen considerable police violence against hundreds of fishermen and others, with court cases slapped on several thousand protesters. A German national was arrested, and occasioned a much-reported comment from the Prime Minister censoring foreign support for anti-nuclear and anti-GM protests (IBN Live 2012; Selvaraj 2012). At Jaitapur, in Maharashtra, where huge French investment is coming into build a new nuclear power station, repression of protest turned violent in April 2011, with a police firing that killed a protestor, and most local people refusing offers of compensation (Ramana 2012, p. 95).

Jairam Ramesh, as Minister for Environment and Forests during May 2009–July 2011, made a show of striking a balance between environmental and social priorities on one side and economic or business pressures on the other. He ruled against Vedanta's mine on Niyamgiri, held a referendum on GMOs with extensive inputs from civil society groups, and made a stand for 'No Go' coal deposits covered by prime forests—on which he was defeated. Yet actually, he cleared most projects put in front of him, including the Posco one, even after two forest reports had shown grave flaws in the process of local consultation on forest rights, etc.; similarly the Jaitapur nuclear plant and the Maheswar dam. In these and other cases, he allowed irregularities to show clearly and admitted he was giving clearance basically because the Prime Minister's Office had ordered him to do so. He came in for strong criticism from environmentalists and social rights activists, as well as from the corporate side, and confessed, "the Ministry of Environment and Forests must have cleared at least 7,000 projects [in the last decade]… each [with] conditions and safeguards… Unfortunately we do not have a system of monitoring compliance…" (Bidwai 2011)

His predecessor as Congress Minister for Environment and Forests between 2004 and 2009 was A. Raja, later indicted in the 2G spectrum scam, who cleared over 2,000 projects between 2006 and 2008. A similar tendency to clear the vast majority of projects while making token stands against particularly controversial ones was characteristic of Jairam's successor, Jayanthi Natarajan (July 2011–December 2013), who was nevertheless blamed for holding up 35 major projects when she quitted (Pannu 2013). Her successor was Veerappa Moily, who was also—amazingly—the Oil Minister, and who cleared over a hundred stalled projects in his first month in office, including Posco, GM trials and Arunachal dams, while confirming Jairam's refusal of clearance to Vedanta's plans to mine Niyamgiri, following the spectacular Gram Sabha vote in twelve villages against this project, ordered by the Supreme Court (Hindu 2014; Daniel and Verma 2014; DNA 2014; Padel 2014).

As soon as Prakash Javadekar took up the position of Environment Minister in May–June 2014, he revealed, if anything, an even more pro-industry stance than Moily, focused on ensuring rapid project clearances geared towards creating a 'conducive environment for business', and attracting investment (Prajapati 2014; Sethi and Jha 2014). In particular, there have been ominous signs that the

basic rights achieved through a long history of campaigning, enshrined in the Forest Rights Act (FRA) and the 2013 Land Acquisition Act, insisting on Gram Sabha consent and Public Hearings, are to be diluted (Kumar and Chauhan 2014; D'Monte 2014). 'The environment ministry will no longer be "the roadblock" to India's growth', as Javadekar's ministry summarised an initial meeting with the Ministers of Coal, Energy and Steel in June 2014 (Aggarwal 2014).

The eroding of FRA provisions for Gram Sabha consent has started out with road projects (Daily Pioneer 2014; Tewari 2014)—significant since the largest ever loan to the Indian Government, orchestrated by the World Bank in January 2011, for $40 billion (with $1.5 from the World Bank itself) was for expanding 747,000 km of roads in the country (Jagota and Gangopadhyay 2011). These roads are geared towards extraction and export of resources, especially minerals, as well as military control against the Maoists.

The stage was already set for this erosion during June 2014 by the release into the public domain of the Intelligence Bureau (IB) Report entitled 'Concerted efforts by select foreign funded NGOs to "take down" Indian development projects'.[14] To numerous critics of this report, it seems clear that it was commissioned and written for the outgoing Congress Government, but made public by the new BJP one in order to scare activists off and thereby set the scene for faster clearances aimed at attracting quick investments, so that numerous projects seen as being held up by activists and 'green terror' could go ahead, giving a quick boost to India's growth rate under the new government. The report estimates that NGO activism 'using people-centric issues which creates an environment, conducive to stalling development projects' has had an impact of lowering India's GDP by 2–3 %. It concentrates on activism against nuclear, mining, coal, dam and GM projects, and names many prominent organisations and activists, including Greenpeace and Vandana Shiva among many others.

Many have commented that, as an Intelligence report, it shows very little intelligence, in as much as it constructs a conspiracy theory about damaging India's growth out of sincere efforts to stand up for basic safeguards that are meant to protect India's environment and communities. Critics concentrate on the charge that campaigns are foreign-instigated when all the movements concerned are strongly indigenous; while the 'IB bats for the corporate sector' (Das 2014), to promote foreign funding for projects that are staging destructive takeovers of communities' land and resources, immensely larger than any NGO funding, assuming this investment to be in the public interest (Concerned Citizens 2014). The report attempts 'character assassinations' of numerous outstanding Indian citizens. While some of the analysis of NGO funding is interesting and significant, the IB Report is silent about NGOs that are funded by foreign-based mining corporations such as Vedanta, as well as this company's political donations, of questionable legality (Sharma 2014a).

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[14]As of June–August 2014, this Secret Report was freely available on the net at http://bharatkalyan97.blogspot.in/2014/06/full-text-of-ib-report-21-pages-on-ngos.html.

Vandana Shiva's critique concentrates on the IB's highly biased portrayal of the GMO issue. As she and others insist, the Report promotes the vested interests of Monsanto, Posco, Vedanta, and other foreign-based corporations, whose predatory motives towards Indian resources are all too clear, against activists who are standing up for the rule of law (Shiva 2014). As Prafulla Samantara suggests, the document appears to be a well planned, corporate sponsored government document. This report is a weapon—first, to use this report to defame the ongoing democratic movements to protect natural resources. Second, to restrain the freedom of organisations and individuals, who have been raising these issues at various national and international forums (Samantara 2014).

In line with this motive, Greenpeace activists were arrested alongside local villagers, early the previous month, for campaigning against Essar's Mahan coal project in Singrauli, MP, currently one of the most high profile environmental and tribal rights campaigns in India, remarkable for its alliance between the grassroots political party Samajvadi Jan Parishad and Greenpeace, standing up against Essar Energy, which followed Vedanta's example of registering on the London stock exchange to attract foreign investment (Naveen 2014).

What seems particularly sinister about the IB Report is that the 'cyclic' process it analyses of setting up NGOs, soliciting funds, getting articles written in the media or elsewhere, 'recruiting' PR firms, and making international awards to the entities concerned, is precisely the tactic used by Vedanta, Posco and other companies, who have spent millions on PR and 'paid for news', as well as CSR (Corporate Social responsibility) ventures designed to impress investors, involving specially set up NGOs, that are top-down and completely un-democratic on the ground (Padel and Das 2010, pp. 539–554).

In another sign that election funding by big corporations is expected to pay dividends in rapid clearances, Vedanta's Lanjigarh refinery held a Public Hearing at the end of July 2014 with a view to a sixfold expansion—even though the plant has been running below capacity due to its inability to mine the nearby Niyamgiri bauxite deposits. Although most local people spoke out strongly against this expansion, pointing out that it seems to depend on mining Niyamgiri's deposit which has been repeatedly denied, not least by the recent, Supreme Court-ordered Gram Sabhas, the local administration misrepresented this Public Hearing as 'consent', and ensured that mainstream media reported it as such—a falsification typical of many Public Hearings, but boding ill for environmental and tribal rights concerns under the new Government, since the Niyamgiri movement has been a case of outstanding resistance to the trend of corporate takeovers, bringing together a large section of civil society, including courts and government officials, environmentalists, political parties, NGOs and many others, heeding local people's insistence on their traditional rights over their mountain and forest (Choudhury 2014; Foil Vedanta 2014; Padel 2014).

8.3 Economic Realities of Ecosystems and Growth

One thing that emerges clearly from this summary is the way that financial investment is prioritised way above both environmental imperatives and the wishes and needs of communities rooted on the land. This is short-sighted in the extreme, since healthy ecosystems are the basis of a sound economy, now and for future generations, and raises vital questions concerning economic imperatives, and the relationship between economy and ecology.

'Sustainable Development' is defined as having three pillars. Placing 'economy' first, which has been the standard approach, makes a mockery of the concept, and allows Vedanta, for example, to write 'Sustainable Development' reports on the basis of profit projections for the next few years, and even to claim their CSR programme is teaching Adivasis 'sustainable agriculture' (Padel and Das 2010, pp. 539–556). Logically, environment should come first, since there can be no life on earth without healthy ecosystems, and society second, since there can be no markets without people. Traditional Adivasi livelihoods are among the best examples we have of sustainability in the true, long-term sense, since they have demonstrably sustained themselves over centuries. Not damaging future generations' capacity to support themselves from the natural environment means planning centuries ahead, not just for 20–30 years. For example, as Baghaban Majhi and other Adivasi activists emphasise, mountains are sources of life because they are storehouses of water. Mining them makes monsoon rainwater run straight off, and permanently damages their apex role in an ecosystem as sources of rivers through perennial streams.

The steel and aluminium are often projected as emblems of national development and boosters of economic growth. Realities are more complex. For a start, rampant illegal mining, documented by the Shah Commission and others involves, among other abuses, avoidance of royalties on a huge scale. The Shah Commission has recommended a CBI enquiry into large-scale corruption in Odisha, that the state government has resisted (Mohan 2014). The way the 'real economics' of mining works, it is clear that paying royalties is in practice subsidiary to other (non-legal) payments, which involve a major source of income to many politicians and political parties. This is true for many mining ventures, especially, it seems, those geared towards export of iron and manganese ore highlighted in the Shah Commission, in Odisha, Jharkhand, Chhattisgarh, Karnataka, Goa and other states.

Also, the economics of the aluminium industry in particular involves huge subsidies on basic costs, especially electricity, as has been reported for aluminium factories worldwide—basically, they cannot even break even without large subsidies on electricity costs. This is evident from the start of the industry in India. There are also major subsidies on the cost of water, and in effect on infrastructure, largely paid for by loans taken by the government to ensure that roads and other transport needs are taken care of, and on labour, which is largely sub-contracted, with a minimum of job security and compensation, and emphasis on keeping

labour costs extremely low. In other words, a mining project's biggest costs are *externalised* onto local communities and ecosystems, which become extremely degraded and polluted (Padel and Das 2010, pp. 293–395). Vast corporate subsidies in India work above all through income tax and customs and excise—'the largest conceivable transfer of wealth and resources to the wealthy' (Sainath 2014).

The nuclear industry is another that brings huge amounts of foreign investment into the country. This is a major issue for example at Jaitapur, through the French company Areva. Yet analysis of the economics of the nuclear power industry shows that, economically especially, it never lives up to its promises. In India, as in the history of the nuclear industry worldwide, the promise of cheap electricity from nuclear power has never been realised and is based on highly distorted analysis, due to unwarranted secrecy on key factors (Ramana 2012, pp. 153–192).

One major way the costs of these industries get externalised onto local people and ecosystems is through water consumption and pollution. Producing one tonne of steel consumes (and pollutes) over 40 tonnes of water, while 1 tonne of aluminium consumes over 1,000 tonnes of water (Padel and Das 2010, p. 333; Ritthoff et al. 2002). This is already a cause of huge friction between metal factories and farmers, for example around Hirakud in north-west Odisha, where a mega-dam built to service an aluminium smelter during the 1950s gives even less water to farmers now, after a recent refurbishment by DFID (Department For International Development of the UK Government), since the water promised to farmers has been taken up by new aluminium and steel factories (Padel and Das 2010, pp. 77–80, 449–51).

India is presently the world's fourth largest steel producer, manufacturing about 60 million tonnes a year, as against about one million in the 1950s; and its aluminium output is also growing rapidly, with new plants built by Vedanta and Hindalco, including the smelters drawing water from Hirakud. In terms of the real, externalised costs of the aluminium and steel industries, is this even being subjected to proper analysis? It is clear that large-scale destructive impacts on communities, and on the ecosystems on which future generations will depend, are not being properly factored into an overall cost benefit analysis.

Looking at the economics of the mining, hydropower and nuclear industries as a whole, it is apparent that what is driving a period of rapid growth (presently estimated at around 8 % for India's mining industry) is abundant short-term investment. In fact, foreign investment seems to be a key, if little acknowledged factor in producing a high GDP, which is why Sierra Leone's GDP was estimated at 15 % in 2012—investment geared towards extraction of minerals, that has had little effect in raising ordinary people's living standards in one of the world's poorest countries, and involves main profits being made in metal trades, etc. outside the country.[15] This example highlights the situation throughout India's mining areas,

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[15]This figure is from the World Bank's *Sierra Leone Overview*, 2014, at http://www.worldbank.org/en/country/sierraleone/overview.

which are statistically the country's poorest, with appalling conditions in terms of work, hunger, water deficiency, human rights abuses and corruption, as well as other standard development indicators (Padel 2012). This is spelt out in a 2008 report *Rich Lands, Poor People. Is Sustainable Mining Possible?* (CSE 2008).

The popular idea—still given out by the mainstream media, politicians, policy-makers, financial institutions and economists—is that a high GDP 'trickles down' to the poor through employment and other benefits, when the reality is often the opposite. The economist Amit Bhaduri (2009, 2010) has shown how a high GDP correlates with increased impoverishment, via work and food insecurity due to 'labour rationalisation':

> For the sake of higher growth, the poor in growing numbers will be left out in the cold, undernourished, unskilled and illiterate, totally defenceless against the ruthless logic of a global market dominated by large corporate interests.

> This is not merely an iniquitous process. High growth brought about in this manner does not simply ignore the question of income distribution, its reality is far worse. It threatens the poor with a kind of brutal violence in the name of development, a sort of 'developmental terrorism', violence perpetrated on the poor in the name of development by the state primarily in the interests of a corporate aristocracy, approved by the IMF and the World Bank, and a self-serving political class... a massive land grab by large corporations is going on in various guises. (Bhaduri 2010, p. 42)

Right now, in 2014, at a time when land grabs are escalating worldwide (Pearce 2012), the World Bank is weakening, instead of strengthening, its safeguards for displaced people and indigenous populations, in sync with India's recent moves to weaken hard-won legislation protecting land rights and the environment (Pred 2014; Narayan 2014).

A more holistic understanding of economic realities needs to see investment into India from FDI in relation to two other major sources of income for the Central and State Governments, as well as for politicians: on the one hand, loans from the World Bank and other sources, which have increased the country's burden of debt exponentially during the last 60 years (Padel et al. 2013, pp. 181–186); on the other, black money, for which the mining industry is a leading source. Corruption is rampant in the mining industry from top to bottom. Though proper figures are obviously impossible to come by, the Lokayukta N. Santosh Hegde estimated the black money generated by illegal iron ore mining in Karnataka at Rs. 2,500 crore (Express News Service 2010), and the Shah Commission estimated that Rs.14,541 crore of illegal minerals had been mined in Jharkhand (Economic Times 2014). Discomfort in high places from such revelations is doubtless why the Shah Commission was ordered to wind up in October 2013 before it had tackled Chhattisgarh, Madhya Pradesh, Maharashtra, Rajasthan or Gujarat (Counterview 2013; Chakravartty 2013).

The black economy in India starts from land deals and speculation, in cities as well as in rural areas (Kumar 1999), and the mining and construction industries are major contributors. This applies to the world economy also. Estimates of India's black economy range from 30–50 % of the official GDP, with over

two-thirds of assets thought to be held in foreign bank accounts (Tiwari 2013; Sharma 2014b), which is comparable with estimates for the world economy.[16] Surrounding the finances of 'developed countries' lie tax havens, whose tax avoidance and money laundering operations have vast, little-analysed impacts on mainstream models (Shaxson 2012). The arms industry and trade have a central place in the economies of 'developed' countries, fuelling wars, as well as spreading the largest-scale corruption of all (Feinstein 2011). Contributing to the arms industry is the mining and metals industry. As scarce resources get scarcer, many of the worst wars are motivated by the extractive industries' rush to get hold of deposits. The civil war in the tribal areas of Central India is basically a resource war, dressed up by both sides as an ideological conflict, with both Maoists and mainstream forces using exploited, displaced Adivasis as fighters killing each other in and around the tribal villages in areas such as Bastar that were basically peaceful until 15–20 years ago, and where indigenous, Adivasi movements were basically quite effective in preventing new steel plants and mines (Padel 2008).

A lot of investment into India comes in the form of loans, increasing the debt burden. The fact that about 70 % of investment into dam projects comes in the form of loans means that rivers are being mortgaged into the control of corporations and financial investors, and the overall power structure is one of 'moneylender colonialism', with the World Bank/IMF in effect dictating national economic policy in the interests of foreign capital (Rowbotham 1998; Padel and Das 2010, pp. 455–495; Graeber 2012). When the model of financial investment-boosted growth is based on a rising burden of unrepayable debt, draining real profits through heavy interest payments and allowing policy to be dictated by external forces, this is not a sustainable model (Heinberg 2011; Padel et al. 2013; Kothari 2014). As Devinder Sharma eloquently suggests, 'growth' in nature denotes a natural cycle. If a mature tree, showing many years of growth, on which many other life forms depend, only contributes to economic growth as presently defined when it is felled to make way for a road or factory, surely there is something inherently perverse about this concept of growth? (Sahu 2009).

Essentially, the current model of investment-based growth is destroying the basis of life on earth (Heinberg 2011). Money flowing into India is orchestrating a loot of the country's resources, displacing and impoverishing hundreds of communities that have basically been living in symbiosis with their natural environment, depleting non-renewable resources fast, and causing immense pollution of water, earth and air. Worst of all for the health of life-supporting ecosystems is the depletion of water. Plans to interlink India's rivers form part of this insanity (Jigeesh 2014), through building yet more dams, when accumulated evidence shows that already 'the world's rivers have been impoverished by dams and their ecosystems devastated' (The Ecologist 2014).

The 'Gujarat model of development' has been much promoted recently for the rest of the country, yet farmers as well as city-dwellers in Gujarat question it

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[16]E.g. 31 % of official GDP in 2007 in Europe, Africa and Central Asia, according to Schneider et al. (2010).

fundamentally, seeing their land and houses forcefully taken away and their water security disappearing, as industry gets prioritised far above farming, and protective legislation gets undermined (Menon 2014).

One of the most worrying aspects is this dilution of law, with a tendency towards weakening regulations for giving environmental and forest clearance, eroding the role of local consent in Public Hearings (anyway reported as highly manipulated and misrepresented in dozens of cases) and Gram Sabhas, including the Forest Rights Act and 2013 Land Acquisition Act (Ramesh and Khan 2014). Even before the present government, 97 % of projects were getting clearance (Narain 2014). A check to this trend came in the form of a Judgement from the Supreme Court on 25th August 2014, putting clearance just given by the National Board of Wildlife to 140 new projects on hold, on the basis of the Board's composition excluding independent experts, as required under the National Wildlife Act of 1972 (Mahabal 2014; Rajagopal 2014).

As Jairam Ramesh emphasised when he was Minister for Environment, every decision for clearance of a project involves lobbying from two 'cultures' that have almost no dialogue—from business/capital on one side, and from environmentalists and social rights activists on the other (Ramesh 2010). There is a need for far more dialogue, and holistic analysis of costs and benefits. Real development means raising everyone's living standards. How much longer can outdated models of 'development' and 'growth' be promoted that sacrifice huge numbers of people—often living in communities rooted on the land that are models of long-term sustainability—for the sake of profits collected by corporate and financial elites? Instead of displacing such communities, their models should be learnt from in order to share resources, rather than depleting them rapidly in a financial system based on debt, that fuels resource wars and allows the extractive and armaments industries to drive the development process behind the scenes. Are the movements opposing new dams, nuclear power stations and mines 'anti-development', or do they represent the cutting edge of real development, based on democracy, an economy of sharing rather than competing, and responsible use of resources?[17]

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[17]The views here are expanded in many places including Norberg-Hodge (2012), Shrivastava and Kothari (2014), Padel et al. (2013).

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Chapter 9
Urban Neoliberalism and the Right to Water and Sanitation for Bangalore's Poor

Vicky Walters

Abstract In India, as in other developing countries, urban water and sanitation services have been buckling under the pressure of growing urban populations, ageing or non-existent infrastructure, competing resource demands, and a milieu of governance challenges. Concurrent to these challenges has been an increased emphasis on reforming and transforming Indian cities in line with neoliberal logics; rationalised under the auspices of achieving equity, efficiency and sustainability of urban infrastructures, government institutions and space. The extent to which this neoliberal trajectory will result in inclusive cities, especially for the poor, is however questionable. This chapter explores the intersections between the neoliberalisation of water and sanitation in Bangalore and the rights to these services for the poor. By examining efforts to extend services to the city's slums, and the water and sanitation conditions of the homeless who have received no attention in government initiatives to provide services, the chapter reveals the elusive character of the 'inclusive city' when neoliberal logics take trumps over human rights.

Keywords Urbanisation · Neoliberalism · Human rights · Water and sanitation · Urban poor

9.1 Introduction

India's cities are transforming. The economic reforms of 1991 and the emphasis on urban India as the power engine of the country's modernising, liberalising and globalising economy has seen the pace of urbanisation increase significantly in recent years. Fuelled also by processes of primitive accumulation (D'Costa this volume),

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the agrarian crisis (Macrae this volume) and uneven development (Ray; D'Costa; and Gibson this volume), it is estimated that within 20–25 years the country's urban population will double—to some 600 million people (Government of India 2013, p. 34). This follows suit with global trends and the arrival of the urban century. While India's urbanisation rate has been slower than many other developing countries, such as China, the magnitude of the country's demographic shift is significant and has been described by Revi (2008, p. 208) as "one of the most dramatic settlement transitions in history". Many of India's new urban inhabitants will be poor, living in slums such as the ones discussed in detail by Gibson in the following chapter. Many others will be homeless. As Corbridge et al. (2011, p. 9) have noted, "India's urban economy is not yet capable of creating enough urban jobs to accommodate the aspirations of potential migrants out of rural India… A new future beckons that is bound up with the urbanisation of poverty".

Alongside demographic transformation and the 'urbanisation of poverty' is a political and physical reformation of India's cities as urban infrastructures, governance institutions, physical spaces and social relations are increasingly being made subject to neoliberal logics; rationalised under the auspices of achieving equity, efficiency and sustainability. In this post-Washington consensus neoliberalism, a greater role for the private sector in public services is posited as being compatible with, and indeed necessary for, improvements in the life conditions of the poor. Here also, states are not minimised or replaced by markets but rather, their capacities are mobilised around creating enabling environments for markets to seed and grow. The Government of India's Eleventh and Twelfth Five Year Plans (2006–2011 and 2012–2017, respectively) clearly talk to the neoliberal rationalities of the post-Washington consensus. The Eleventh Five Year Plan (2006–2011, p. vii), which was titled *Inclusive Growth*, spoke of the need to "accelerate the pace of growth while also making it more inclusive" (Government of India 2008a). The Twelfth Five Year Plan (2012–2017) followed this up with the call for, (as noted by the Plan's title), *Faster, More Inclusive and Sustainable Growth*. Invoking the increasingly popular notion of the 'inclusive city' the plan emphasises the productive capacity of Indian cities while also referring to them as "effective drivers of inclusiveness because barriers of caste, creed, and language are bridged in interconnected efforts by residents to earn better livelihoods" (Government of India 2013, p. 34). An alternative notion of the 'inclusive city' is grounded in human rights and the idea of the right to the city (Brown and Kristianson 2009). In this rights-based approach, urban development must be combined with social equity and justice (ibid, 2009, p. 3).

The *Jawaharlal National Urban Renewal Mission* (JNNURM) which was launched by Congress Prime Minister Manmohan Singh in 2005 embodies the neoliberal notion of inclusivity. Widely cited in the Eleventh and Twelfth Five Year Plans, the focus of the JNNURM and its follow-up JNNURM II is on preparing Indian cities "to realise their full potential and become effective engines of growth" (Government of India n.d., p. 4). This is explicit in the mandatory governance reforms of the JNNURM which aim to improve the investment climate and attract private sector investment, and particularly in core infrastructure sectors and services such as housing, drinking water supply and sanitation. The extent to which the

mission aims for inclusion of the poor is through the sub-mission *Basic Services for the Urban Poor* which is focused on the "integrated development of slums through projects for providing shelter, basic services and other related civil amenities" (ibid, p. 6).[1] The BSUP requires that slum dwellers are not provided housing for free and that basic services are charged at full cost recovery levels within 7 years. The sub-mission does not support wage employment programmes or investment in the creation of new employment opportunities. According to The Ministry of Housing and Urban Poverty Alleviation, the need for this sub-mission is due to rising urban populations and concerns with the increasing numbers of urban poor and slum dwellers which "causes tremendous pressure on urban basic services and infrastructure" (Government of India 2009, p. 1). In neither the Twelfth Five Year Plan nor the JNNURM documents is there any mention of human rights or the right to the city.

This chapter explores the intersections between the neoliberalisation of urban water and sanitation services and access to these services for the poor. In India, as in other developing countries, urban water and sanitation services have been buckling under the pressure growing urban populations over the last decades. With growing emphasis on improving efficiency and increasing investment in infrastructure, many public water utilities have been targeted for commercially oriented reforms. These reforms include such things as volumetric metering, reductions in public subsidies, up-front capital contributions for new connections, and an increased role for private parties. The chapter is set in Bangalore, the capital city of Karnataka. Karnataka has been one of the forerunning states in implementing, or at least attempting to implement, market reforms in urban water services (Walters 2013). These efforts have been accompanied, in Bangalore in particular, with initiatives to provide the city's slum population with connectivity to the formal water network. In exploring what has and has not been done to improve services and water security for the poor, the neoliberal rationalities which suggest commercially oriented services are complimentary and necessary for inclusive cities and the well-being of the poor begins to unravel. This is particularly so when considered through a rights-based framework to water and sanitation.

I begin by presenting the conceptual framing of the right to water and sanitation followed by an introduction to the contextual setting of water and sanitation provision in Bangalore. The discussion then moves on to explore the water and sanitation situation for Bangalore's poor. First, I examine the context and outcomes of a series of initiatives to provide user-pays services to Bangalore's slums. Second, I consider the circumstances of water and sanitation for the city's homeless who have not been pursued for any program to provide them with access to services. These discussions reveal, and make apparent, the elusive character of the 'inclusive city' when neoliberal logics take trumps over human rights.[2]

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[1]For a more detailed discussion on the JNNURM and the BSUP housing model see Walters (2013).

[2]This chapter is based on 12 months doctoral research which was undertaken by the Author in Karnataka, India in 2007 and a small study conducted on homelessness and the right to water and sanitation in Bangalore in 2008. This latter study was conducted in partnership with ActionAid, Karnataka and the BRIDGE network.

9.2 The Right to Water and Sanitation[3]

The right to water and sanitation has existed in various human rights treaties and political commitments since the beginning of the international human rights regime (Scanlon et.al. 2004; Cullett 2013). However, it was not until July 2010 when the UN General Assembly passed a resolution affirming the right to water and sanitation as fundamental human rights, essential for the full enjoyment of life and integral to the realisation of all human rights, that international recognition of the right reached a historic landmark (UN General Assembly 2010: August). As with other human rights, the state is the principle duty bearer and has the obligation and responsibility to respect, protect and fulfil the right to water and sanitation. This obliges state parties to take the necessary measures to facilitate and promote the right, and to provide water and sanitation for those who are unable to realise the right through their own means (UN Committee on Economic, Social and Cultural Rights 2003). In fulfilling the right, state parties should give particular attention and priority to vulnerable groups such as those without basic access, women and children, migrant workers, and deprived urban areas (UN Economic and Social Council 2005). This would include those who live in slums and those who are homeless.

Like other human rights, the right to water and sanitation includes both substantive and procedural elements. Substantively, it requires that every person have access to adequate and sufficient water and sanitation to ensure their human dignity, health and life. It also requires that facilities are available and are physically and economically accessible. This means that toilets are available at all times of day (Cohre et al. 2008) and water supply is continuous or regular (UN Committee of Economic, Social and Cultural Rights 2003). Water and sanitation services are defined as being physically accessible when they are "within, or in the immediate vicinity of the household, educational institution, workplace or health institution" (UN Economic and Social Council 2005: s. 1.3[a]). There is no consensus on affordability and thresholds vary across countries and international organisations from as low as 2 % to as high as 6 % of total income (Hutton 2012). For the right to water and sanitation to be met, water supply and sanitation facilities also need to be good quality, safe and culturally acceptable. A good quality water supply is one which is safe for personal and domestic uses and which is culturally acceptable in terms of colour, odour and taste (UN Committee of Economic, Social and Cultural Rights 2003; UN Economic and Social Council 2005; World Health Organisation 2003). In terms of sanitation facilities, it requires that they are hygienic, at no risk of collapse, prevents human, animal and insect contact with excreta, assures privacy, and has water points positioned to enable use for personal hygiene (Cohre et al. 2008). Safe sanitation facilities and water supply also means they are in a location that provides freedom from risk to personal well-being such as dog attacks, sexual abuse, police brutality, rough or dangerous terrain, inadequate lighting, traffic

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[3]This section is a summary of a more comprehensive discussion on the right to water and sanitation in Walters (2014).

hazards and health risks. Critical for the achievement of the substantive elements of the right are the procedural elements which include access to information, participation in decision-making processes, and the right to determine the type and management arrangements of services (UN Economic and Social Council 2005).

In India, the human right to water and sanitation is not explicitly enshrined in national law but has been interpreted by the Indian courts in various case rulings as deriving from Article 21 of the Constitution of India on the right to life, and Article 47 on the "Duty of the State to raise the level of nutrition and the standard of living and to improve public health" (Bluemel 2005; Cullet 2013). However, neither the National Urban Sanitation Policy (Government of India 2008b) nor the National Water Policy (Government of India 2012), both of which promote the goal of universal access, explicitly recognise water and sanitation as human rights. Alternatively, these policies promote market mechanisms as a means for improving efficiency, accountability, and raising service delivery standards. Strategies for this include commercialising public utilities, increasing the role of the private sector, and reducing public subsidies. While the union government sets the overarching policy framework, under provisions set out in the Constitution, state governments are vested with the responsibility for planning, designing, implementing and operating water and sanitation projects within their jurisdiction, a responsibility which they can devolve to municipal governments in urban areas.

9.3 Water and Sanitation Services in Bangalore[4]

In the early 1960s, the Bangalore Water Supply and Sewerage Board (BWSSB) was established as a legally mandated public utility responsible for providing water and sewerage services to Bangalore and its surrounding areas on a no-profit, no-loss basis. The BWSSB provide individual, user-pays service connections. The main water source for these services is Cauvery River which is located 100 km away from Bangalore. Since the establishment of the utility these services have been restricted to central Bangalore although there are some peri-urban areas that have also been supplied with the BWSSB's services. These are primarily areas where the land is under the jurisdiction of the Bangalore Development Authority or where large private property developments and the gated communities of the well-off live (Walters 2013). Most households in these out-lying areas rely on groundwater through government provided house connections, public taps or private borewells. In late 2006, the jurisdiction of Bangalore was changed to merge Bangalore and the eight urban local governments surrounding the city into one Greater Bangalore Region with one urban local government. A few years earlier, in 2003, plans were initiated for the *Greater Bangalore Water and Sanitation Project* (GBWASP), a major infrastructure project to extend BWSSB services to these outer areas.

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[4]This section and the next are largely adapted from Walters (2010, 2013).

The urban poor who live in slums have not been traditionally serviced by the BWSSB. These individuals and households have been forced to rely on the good will of better off households, purchase water from informal water suppliers such as street vendors, or access water from open wells or borewell taps. Many of the taps supplied with borewell water are drying up due to excessive ground water extraction from both domestic and commercial users, and in many locations throughout the city the ground water is un-potable. These taps also receive limited maintenance from BWSSB engineers as they do not generate any revenue for the utility. There are also thousands of public taps which are scattered throughout the city which are supplied by the BWSSB with Cauvery water. These taps are a vital water source for the poor but their removal is of much attention as they are categorised as non-revenue water and considered commercially unviable and undesirable.

In addition to the BWSSB services, there is also a diverse range of private, small-scale and informal water supply vendors in the city. While some consider that small-scale providers are able to compensate for a lack of public sector provision (Lorente and Zerah 2003), independent water suppliers tend to be more expensive per unit than piped water supply and their services are generally unregulated and monitored (Kjellen and McGranahan 2006). Those most dependent on informal vendors are those who live in the 'informal city' (such as slum colonies, resettlement areas and the homeless). As with water supply there are also sanitation services outside of the BWSSB's services. In urban India, public sanitation blocks provide toilets but also amenities for personal bathing and clothes washing. While public sanitation is primarily the responsibility and duty of the urban local bodies, there has been a growing preference for private leasing arrangements and user-pays of public sanitation blocks (Kjellen and McGranahan 2006).

For many decades, the BWSSB was considered one of the best performing water utilities in India, however rapid population growth over the last decades of the twentieth century put increasing pressure on the city's infrastructures including water services. The BWSSB attempted to keep up with demand through large infrastructure projects to source additional water from the Cauvery River; however, given the distance of the Cauvery River from the city these are expensive undertakings and since the mid-1990s have been funded through heavy borrowing from the Japan Bank for International Cooperation (JBIC). By the late 1990s, the international and national agenda for water provision had turned toward commercial self-sufficiency of service providers. In Karnataka, the political and bureaucratic hierarchy governing the state was staunchly pro-market and in Bangalore, the middle class and corporate constituency were becoming increasingly intolerant and vocal about their flagging water services (Walters 2013). Under these conditions, the BWSSB was coming under increasing pressure to reform and perform. Over the past 15 years, this has involved green-field projects to extend services, the introduction of new market-finance mechanisms, *incrementally* removing public subsidies, imposed restrictions on the employment of new staff, and various attempts to outsource operations and maintenance to private operators.

One the first attempts to privatise the BWSSB was in the new millennium when a Memorandum of Understanding (MoU) was signed by the BWSSB and two French water corporations who were entrusted to develop a detailed and phased privatisation strategy. The MoU dovetailed with a major Master planning exercise which was conducted by AusAID over the years 2000–2002. The Master plan was expected to improve the commercial efficiency of the BWSSB and it was through this process, and the anticipated privatisation of the utility, that the first official initiative to service Bangalore's poor was developed.

9.4   Servicing Bangalore's Poor

The first initiative to service Bangalore's poor took place over the same years as the Master plan was being developed (2000–2002) and was a pilot project in three of the city's slums. Funded by AusAID, the pilot involved connecting the slums to the formal water network and in one slum it also involved the construction of a community toilet block. The pilot was partly humanitarian—to improve water supply for the poor. However, the primary motivation for connecting the slums was commercial. By connecting slums to the user-pays network not only would it widen the customer base of the utility and present an opportunity for generating revenue, it would also reduce non-revenue water from public taps.

The pilot required households contribute to the capital costs of the new infrastructure as well as pay on-going user charges for the services. However, convincing the slum households of the proposed financing model would require significant effort. To do this a social development specialist and an urban poverty specialist were recruited who along with the project engineers worked closely with NGOs who already had a presence in the selected slums. The involvement of NGOs that already had rapport with communities was considered necessary to mobilise people in favour of the pilot. Part of this mobilisation involved forming Water and Sanitation (WATSAN) committees. The job of the committees was to bridge communication between the project team and households, and to provide the social infrastructure for enabling the communities to make decisions on what services they wanted. The decisions however were pretty minor. As I have explained elsewhere, all the major decisions had already been factored into the project design: up-front capital contributions, user-pays services and WATSAN committees were not optional (Walters 2013). Overall, the pilot model was that the poor could have access to the city's infrastructure and public services so long as they were *willing to pay*.

The majority of people in the three slums agreed to take either individual or shared user-pays connections as well as contribute to the up-front capital costs. Thus, the pilot was regarded as a success. However, while financial participation by the poor had been achieved the persistence of poverty among the households meant the viability and sustainability of the model would soon unravel.

In 2007, 5 years after the completion of the pilot, households in one of the slums had broken the metres because they could not afford the minimum monthly charges of INR 73. In another slum, households received a regular water supply every 2–3 days for the first few years, but after that were only receiving water every few weeks. Compounding this problem was that bills were coming only every few months and for amounts far beyond what the households could afford. The community tried to remedy the problem. The WATSAN committee members consulted with the NGOs and met with the BWSSB engineers. Other members of the community protested outside the BWSSB service station. None of these activities had a positive result. The WATSAN committees were informed by the BWSSB that *every* household must pay their outstanding arrears which were a combined amount of user charges plus compounding interest, or the entire community would not be provided with a regular water supply.

Over the same period as the BWSSB slum pilot, resistance to the planned privatisation that had been initiated was also taking place and gaining momentum. Those opposing privatisation prepared a writ petition and submitted it to the Karnataka High Court which ruled that under the BWSSB Act (1964) the privatisation of service delivery was not legally permissible. The MoU with the two French water corporations was consequently cancelled and the privatisation plans tabled. Despite this and because the AusAID pilot had demonstrated that the poor could be convinced to pay—at least in the short term, it was decided that the initiative to connect the city's slums should be up-scaled.

From 2003 to early 2007 the BWSSB housed a Social Development Unit (SDU) that was charged with the job of upscaling the pilot project and connecting Bangalore's slums to the user-pays network. The SDU was made up of just one government employee, the individual who had been the social development specialist on the AusAID pilot. The work of the SDU focused on initiating, facilitating and coordinating the process of putting metered water services into slums and removing public taps and illegal connections. On the work of the SDU and slum household's use of public taps, the BWSSB website reads

> The Social Development Unit assumed the responsibility of reducing slum dwellers reliance on public taps by offering them the options of either individual or shared connections… In many slums people had also connected illegally to the system and had been enjoying free water. Efforts were made to tackle this menace.

It is disturbing that the poor, who already suffer discrimination and deprivation in a multitude of ways, are referred to as a being a menace for using public taps. In 2007, during an interview with a Bangalore-based consultant who was working for Suez when the privatisation MoU was signed, had this to say about how public taps and the poor would be treated under a privatisation regime

> …the public taps are the bane of the water supply… Because there is no ownership of the taps the water just keeps on pissing out. So what we said was we will disband the taps, provide free connection service to all slum households and then let them start paying for it (cited in Walters 2013, p. 108)

This man now has his own consultancy company which provides advice to Indian water utilities on how to increase private sector involvement.

Over a 5 year period the SDU targeted 43 slums. To hasten the process and to garner greater community buy-in, the requirement of households to pay capital contributions was abandoned. The waiving of the capital costs did not mean that the services would be provided to slum households for free. Households were still required to pay plumbing charges, the cost and installation of the metre, and on-going user charges. The initial costs were far from affordable for many households and combined with the prospect of monthly charges there was some resistance to the initiative, and particularly to the removal of public taps. There was, however, a determination among officials to see the removal of public taps. In some slums the BWSSB engineers requested the police accompany them to remove public taps, in other slums community groups were encouraged to support the program and moderate opposition (Walters 2013).

In addition to conflict at the time of implementation, there was a host of service problems once the new lines were in place. These problems included metres not being delivered and installed, first bills being issued months late and for huge amounts, and water being supplied intermittently or not at all. In one community I visited some households had bills issued for over INR 40,000 and without having ever received water. When water didn't come and with public taps removed, people were forced to use borewell water which can be of poor quality and a health risk, or travel outside the slum area to public taps provided with water from the BWSSB. Ironically, in a study conducted as part of the Master planning exercise it was determined that only 23 % of public taps were in fact located in slums. This would suggest that it is not only slum dwellers who use the city's public taps yet, it has been these taps which have been targeted for removal.

There has been no official evaluation of the BWSSB slum program, neither to determine its success or its impacts on the households and communities. From interviews I conducted with people in nine of the slums as well as BWSSB engineers, it is evident that the program has not resulted in reliable or sustainable services. Regardless of the lack of evaluations on the program, from 2003 plans were already underway to up-scale the initiative even further—to an additional 362 slums. The proposed upscaling was named the *Cauvery Agamana Project* and talks for the project began in 2003/2004 as part of loan discussions between the BWSSB and the Japan Bank for International Cooperation (JBIC). Like the AusAID pilot and the work of the SDU, the motivation for the project was first and foremost commercial. The loan under discussion was principally for infrastructure to augment an additional 500 mld of water from the Cauvery River to service the outer areas of Bangalore where, as part of the *Greater Bangalore Water and Sanitation Project* (GBWASP), the BWSSB's water and sewerage network was being extended. The JBIC loan would also cover some management reforms to improve the efficiency of the utility. This included minimising non-revenue water and would entail a multi-pronged strategy: reducing pipe leakage, removing public taps and regularising unauthorised connections. The last two are primarily

regarded as a slum problem, or as the BWSSB had stated the 'menace' of people in slums accessing free public water.

The BWSSB and the JBIC were accompanied in their discussions by representatives of the Cities Alliance, a global coalition of major international development actors that work with local governments to reform urban governance, create 'cities without slums', and develop sustainable financing strategies. That the Cities Alliance group was party to these discussions was not unexpected. The Project Development Report for the GBWASP had been prepared by the USAID and in the report it had been suggested that there could be a role for Cities Alliance if there was going to be a program for the poor. The JBIC and the USAID are two of Cities Alliance's largest members, and in 2002 both the United States and Japanese Governments launched a joint initiative to provide clean water on a sustainable basis to the world's poor. The governmental and institutional connections are clear. Cities Alliance agreed to consider a grant proposal to fund the 'software' component of the project—that is, the activities required to convince slum communities to forfeit free water and sign up to the user-pays system. Cities Alliance also proposed that the project should be implemented through an Apex Agency (lead NGO), that would be responsible for coordinating the various actors including the BWSSB, the JBIC, a social development officer and the local NGOs who would responsible for mobilising people in slums in favour of the project. By invitation only, five NGOs were encouraged to put in an expression of interest and only after a second round of requests did Wateraid, a UK NGO that is partly funded by the private water corporation Thames Water, put their hand up for the job (BWSSB, August 2005 cited in Walters 2010, p. 254).

Neither Cities Alliance nor Wateraid were part of the final composition of the project and it took many years for the *Cauvery Agamana Project*, or at least something similar to it, to begin in Bangalore's slums. The BWSSB website provides a brief progress report on the project. It reads

> This Project is currently under implementation. Four NGOs have been contracted to work in 96 slums in the 1st Phase.
>
> It is envisaged that with the measures introduced in respect of servicing of the urban poor BWSSB would reduce its losses through public fountains and illegal connections and increase its revenue and consumer base. It is expected to have a positive impact on its customer orientation and will bring in social sensitivity to the crucial task of water supply and sanitation services provision. (n.d)

This project is still underway so it is too early to provide any solid evaluation of its results. However, given that the primary goals of this project are similar to the AusAID pilot and the work of the SDU, namely to remove free water and make slum households paying customers, one would expect to see similar outcomes. That is, service delivery problems and the persistence of water insecurity for those in Bangalore's slums.

9.5 Rendered Invisible: Water and Sanitation for the Homeless[5]

How many people are homeless in Bangalore is unknown. Figures vary considerably from just 2,868 recorded in a government survey (Deccan Herald, n.d.) to an estimated 100,000 (Shekhar 2006). What is clear, however, is that the homeless live in an extreme state of marginalisation and deprivation. Marginalised politically, economically, physically, geographically and socio-culturally, the homeless in urban India are deprived of the right to vote, secure livelihoods, safe living and working conditions, adequate shelter and standards of living, and access to basic services (Walters and Gaillard 2014). Like those who stay in Bangalore's slums, the homeless are predominantly lower-caste Hindu's or from minority religions. Many have migrated from rural areas in neighbouring states such as Tamil Nadu. Few have voter identification and their livelihood options are limited to the insecure informal sector such as construction workers, rag-pickers, basket weavers and cobblers. The majority of them stay in temporary makeshift shelters. Vulnerable to work-related accidents, malnutrition, water and vector-borne diseases, gender-based sexual harassment, large-scale disasters and a host of every day hazards, it is somewhat alarming that there is very little attention paid to the homeless. Indeed, at the national level and in the state of Karnataka there is a notable lack of any policies, programmes or projects that directly address homelessness and access to water and sanitation. This is despite the homeless being highly susceptible to water and sanitation insecurity and the corresponding risks, dangers and inequalities that are associated with these insecurities (Walters 2014). For homeless individuals and families, the Indian city is not one of inclusiveness where "barriers of caste, creed, and language" have been bridged (Government of India 2013, p. 34).

The homeless in Bangalore access water from multiple sources. Public taps supplied with treated Cauvery water provide good quality water but they were not always accessible. In the outer areas of Bangalore there are no public taps supplied with treated water. In central Bangalore, taps that do exist may be damaged and not functioning, or located some distance from where people stay. People explained how they can sometimes walk up to 2 km to reach a public tap. Public taps are often supplied with water infrequently, irregularly and at unpredictable intervals—especially in the summer months so there is no certainty water will be available. Furthermore, water supply can come at inconvenient, difficult and dangerous times such as the middle of the night. Women and girls are usually responsible for collecting water and face a number of risks such as busy intersections, stray dogs and harassment. If the homeless are able to access a public tap it does not mean that the quantity of water they can collect will be sufficient. Public taps can be places of fierce competition and the homeless are often made to wait until others who live closer and have informal 'ownership' over the taps have collected what they need. As homeless people are pitifully poor and predominately

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[5]A more detailed discussion on homelessness and the right to water and sanitation in Bangalore and Delhi can be found in Walters (2014).

low caste they are treated with less respect and with less right to access taps by non-homeless people who use them. Despite these issues, the homeless preferred BWSSB public taps as their primary source due to the quality of the water.

For those who did not have access to BWSSB public taps they sourced water from borewell taps or purchased water from mobile street vendors and local businesses. Water quality testing conducted by the Author in fourteen locations in the central and peri-urban areas of Bangalore, found that borewell water in most of the samples did not meet World Health Organisation drinking water standards (Walters 2013). While water purification is possible, it can be costly and it not something the homeless can afford to do. Furthermore, purchasing water is no assurance that the water will be safe and of a good quality and households usually have to limit their water use due to the expense. This usually means bathing only every few days. Some households purchase borewell water from local hotels as there is no other water source and frequently get sick because of the poor quality. The poor quality of borewell water or the expense of purchasing water highlights the importance of the availability of potable water through public taps. However, as was discussed in the previous section, public taps are being removed in Bangalore's slums and the larger plan is for them to be removed throughout the entire city. This can only prove to be deleterious for the homeless.

The sanitation situation is equally critical. Public sanitation blocks which provide toilets and spaces for bathing and washing clothes do exist in Bangalore and some homeless people use them. However, these facilities are out-sourced to private operators and run on a user-pays basis. Charges range from INR 1–3 for urination and defecation and INR 10–20 for clothes washing and bathing. With meagre incomes these costs are extremely unaffordable and some households pay more that 50 % of their weekly income on water and sanitation costs. Many homeless in Bangalore work where they sleep as cobblers or basket weavers and cannot simply go off to the toilet which can be kilometres away. They also can not send their young children alone as public sanitation blocks can also be located across busy intersections. This forces many homeless people to practise defecation near where they stay. As with collecting water, this presents an array of risks. These risks include things such as snake bites, dog attacks, dangerous terrain and ill-treatment from security guards and police. Women and girls also face the gender specific risk of sexual harassment and possibility of rape. This risk is compounded as females seek some privacy and usually practise open defecation at night when they are less likely to be seen. All the women and girls can do to safeguard themselves is to coordinate their timings with each other so they can go for open defecation as a group.

The lack of bathing facilities is also a struggle for women and girls. To manage risk and maintain some privacy they bathe at times of the day when there may be fewer people such as before sunrise and often bathe while still clothed. During menstruation problems associated with a lack of toilet and bathing facilities is all the more severe and maintaining personal hygiene extremely difficult. The homeless cannot afford disposable sanitary pads and so they use cloth which they wash and have to dry in public. Here the lack of privacy is acute. Despite the

critical water and sanitation situation of the homeless there are no government initiatives, programmes and projects to provide the homeless with water and sanitation. Rather, the homeless and their basic rights are rendered invisible by the state.

9.6 Conclusion: The Elusive 'Inclusive' City

Moves toward the commercialisation and privatisation of water and sanitation services in India's cities are having, and will continue to have, adverse outcomes on water and sanitation security for the urban poor. The initiatives to service Bangalore's slums and the lack interest and attention in the homeless present a scenario which is both disturbing and alarming for the character of India's twenty first century cities, and the rights of some of the country's most disadvantaged citizens. In different ways the experiences of those in the city's slums and those who are homeless point to the elusiveness of an 'inclusive' Indian city. What is reflected is a scenario where market relations take precedence over human rights; where the poor are connected to the city's basic infrastructure if it is considered that they can be made to pay, and; where the poorest, most vulnerable and deprived of the urban poor are ignored and overlooked.

The initiatives to service the slums were clearly motivated by and dependent on the formation of market relations between service provider and citizen. In doing so, it framed citizenship not through the extension of human rights but as citizens and customers of basic services. In this context, the initiatives have failed to achieve consistent improvements in services for those in the slums that were targeted and when the experiences of the slum communities are set against the elements of the right to water it is clear the initiatives have not been progressive in ensuring that water supply is adequate, sufficient or economically accessible. Nor have they involved genuine participation of people in decision-making and the right to determine the type and management arrangements of services. A Chief Engineer of the BWSSB explained to me how the failure to supply water to the slums was not a technical issue, but one of politics and attitude. He said:

> …When there is a shortage of quality water, services are given to richer areas because of the power of elected representatives there. Few engineers are motivated by the idea of the right to water for the urban poor. Forty-three slums have been connected but there is no water [supplied] because slum dwellers have limited capacity to pay.
> (personal communication, 2007 cited in Walters 2013, p. 134)

The momentum behind the commercialisation of basic services explains why the slums were targeted: to reduce non-revenue water from public taps and increase the customer base. It also explains however, why people in slums who have limited capacity to pay were also poorly serviced. It further sheds light on why the homeless, who are arguably some of the poorest of those in the city, have been totally ignored and overlooked. They are too poor to be considered for inclusion in a neoliberalising city.

Indeed, the situation for the homeless is highly precarious. Forced to walk long distances at inconvenient times of day to access public taps, to use poor quality borewell water, or buy water at exorbitant prices, there is no water security for the homeless. Similarly, the lack of access to affordable and safe sanitation facilities compels many to practise open defecation and face a multitude of risks. For women and adolescent girls the situation is extremely hazardous. The abysmal state of access to water and sanitation experienced by the homeless must be understood as part of a larger bundle of deprivations and denied rights: the right to adequate housing, standard of living, health and livelihood, to name just some. The interrelatedness of human rights and the denial of these rights by the state mean that the homeless live in entrenched forms of deprivation, marginalisation and vulnerability that is compounded by their lack of political voice.

Water and sanitation insecurity for India's urban poor is at a critical level. If we are serious about progressing on the right to water and sanitation then access to services cannot be left to market principles or determined by class, caste and social status. An inclusive city requires the right to city, and rights within the city, be recognised and achieved. Genuine inclusion of marginalised and deprived groups requires recognition of them as citizens not customers and for this to be made explicit in national and state level policies. In the absence of a solid legal and policy framework on the right to water and sanitation in India, the persistence of enduring inequalities bound up with class and caste discrimination, and emerging inequalities associated with process of urban neoliberalisation, means this will not be easy to achieve and will require addressing the multifaceted and deep rooted structures that create and sustain marginalisation.

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Chapter 10
Bastis as "Forgotten Places" in Howrah, West Bengal

Lorena Gibson

Abstract India's recent rapid economic growth has not improved the lives of those living in poverty, such as those residing in Howrah's *bastis* (slums), which have been described as "deplorable", "dirty", "filthy" and "overcrowded" since the late 1800s. In this chapter I argue that Howrah's *bastis*, many of which are inhabited by the minority and marginalised Muslim population, are "forgotten places": historically and politically constructed habitats that are neglected, but nevertheless deeply inhabited, by the state (Lee and Yeoh, Urban Studies 41(12): 2295–2301, 2004; Fernandes, Critical Asian Studies 42(2): 265–272, 2010). In these *bastis*, services that are the responsibility of the state, such as access to education or the civic amenities discussed by Walters (this volume), are not adequately provided for, resulting in uneven development and vulnerable urban spaces within Howrah city. Furthermore, I show how "forgotten places" leave a gap that NGOs and grassroots organisations try to fill, drawing on ethnographic fieldwork to describe the efforts of Howrah Pilot Project, an organisation that runs grassroots-level development initiatives in one of Howrah's *bastis*. By considering how Howrah Pilot Project works to provide Muslim children from the poorest households within that *basti* with access to education—widely considered a basic human right—I argue that it can be viewed as a response to the processes of "active forgetting" perpetuated through historical sociocultural structures of inequality and injustice. However, such organisations need to be augmented by a responsive state in order to achieve meaningful, long-term, beneficial change.

Keywords Howrah · *Bastis* · Development · Education · Forgotten places

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10.1 Introduction

While Kolkata's poverty is world-famous, Howrah, located on the opposite side of the Hoogly River and Kolkata's twin city (see Fig. 10.1), fares worse. Howrah's *bastis* have been described as "deplorable", "dirty" and "overcrowded" since the late 1800s. Despite India's recent economic rise to global significance and official reports of declining poverty, ideas and policies informed by neoliberalism have not improved the lives of those living in poverty in *bastis* in Howrah, for reasons discussed by D'Costa (this volume). I argue that Howrah's *bastis,* many of which are inhabited by the minority and marginalised Muslim population, are "forgotten places": historically and politically constructed enclaves that are neglected, yet nevertheless deeply inhabited, by the state (Lee and Yeoh

Fig. 10.1 Map of Howrah and Kolkata, West Bengal, India. The Hoogly (or Hugli) River separates Howrah city, which lies along its western bank, from Kolkata city on the east. Howrah city's population is around one million and Kolkata city's population is around five million. Both cities are encompassed within a wider metropolis known as the Kolkata Metropolitan Area (KMA), the area outlined in the insert. *Source* Adapted from https://commons.wikimedia.org/wiki/File:India-Kolkata-locator-map.PNG

2004; Fernandes 2010). In these *bastis*, services that are the responsibility of the state, such as access to education, are not adequately provided for, resulting in uneven development and vulnerable urban spaces within Howrah. The processes involved in creating and sustaining forgotten places serve to responsibilize NGOs and grassroots organisations, which often try to fill gaps left by the state in such places. This chapter provides an ethnographic account of what happens in one forgotten place by discussing the efforts of Howrah Pilot Project, an organisation that runs grassroots-level development initiatives in Priya Manna Basti. By considering how Howrah Pilot Project works to provide Muslim children from this *basti's* poorest households with access to education, I suggest it can be viewed as a response to historical and sociocultural processes of "active forgetting". However, as Walter and Chatbar (this volume) both suggest, such organisations need to be augmented by a responsive state in order to achieve meaningful change.

10.2 "Forgotten Places" as an Analytical Term

Poverty and environmental degradation, perhaps Howrah's most recognisable urban features, are inextricably linked in the various *bastis* scattered throughout the city's 50 administrative wards. *Basti,* which means settlement in Bengali and Hindi, is a word currently used to refer to areas of low quality housing and urban degradation (slums). These areas vary in size, land tenure, and socioeconomic characteristics of their inhabitants. The word encompasses a wide range of housing, from huts built with disposable materials (bamboo, mud tarpaulin) along canal banks in temporary unauthorised squatter settlements to officially sanctioned *pukka* housing (constructed of durable material) in registered *bastis*. There is also considerable diversity within and between *bastis* in terms of poverty, educational achievement and employment. Not all of Howrah's poor live in *bastis,* and indeed the poorest of the poor are more likely to be found in the kinds of appropriated public spaces discussed by Walters (this volume) than *bastis*, which are also home to people from the lower middle classes. Despite these differences, scholars writing about urban poverty in the Kolkata Metropolitan Area (of which Howrah is part) often make the point that *bastis* are characterised by inadequate, or even the complete absence of, state services (Ramaswamy et al. 2010[1]; Mukhopadhyay 2006, p. 224; Sengupta 1999). In Howrah's *bastis*, the state is conspicuously absent in terms of providing access to civic amenities particularly, water, sanitation, electricity and educational facilities. Despite this absence from physical space, the state is overwhelmingly *present* in social space, especially social and

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[1]This is an article I co-authored with Ramaswamy and Sita Venkateswar, who has also conducted research with HPP.

political life. Instead of assuming that the widespread economic liberalisation policies implemented by the Government of India in the early 1990s resulted in a retreat of the state (a narrative contested by authors such as Fernandes 2004, and Münster and Strümpell 2014), approaching Howrah's *bastis* as forgotten places shows that while the state is absent in material ways, it remains present in other significant ways.

According to Lee and Yeoh (2004), the construction of forgotten places involves a politics of forgetting, strategic processes of exclusion and marginalisation. They describe "forgetting" in capitalist society as:

> … an explicit and conscious act, led or imposed by more powerful actors and consequently creating or reinforcing the marginalisation of particular places and groups in a range of different contexts and power structures. Forgetting is thus a sort of erasure or loss driven by more powerful others or dominant groups such as global capital, the neo-liberal state or the middle classes. These dominant groups actively control and manipulate space, either by creating new places or discarding certain places in order to maintain existing power structures.
>
> (Lee and Yeoh 2004, p. 2298)

In India, Fernandes (2004) connects the politics of forgetting with the rise of the new middle class, which grew in visibility during the 1990s. Discussing how new middle-class consumers have increasingly been depicted in national political discourses as representative cultural symbols and citizens of liberalising India, she argues that the production of middle-class identity is linked to "a politics of 'spatial purification' (Silbey 1995) which centres on middle-class claims over public space and a corresponding movement to cleanse such spaces of the poor and working classes" (2004, p. 2416). Here, the politics of forgetting "refers to a political-discursive process in which specific marginalised social groups are rendered invisible and forgotten within the dominant national political culture" (2004, p. 2416). This process, which manifests in struggles over public space at the local level[2] (two of the examples Fernandes discusses include drives to "clean up" cities by erasing any sign of the poor or poverty, and middle-class discontent with perceived excessive state support for the poor and working classes), does not go unchallenged:

> In practice, the hegemonic role of the liberalising middle class co-exists with and is challenged by numerous forms of political mobilisation of marginalised caste and class groups in contemporary India. The politics of forgetting thus continually rests on more active processes of exclusion that are in turn contested by these marginalised groups. The process of forgetting is a political-discursive process in which dominant social groups and political actors attempt to naturalise these processes of exclusion by producing a middle-class-based definition of citizenship.
>
> (Fernandes 2004, p. 2416)

The growing body of literature examining spatial politics in India's cities (e.g., Athique and Hill 2010; Chatterjee 2004; Fernandes 2006; Gooptu 2011;

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[2]Chatterjee (2004) also discusses citizenship and identity politics in postcolonial India, framing struggles over urban space as a contest between civil and political society.

Kaviraj 1997; Mahadevia 2006; Roy 2003) shows that although contemporary struggles over space might have particular characteristics informed by contemporary capitalist and neoliberal state reorganisation, they often build on much older distinctions including class, occupation and religion. The socio-spatial segregation and neglect characterising Howrah's *bastis* are not new, and in this chapter I highlight the historical and political processes that contributed to the current situation. My analysis focuses on access to education in Howrah's Priya Manna Basti as a lens through which to understand how active processes of forgetting are embodied and contested by various social actors.

This chapter draws on ethnographic research I conducted with Howrah Pilot Project (HPP) between 2004 and 2007.[3] HPP is a small, grassroots organisation that runs several community development initiatives in Priya Manna Basti, including a *masala* (spice)-making enterprise, a women's saving scheme, access to family planning services, cataract surgery and Talimi Haq School, a nonformal school for children from the *basti's* poorest households. Once a bustling centre of trade and industry, today Howrah is synonymous with urban decay and industrial decline. Taking a brief historical glance at the development of Howrah's *bastis* provides important insights into historical and political processes that have positioned them, and their inhabitants, as "other", undesirable and marginal. Focusing on Howrah also helps counter dominant representations of the KMA which often forget, overshadow or ignore the city in favour of its twin, Kolkata city.

10.3 Priya Manna Basti, Shibpur, Howrah

Howrah's early history is one of prosperity, not poverty. Howrah was a centre of trade (and conflict with foreign traders) long before Job Charnock founded Calcutta[4] across the River Hoogly in 1690. During Charnock's time Howrah's villages were home to prosperous Muslim and Hindu merchant families, along with migrants from other parts of Bengal seeking employment in its mercantile centres and Armenian settlers (Chatterjee 1967, p. 31; O'Malley and Chakravarti 1909, p. 19). Employees of the British East India Company and other European settlers began building villages and garden parks (including the Botanical Gardens in

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[3]My research in Howrah is based on three fieldwork trips of seven to eight weeks in length carried out over this period (5 months in total). Making short, repeated visits allowed me to build relationships over time, which we continue today via email, text and Skype. My main tools were participant-observation, interviews, focus groups, photography, and teaching an introductory social anthropology class at Talimi Haq School (see Ramaswamy et al. 2010).

[4]Calcutta was the anglicised version of the name of the fishing village around which the city grew during the period of British colonial rule. In 2001 the West Bengal Government changed the city's official name to Kolkata to better reflect Bengali pronunciation (and, perhaps, as part of a Hindu nationalist agenda). I use Kolkata to conform with the official designation and Calcutta to refer to the city before its name change. Where I quote other sources I retain the original spelling.

1786) as "urban retreats" in Howrah from the mid-eighteenth century (O'Malley and Chakravarti 1909, p. 22; Chatterjee 1967, p. 34). Transportation networks played a vital role in Howrah's expansion, especially Grand Trunk Road (one of South Asia's oldest roads), Howrah Railway Station (built in 1854), the original floating pontoon bridge that connected Howrah with Calcutta (constructed in 1874), and across the river, Calcutta Port (established in 1870). The bridge and trams saw an increase in commuters as growing numbers of Bengalis and others employed in Calcutta's administrative centres made their homes in Howrah (O'Malley and Chakravarti 1909, p. 31). Howrah became an important industrial hub following the Industrial Revolution and from the 1850s experienced a rapid growth in mills (jute, flour, cotton and sugar), iron and engineering works, dockyards, warehouses (for salt, rice and coal) and other industries (Chatterjee 1967, p. 34; O'Malley and Chakravarti 1909, pp. 104–117).

Priya Manna Basti (PM Basti) is located along Grand Trunk Road in Shibpur, an old village settlement in Howrah that developed into an industrial area in the nineteenth century. Shibpur had Bengali *zamindars* (landlords) and was home to Brahmin Hindu families as well as Europeans, giving it a reputation as "a centre of cultured peoples" (Chatterjee 1967, p. 70). The rise in industrial activity attracted a large stream of migrants from other parts of India who congregated in areas along lines of class, caste, religion and occupation. Discussing how Muslims formed more than one-fifth of Howrah's population by 1901, O'Malley and Chakravarti write that they congregated "chiefly in dirty over-crowded *bastis* like Tindalbāgān, Tikāpārā and Priya Mānnā's *basti*" (1909, p. 38). Ramaswamy— social activist, urban planner, writer and founder of Howrah Pilot Project—has collected oral histories of PM Basti and its community and describes its early twentieth century origins:

> What is today known as PM Basti, was originally the property of two Englishmen—John Chew and James Chew. It was then known as 'Chew's Garden', and there were a number of flower gardens, ponds and small structures on the site. One of the Chews was killed when he suffered a riding accident and fell from his horse into a pond. His brother then sold the property. The new owner [Jitendranath Manna] renamed it after his wife … After Howrah Mills, Ganges Jute Mill, and Fort William Jute Mill were set up, and workers from the neighbouring states of Bihar and UP [Uttar Pradesh] came to work in these factories, there was an acute need for housing the jute mill workers. Workers took small plots of land on the former Chew garden on rent and built huts for themselves—made of earth and wattle-and-daub. In this manner, about two hundred densely packed houses came up. (Ramaswamy 2006)

Amina, a Muslim woman who lives in PM Basti and coordinates Howrah Pilot Project, has also narrated the area's history (Khatoon 2009a). She explains that PM Basti's inhabitants were primarily Urdu-speaking Muslims, mostly landless, poor, illiterate young male farm workers who had been recruited from rural villages in West Bengal as well as Uttar Pradesh and Bihar to labour in the jute mills. Howrah Jute Mills in particular has played an important role in the *basti*, leasing the land from Jitendranath Manna in 1930 and attempting to improve living conditions for its employees (Khatoon 2009a). Amina describes how PM Basti's physical environment affected its residents:

The mill authorities soon began to observe that many of their workers were dying by the age of 40–50, while in their country, workers lived till they were much older. The cause was evident. As the plot had been an open garden, the settlement came up in an unplanned fashion. Huts were scattered everywhere. There were no drains or sanitation. Drinking water was scarce. The mill had installed a water tap that provided water for only a few hours a day. People would go to a distant municipal tank in Kawaipukur. They filled water in buckets and carried them home. To bathe and wash clothes, people went to the river which was near the *basti*.

The huts were built just three feet apart. There were no chimneys on them to let out smoke, and often the whole settlement was enveloped in smoke. Given the lack of drainage and accumulation of water everywhere, mosquitoes thrived and malaria was rife. (Khatoon 2009a)

Discussing historical accounts of environmental management in Howrah, Chandan Sengupta observes that in 1889 a sanitary commissioner who inspected the city described it as "without exception the dirtiest, most backward and badly managed municipality I have ever seen", sentiments echoed in 1893 by another sanitary commission which labelled Howrah "deplorable" (1999, p. 1292). PM Basti has a long history of neglect by colonial and postcolonial administrators for a range of reasons deeply embedded in historical, political and socioeconomic structures. "Obnoxious" ponds and poor sanitary conditions like those described above contributed to negative discourses about Howrah's *bastis*, with terms like "filthy" and "overcrowded" well-entrenched by the early 1900s (O'Malley and Chakravarti 1909, pp. 38, 62). Over time, these negative discourses became associated with the people living in such environments, casting them as different and undesirable. The story of PM Basti's development also illustrates how Howrah's *bastis* grew as enclaves based on distinct social characteristics which undoubtedly served to further marginalise their inhabitants. The Bengali novelist Shankar, who grew up in Howrah and is perhaps best known for his 1962 novel *Chowringhee,* once called the city "*Kolkata'r khata-paikhana*, Calcutta's service latrine" (cited in Ramaswamy 2004). This is an evocative image giving Kolkata's reputation (in Western imaginings) as "a byword for human degradation" (Dutta 2003, p. 178).

Today PM Basti spreads over 12.5 acres of land leased from Howrah Jute Mills (one of the few still operating in Howrah) in Ward 31 of the Howrah Municipal Corporation. With around 50,000 inhabitants—mainly Urdu-speaking Muslim families, some of which have been there for three generations or more—it is one of Howrah's most densely populated areas (Ramaswamy et al. 2010, p. 293). Sohel Firdos's 2005 household survey[5] of PM Basti found that the majority of its residents are employed, or seek employment, in jute mills. Most of the population is uneducated and those not working in the jute mills find employment as "owners

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[5]Sohel Firdos carried out household surveys between 2005–2007 in wards in Howrah and Kolkata where more than 90 % of the population lived in *bastis*. His preliminary findings suggested a high correlation between these "slum wards" and deficiencies in access to public goods and services (Firdos 2007).

of small shops, fruit and vegetable-sellers, rickshaw-drivers or workers in shops in Kolkata's Barrabazaar" as well as in various forms of light industry and manufacturing (Khatoon 2009b, p. 1). According to Ramaswamy, life for the poorest households in this *basti* "revolves around daily survival in the margins of society":

> It is estimated that about 10 percent of the slum households are in the poorest category. Few in this category avail themselves of primary education and children begin working from as early as the age of five, either in the home or outside. Girls are married by the time they are sixteen, and they raise their own children in the same manner. Illiteracy is almost universal in this poorest class. Attitudes among the uneducated regarding female education and women's activities outside the home are conservative. Typically, the bread-winning male earns his daily wage of between one hundred rupees and one hundred and fifty rupees, performing manual labour, petty vending, rickshaw pulling, and the like. Family size are large, with at least five children being the norm and in some cases more than ten. Shelter consists of a single (rented) room of about 100 square feet. … Lacking any vocational skills the livelihood options for youth, and especially girls, are extremely limited.
> (Ramaswamy et al. 2010, p. 293)

PM Basti has few markers of state-led modernisation, such as running water in homes, a functioning sewerage system, adequate toilet facilities, affordable medical services, or success in formal schooling (Ramaswamy and Chakravarti 1997; Khatoon 2009b, c, e, f). While state absence in such material terms from the *basti* is not new, the politics of forgetting have changed significantly over the past century, with the ideological and policy shifts that occurred in the 1990s amplifying many of the processes involved in constructing and maintaining *bastis* as forgotten places. Ramaswamy has written extensively about urban renewal, politics and poverty in the KMA and has much to say on the simultaneous absence and presence of the state in places like PM Basti. At the "Does Culture Matter?" conference held in Kolkata by the Goethe Institute, for example, he asked who should be responsible for the foul service latrines in Howrah's *bastis* and the dangerous unhygienic conditions they foster:

> We think of 'government' first. I can mention here something that I fully understood only because of privileged access I had as a govt. project functionary. If many of the citizens of Calcutta are alive, or healthy, then that is not as a result of anything that the public authorities do, or I must hasten to add anything that the private market does. It is just providence … The real agenda of institutions and authorities—is basically enhancement of their own power and privilege. The system is simply totally bankrupt and devoid of basic capability in terms of meeting public ends. This must be seen as a state of crisis in the society.
> (Ramaswamy 2004).

The "government" Ramaswamy refers to here is the Communist Party of India (Marxist), which governed West Bengal for 30 years until its displacement in the 2009 general elections. A number of his published works draw attention to the CPI(M)'s failure to implement effective interventions for the urban poor (especially Muslims) in West Bengal, including blog posts and an article suggesting the Howrah Municipal Corporation sabotaged a project to instal toilets in selected *bastis* so that government officials and contractors could pocket the funds (Ramaswamy 2007, 2014). He also discusses how legislation concerning the complex *thika* tenancy system (whereby a landowner rents vacant plots to intermediate

agents—*thika* tenants—who build small huts and other structures which they in turn rent to a third party) has resulted in illegal construction "through a nexus of builder-hoodlum-party cadres-police" which adversely affects *basti* dwellers (Ramaswamy 2008, p. 25). Ramaswamy notes how the "criminal activities of the Party's grassroots cadres" means that *basti* dwellers are left with no choice but to engage in criminal activities in order to access basic services like electricity, which is stolen through an illegal connection and resold to the community by party-supported people (Ramaswamy et al. 2010, pp. 296, 297 note 213). Ramaswamy is not the only one to address these issues. Firdos (2007) lists "political interference" and the Kolkata Municipal Corporation's unwillingness "to share spatial as well as attribute data with academics" as key barriers to locating, mapping and creating a database of the city's *basti* population. Ananya Roy also describes the links between the CPI(M), social control and political patronage in Calcutta's squatter settlements to show how the state is "inevitably a site of bitter everyday and extraordinary contestations" (2003, p. 229).

PM Basti's inhabitants embody their degraded physical environment through high rates of disease, infant and maternal mortality, stunted growth, malnutrition, illiteracy, ill health (including diarrhoea[6] and respiratory problems caused by smoke from coal and cloth fires) and low life expectancy. Such negative quality of life indicators are far less likely to be found in newly developed urban habitats, such as areas across the river in Kolkata city with new shopping complexes, multiplex cinemas, and gated apartment blocks designed for India's middle classes (see Figs. 10.2 and 10.3). Indeed, visions of urban development in the KMA, informed by ideas that began to circulate in the 1990s about what a post-industrial globalised Indian megacity might look like, have contributed to a shift in government policy away from welfare towards improving infrastructure for high technology and the new services industries emerging across the river in Kolkata city (Chatterjee 2004, pp. 142–146). They have also shaped popular discourses concerning Howrah's *bastis*. On more than one occasion I was told by people I met in Kolkata city that Howrah was not a place where "nice people" go. Enclaves like PM Basti (along with the manufacturing industries located in Howrah) disrupt middle-class visions of Kolkata and are unwelcome reminders of uneven development, poverty and inequality.

10.4 The Quest for Education in Priya Manna Basti

PM Basti's inhabitants have a history of collectively responding to the absence of state schools by running community-led educational initiatives. By the 1930s those living in the *basti* had "transformed into a community of people through long years

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[6]Appadurai (2004, pp. 78–79) points out that the absence of toilets and good sewerage systems can make diarrhoea a humiliating as well as dangerous experience in urban slums.

Fig. 10.2 Jodhpur Park, South Kolkata. A view of the street where I rented a shared apartment in December 2005

of coexistence under adversity" (Ramaswamy et al. 2010, p. 296), and in 1931 community leaders decided to take on the responsibility of educating children from the *basti*. Muslim Free School was established with the support of Howrah Jute Mills, which paid teachers' salaries and the school ran until 1940 when it was closed due to the advent of World War II (Khatoon 2009d). In the early 1950s, community leaders again set up Muslim Free School as a local Urdu-medium school, with teachers' salaries this time funded through donations from community members (Khatoon 2009d). The school's managing committee ensured that it complied with government regulations so it could be recognised as a formal school and receive state funding, but it wasn't until the school's name was changed from Muslim Free School (which authorities opposed) to Howrah Upper Primary School in 1953 that it gained government recognition and funding (Khatoon 2009d).

Since Urdu is the first language of most of PM Basti's residents, establishing an Urdu-medium school was a pragmatic decision that had political implications, as suggested above. Naming the school "Muslim Free School" clearly signalled the school's language of instruction, which has been a contentious issue in Bengal since colonial times.[7] While Urdu is not an exclusively Muslim language, it became an

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[7]Education and the ability to speak English became crucial forms of distinction in Bengal from the 19th century, as I have discussed elsewhere (Gibson 2012; see also Andrews 2006; Bose and Jalal 1998; Moorehouse 1971; Roy 1994; Viswanathan 1989), influencing access to economic and political power along lines of class, caste and religion.

Fig. 10.3 Priya Manna
Basti, Howrah. A view of a
lane in PM Basti from the
HPP office in January 2006.
Photos Author

identity marker for India's Muslims following Independence and Partition, particu-
larly in Bengal (where the area with the majority of Muslims became East
Pakistan—Bangladesh since 1971—and the remainder of the region, which had the
lowest population of Muslims, became West Bengal in independent India).
According to Amina, although approximately one quarter of households in PM
Basti left for Pakistan in 1947, the *basti's* population actually increased as Urdu-
speaking Muslims from neighbouring areas who also stayed, sought refuge and
safety in PM Basti during the anti-Muslim violence and communal riots in Howrah
and Calcutta in the years following Partition (2009a). In newly independent India,
Muslims became the country's largest minority community, citizens who have a
relationship with the state as "Muslims" and who are guaranteed the right to reli-
gious freedom, language conservation, and to establish and administer educational
institutions under the Constitution of India. Pursuing these rights in the form of an
Urdu-medium school in PM Basti in the 1950s meant navigating wider political
processes, securing support from more powerful social agents and renaming the
school.

In addition to the school, community members, including a group of children,
also collectively organised libraries and other grassroots social initiatives in
PM Basti in the 1940s and 1960s (Khatoon 2009d). Amina records that the

community-founded Urdu-medium school was recognised as a junior high school in 1978 and achieved high school status in 1986 (2009d). PM Basti's schools "generated large numbers of educated men, several of whom went on to acquire respectable and remunerative jobs. Realizing the importance of schooling and education for women, community leaders in PM Basti set up a separate girls section of the Howrah High School to educate young women. Graduates from these schools would in turn send their own girls to school and university" (Ramaswamy et al. 2010, p. 296). The quest for education in PM Basti illustrates how forgotten places are sites of struggle, where those with less power actively try to negotiate and resist being sidelined, excluded and marginalised by dominant groups. As Fernandes reminds us, "forgotten places are … alive with people who try to survive in the face of the insurmountable violence of poverty and the everyday obstruction of social hierarchies of caste, religion, and gender and in many instances also try to overcome, resist, and transform the conditions that produce these crises and constraints" (2010, pp. 266–267).

Despite these initiatives, most of PM Basti's population is uneducated. There are a range of reasons for this, including poverty and their status as members of a minority community. In contemporary Indian society, Muslims occupy a lower social status in relation to other communities, as evidenced in a high profile report assessing the social, economic and education status of India's Muslims which was released during my 2006 fieldwork trip. The Sachar Report (Government of India 2006) reiterates what other researchers have already documented about the marginalised status of Indian Muslims,[8] finding that overall Muslims are worse off than other socio-religious communities in terms of poverty and access to physical infrastructure, literacy levels and female schooling, and formal and public sector employment. In West Bengal for example, where Muslims constitute 25.2 % of the population, the literacy levels in urban areas are 84 % for Hindus (89 % for males and 78 % for females) and 66 % for Muslims (72 % for males and 59 % for females) (Government of India 2006, p. 288). This might be in part due to the lack of quality Urdu-medium government schools, which the Sachar Report comments upon in recommending that the Government of India take steps to educate Muslim children in Urdu[9] (Government of India 2006, pp. 15–16, 80, 83). In urban areas, Muslims have the highest incidence of poverty (38.4 %) of all socio-religious communities (Government of India, 2006: 157). Several studies of Muslims in Kolkata (where they comprise 20.27 % of the city's population) and Howrah (where they make up 24.44 % of the city's population) (Census of India, 2001) have shown that they live predominantly in *bastis* (see Samanta 2004; Ramaswamy and Chakravarti 1997;

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[8]For example, Hasan (1997), Hasan and Menon (2005). Steven Wilkinson makes a similar point in his comments on the analysis in the Sachar Report, which he describes as "detailed, though not very new" (2007, p. 832).

[9]Although many people I spoke with are critical of the value of Urdu-medium government schools, suggesting they do not provide students with the skills or opportunities necessary to participate in India's globalising economy. See Ramaswamy et al. (2010, p. 296 note 212), M. Weiner (1991) and a collection edited by Chopra and Jeffrey (2005) for critiques of India's state-led education system.

Siddiqui 1974/2005). Although religion is not the only factor influencing the social status of India's Muslims, the fact remains that there are disparities in access to economic, cultural and social capital between socio-religious groups, with Muslims living in poverty at a consistent disadvantage. This is the wider context in which Howrah Pilot Project operates.

10.5 Creating Bright Futures Through Talimi Haq School

Howrah Pilot Project (HPP) came into being in August 1997. Ramaswamy formed the grassroots organisation with the help of Prodyut Paul (a political activist associated with the CPI(M) and social worker from Howrah) following his experiences with a community-based environmental management project. From 1995 to 1997, Ramaswamy worked as social development coordinator of the Calcutta Environmental Management Strategy and Action Plan (CEMSAP), a project run by the West Bengal Department of Environment with support from Britain's Department for International Development. This pilot project successfully constructed ten toilet blocks in *bastis* in two of Howrah's municipal wards (see Ramaswamy 2014; Ramaswamy and Chakravarti 1997). Invigorated by this success, and by the strong relationships forged with community members in PM Basti, Ramaswamy and Prodyut started HPP as an independent follow-up to CEMSAP. HPP's goal is to renew the community, *basti* and city by beginning with the poorest and most socially and environmentally degraded forgotten places. "Environmental improvement and poverty reduction in metropolitan Calcutta can succeed only by building capable leadership for community development at the grassroots", Ramaswamy wrote in an essay entitled *In Search of Ramrajya*. "And this is what Howrah Pilot Project has been doing" (Ramaswamy 2007).

From the outset, HPP created a social space in PM Basti that transgressed boundaries of religion, gender, class and caste. This is no small feat in light of the political issues surrounding communalism and religious identity in West Bengal, and in the context of the social and class polarisation exacerbated by India's economic growth from the 1990s. As Sita Venkateswar notes, "this kind of space had to be deliberately and assiduously created" and is "an illustration of Ramaswamy's role and the style of his interventions" which took years of dedicated and painstaking work (Ramaswamy et al. 2010, p. 305 note 316).

Ramaswamy established Talimi Haq School[10] on 1 June 1998 following his unsuccessful attempts in 1997 to start a night school on the premises of the local government-aided school. Inspired by the work of educationalists such as Rabindranath Tagore, Paulo Freire and Sylvia Ashton-Warner, Ramaswamy sought to create an atmosphere of "joyful learning" for working children who did not attend school, for poor children who could not afford to attend formal school, and

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[10]"Talimi haq" means "right to education" in Urdu.

for those who found little joy within the formal education system and dropped out. Talimi Haq School aims to inspire its students, instil a love of learning and give them a basic education in preparation for formal school. "The whole emphasis, approach and objective of the school will be to stimulate the bodies, minds, feelings, creative and expressive faculties of the children", he wrote on the *Talimi Haq School* blog. "The school shall aim to equip the children to be honest, hard-working, capable and loving adults" (Ramaswamy 2006). Volunteer teachers (including Amina, who joined HPP as a teenager in July 1998)[11] were recruited from the community and trained through Sister Cyril's Loreto Day School in Kolkata city, and classes were conducted at the HPP office, which today comprises two rooms located on the first floor of a tall concrete building in PM Basti.

Today, Talimi Haq School is HPP's central activity. Its volunteer teachers are paid a small stipend that neither reflects the valuable contribution they make nor brings their households above the poverty line. Amina, who is the school's head teacher and Binod, a Hindu man[12] from a neighbouring *basti* and Amina's second-in-command, often spend their token salaries on essential supplies for Talimi Haq School as HPP is not a wealthy or well-funded organisation. This often causes friction in their own househlds as they try to balance their commitment to the school with their family responsibilities. HPP has occasionally received grants for vocational projects but for the most part the school is funded by profits from the masala enterprise, contributions from friends and supporters[13] and, when money is really short, from Ramaswamy's own pocket.

There is no formal syllabus or curriculum at the school. Teachers plan lessons to meet key indicators, such as a level of proficiency in Hindi or mathematics that will enable students to enrol in formal school. They teach classes in English, Urdu, Hindi, maths, history, geography, Islamic religion and moral education, nature and environmental sciences, social awareness, hygiene and cleanliness, drawing and painting, crafts, singing, drama, computer and Internet literacy, and physical culture. Children pay a nominal fee to attend the school and there are no costs associated with books or school uniforms.

During my last visit in 2007 there were 125 girls and boys ranging in age from four to fifteen enrolled at the school and the newly added Montessori class for

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[11]I discuss how Amina came to join HPP and her personal quest for education in Gibson (2012).

[12]Binod, who is about Amina's age, is the eldest son and main income earner in a Hindu family. Binod was somewhat reticent in talking about his family he avoided my questions about whether he had experienced any problems working in PM Basti because of his faith, saying that people quickly became used to him.

[13]Ramaswamy has invested much time and energy into raising the profiles of HPP and Talimi Haq School in India and abroad. This includes using his extensive networks from his travels, blogs, seminars and publications to bring visitors from India and abroad to HPP. The money he has earned by writing and giving lectures about slum-related issues from 1997 onwards has also helped support HPP's work. Visitors to HPP see a social movement involving people living in poverty who are articulate, intelligent, and actively struggling to create meaningful lives for themselves and their families.

2–3 year olds attracted 25 more students. Amina and Binod believe that young children are most in need of a positive educational experience. "A child's main educational background is built here", said Amina. "If this primary education is weak, he or she won't study later or have a bright future". In 2014 Amina received the first Krishna Memorial Award for Women Educationists and Caregivers from Calcutta Research Group and Krishna Trust in recognition of her efforts. Talimi Haq School has a similar number of children today, but struggles with funding.

In addition to Talimi Haq School there are two Urdu-medium primary schools, a government-aided higher secondary school and two non-government junior high schools in the *basti* (Khatoon 2009c). Firdos's 2005 household survey of PM Basti found that over 80 % of children between the ages of 5 and 19 had attended school at some stage. However, the majority of people from PM Basti's poorest households are uneducated, as I noted earlier. Amina and Binod pointed to a range of reasons for this during our conversations. A key factor is the prohibitive cost of formal school fees, which are beyond the reach of many families living at or below the poverty line. Many school-age children (6–14 years old) in the *basti* work instead of attending school. Boys work in the labour market as ragpickers, as assistants in small stores or by helping family members with zari-work and embroidery (Khatoon 2009c, p. 5). Girls work within the home to support household reproduction (fetching water, cooking, caring for siblings) or contribute to household income by assisting their mothers with bead-work, toy-making and sewing (Khatoon 2009c, p. 5). Other problems stem from overcrowded classrooms,[14] lack of space in small, single-room homes that make it difficult to study and widespread illiteracy which means parents find it hard to assist children with their studies.

The historical enthusiasm for education within PM Basti is tempered by the structural disadvantages of poverty. Talimi Haq School was created to cater to such children and in 1997 HPP volunteers conducted a survey to identify potential students from the *basti*. Seema Tewari, a young woman from a Brahmin family in Kolkata city, worked with Ramaswamy as an HPP volunteer to help establish Talimi Haq School in 1998. Discussing the 1997 survey she was involved with, she writes:

> The people in PM Basti could be divided into those who were educated, and sent their children to school as a matter of course, and those who were almost entirely outside the pale of education. I was surprised to find that the girls were sent to school and that there was no male-child bias. In fact, in many poor households, people felt there was no point in the boys going to school, since they would have to take up some manual work sooner or later. People had also started preferring educated daughters-in-law.
> (Tewari 2001)

Tewari's comments highlight two important factors affecting access to education for Muslims. The first is that Muslims living in poverty do not view

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[14]Some Talimi Haq School students who also attend formal school told me that some classes have more than 100 students per teacher and that they sometimes have to sit on one another's laps (see also Khatoon 2009c; Ramaswamy et al. 2010, p. 295; or Siddiqui 2005). They said that it is hard to hear the lesson or concentrate when the room is full of noise and one's desk is far from the blackboard.

education as a societal route for better employment opportunities. The second is the perception that Muslim girls are kept out of school, which is not always the case in PM Basti. I will return to the second point shortly; first I will discuss the pervasive perception that education is pointless because there are limited opportunities for urban poor Muslim youth.

One of the main findings of the Sachar Report (Government of India 2006) is that many Muslims perceive their low human development indicators—particularly access to schools and formal and public sector employment—as specific to their status as members of a minority community.[15] The report's authors noted that Urdu-speaking Muslims in particular felt discriminated against in the labour market, despite various affirmative action policies such as those recommended by the Mandal Commission Report (Government of India 1980). These findings have been echoed by researchers working in Howrah and Kolkata. In a survey of Muslim *basti*-dwellers from the Park Circus-Topsia area of Kolkata city, Husain (2005) found that while Muslims living in poverty value education in a general sense, as well as functional literacy and numeracy in their daily lives, they perceive anti-Muslim bias in the job market (especially against boys), both in the public and private sectors. This topic arose during a workshop held in 2007 at the Institute of Objective Studies in Kolkata (at which, I was guest speaker). Dr MKA Siddiqui, who hosted the workshop and has published extensively on Muslims and other minority communities in India, described a conversation he had with a young Muslim boy who worked as a street vendor. Dr Siddiqui asked him why he had dropped out of school. "Sir, I could go to school, but what will I get out of it?" the boy replied. "I have asked my brother not to waste money on education. I'm going to end up working here anyway so I might as well start earning money now". Ramaswamy has made a similar observation:

> The perception among poor and low-income inhabitants of slum localities like PM Basti is that if and when they finish their secondary education, the economy and society will have no jobs to offer them except as manual labourers. Hence boys drop out of school and begin working because early entry into the labour market is perceived to be a more strategic livelihood option.
> (Ramaswamy et al. 2010, p. 295)

Many people in PM Basti do not view education as a pathway to valued forms of employment and believe there is no point in sending boys to school. Such perceptions become self-fulfilling prophecy when they are internalised and enacted. When people perceive limited employment opportunities, they are unlikely to invest in education, resulting in low literacy levels, actual discrimination in the job market and fewer opportunities. This vicious cycle can also lead to what Ghassan Hage (in Hage 2008) has called the experience of "stuckedness", a sense of existential immobility, a feeling that they are socially and spatially stuck in these

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[15]The authors of the Sachar Report take care to point out that while many Muslims *perceive* the problems they face as community-specific, poverty and low socio–economic indicators are not exclusive to Muslims; they are experienced by all disadvantaged socio-religious communities in India (Government of India 2006, p. 25).

forgotten places precisely because they are Muslim *basti*-dwellers. This sense of "stuckedness" or hopelessness is reflected in the comments I often heard from parents of boys in PM Basti and from non-Muslims living in middle-class areas of Kolkata city who informed me that "Muslims will never get out of poverty". It is also what Talimi Haq School teachers actively work to change by trying to show how education can lead to wider societal opportunities beyond employment.

During Talimi Haq School's early years, its volunteer teachers had to repeatedly visit parents in their homes in order to convince them to send their children to the school. "It's hard when the parents are illiterate", Amina told me. "They don't understand why education is important". Amina believes that educating males and females will help improve the lives of all family members by leading to better health and hygiene practices and improved family health, more economic opportunities and increased household income, women having fewer children, empowerment for girls and women, girls getting married at a later age, knowledge of the *Quran* and the *Hadith* and better relations between husbands and wives. These are the wider benefits to education that she and the other volunteer teachers promote at Talimi Haq School.

Talimi Haq School teachers communicate with parents about what they should expect from a formal school as well as the wider values of education in a variety of ways. In 2006 Amina and Binod decided that the school would present a stage performance about education for its annual programme. "This drama was based on what we thought parents think about sending their children to school", said Amina as she described it to me. "Whether the child is being taught, whether the child actually attends school, whether the child studies at home, nobody sees to any of this. The mothers are only concerned about whether the child will bring home rice from school. The mothers are quick to go to the school to complain, 'why was my child not given an egg in her meal when that other child got an egg?' They will definitely complain about that sort of thing. But they never complain about other things, like 'why wasn't my child's copybook checked? Why wasn't my child given any homework? Why wasn't he taught anything at school today?'"

"They only send their children to school for the free meal, or to keep them from roaming around the *basti*", added Binod. "What kind of future will that give the children?

This public performance helped legitimise education as valuable and worth pursuing in PM Basti. By using scenes and concepts with which the audience is familiar, and by presenting them in an accessible and entertaining format, Amina and Binod can begin a larger conversation with parents about the purpose of education. Talimi Haq School teachers also discuss these issues with their students, and it will be interesting to see the intergenerational effects of the teachers' efforts on students' agency, hopes and attitudes towards education in the future.

Gender is a factor affecting access to education for Muslims, although perhaps not in the way most commonly perceived. Tewari's comment above encapsulates a perception shared by many, which is that there is a gender bias against educating Muslim girls. However, recent research on attitudes towards girls' schooling among *basti*-dwellers in Howrah and Kolkata suggests that most Muslim parents

are interested in educating girls. For example, Firdos's 2005 survey of PM Basti found that more boys (17 %) than girls (13 %) between the ages of 5 and 19 had never attended school, and of those who did attend, girls were more likely to continue with schooling (57 %) than boys (51 %) until adolescence (Khatoon 2009c). In a survey of Muslim *basti*-dwellers in Kolkata city, Husain's respondents argued that education was more important for the girl child because it enhanced her marriage prospects and enabled her to be independent after marriage, providing some security in the event her husband deserted her (2005, pp. 139–141).

Although pre-adolescent girls in PM Basti are more likely to attend primary and middle school than boys of the same age, conservative attitudes regarding female mobility affect the education of adolescent girls. For example, Firdos found that enrolment ratios for girls and boys in PM Basti plummeted sharply (from over 70 % to less than 20 %) at high school level (Classes 9–13) and twice as many girls dropped out of high school than boys (Khatoon 2009c, p. 5). Once girls reach puberty, they are often withdrawn from school and are kept close to home in order to maintain their chastity and with it, family honour.[16] "Ironically, this restriction may exercise a positive effect on (a girl's) education", writes Husain. "Unlike her more mobile brother, the girl is restricted to her immediate neighbourhood and to her nearby school. This increases her focus and may lead to higher levels of attainment for girls" (Husain 2005, p. 146). Obviously this depends upon having an affordable school nearby and the quality of education it provides.

While conservative attitudes regarding young Muslim women clearly play a role in access to higher education, Amina believes these attitudes stem from illiteracy, patriarchal power and lack of knowledge rather than core Islamic values.[17] Her own experiences in pursuing education, which I have discussed in Gibson (2012), involved drawing heavily on her identity as a Muslim woman and her understanding of Islam to navigate various sociocultural and structural constraints. It is important to make a distinction between religion and other factors affecting access to education, as this can have significant consequences at the level of policy and state interventions. When religion is perceived as the cause of low literacy or employment rates for Muslim women, debates about strategies to improve their social status revolve around minority rights and religion rather than wider discourses of poverty, gender and development (a point also made by Hasan and Menon 2005). Cultural and religious norms do play a role in access to education, but Amina and Binod locate the main causes of their disadvantage in relations of power and inequality, identifying the problems associated with living in forgotten places as the biggest factors affecting their lives.

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[16]See Chakraborty (2010) for a discussion of the constraints on the mobility of young Muslim women in Kolkata's *bastis,* and how they negotiate them.

[17]Husain (2005) also provides evidence to counter the perception that low literacy levels among Muslims are due to conservative Islamic values.

10.6 Concluding Thoughts

More than 700 of PM Basti's poorest children have attended Talimi Haq School since it started in 1998. Over 550 Talimi Haq School graduates have gone on to join local formal schools, which is a major achievement given widespread illiteracy and parents' perceptions that education is pointless. Talimi Haq School can be viewed as a hopeful collective response to processes of active forgetting that leave the *basti* inadequately serviced in terms of quality, accessible educational facilities for Urdu-speaking children from poor households. Its teachers believe that everyone has the right to education and take responsibility for offering it to those who miss out. However, they also have a realistic understanding of what they can achieve from where they are located in the social world. Amina and Binod worry constantly about the school's future and seek practical solutions to their funding problems. At Amina's request I spent some time searching for funding opportunities but I found that most funding opportunities are tied to projects; few organisations offer ongoing financial support for the type of long-term outcomes that HPP works toward. Also, teachers do not challenge the formal education system and instead focus on what they can influence, which are local attitudes and behaviours. This is not something they could do as individuals; it is an expression of collective responsibilisation.

It seems fitting to conclude this chapter with an excerpt from one of Amina's articles, which describes the school's hopes for the future:

> Talimi Haq School attempts to function as an island of love, decency and learning in the existing degraded social environment. The school's objective is to educate children to become good citizens, good human beings, and good parents whose children can dream and hope to realise their dreams. Talimi Haq School too has a dream—of becoming a full-fledged high school that can transform the lives of poor children by providing them a world class education befitting the 21st century, right here in Priya Manna Basti.
> (Khatoon 2009c, p. 8)

Talimi Haq School addresses an urgent need for education in PM Basti, a forgotten place with a history of collectively organised grassroots educational initiatives. However, it is problematic and unsustainable to rely on grassroots organisations to take responsibility for the gaps left by the state in such forgotten places. Talimi Haq School's volunteer teachers are simply not in a position to change the larger political and economic structures that shape their social world without the support of more powerful social agents. Leaving the responsibility for education to people who are themselves below the poverty line increases the burden on people already struggling to survive. Their efforts need to be augmented by a responsive state, one that could look at working in partnership with grassroots organisations like this, in order to achieve meaningful, long-term, beneficial changes in forgotten places like PM Basti.

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Chapter 11
ICT4D and Empowerment: Uneven Development in Rural South India

Rakhee Chatbar

Abstract Information and Communication Technologies (ICTs) are being increasingly mobilised as allies for development (ICT4D). This chapter interrogates the role technology plays in development in rural regions through a micro-level study. Specifically, it interrogates an ICT4D project established by a prominent Indian NGO that aims to empower rural communities through public access to ICTs. Drawing upon field based research from the state of Tamil Nadu and the Union Territory of Pondicherry, South India, this paper demonstrates that ICTs do offer limited opportunities in the form of generic information and enhanced skills, especially amongst children, young and educated people, to participate in the information revolution. Research also shows that it can provide employment opportunities on occasion, develop the social prestige of individuals and the villages and offer opportunities to specific groups within the village communities such as women, youth and others who are otherwise socially marginalised. That said, the research also illustrates that the due to the uneven distribution of gains of growth in India since neoliberalisation in the 1990s, ICTs have not been conducive to transformative empowerment. Drawing on literature on empowerment, I argue that while ICTs provide opportunities for empowerment, existing structural inequalities and systemic conditions hinder the possibilities for "transformative empowerment" and in some instances reinforce pre-existing inequalities and contributes to uneven development. Empowerment through ICTs can only be enabled if the ICT4D initiative addresses the key drivers of marginalisation in rural communities—structural and systemic conditions.

Keywords Rural development · India · ICT4D · Empowerment · Digital divide · Tamil Nadu · Pondicherry

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Abbreviations

ICT4D	Information and communication technologies for development
ICTs	Information and communication technologies
KW	Knowledge worker
MSSRF	M.S. Swaminathan Research Foundation
NEP	New economic policy
TN	Tamil Nadu
UTP	Union Territory of Pondicherry
VRC	Village resource centre
VKC	Village knowledge centre

11.1 Introduction

The last two decades have witnessed significant changes in approaches to development in India. The 1990s marked an important shift as the New Economic Policy (NEP) changed the economic, political and social landscape. Since the adoption of the NEP, there has also been a shift in approaches to development: the state has been deemed incapable of delivering development on its own, NGOs are recognised as key allies, multi-stake holder partnerships are viewed as essential, knowledge is seen as the key driver of change, and information and communication technologies (ICTs) are being increasingly mobilised as allies for development (ICT4D). ICT4D projects, as Pieterse (2010) notes, are emblematic of the globalisation-development nexus. While India's performance since the NEP has been hailed as a success (Bhagwati 2013), there is much disparity across the states and across different aspects of development (Dreze and Sen 2013, 2011; D'costa 2012; R. Ray Chap. 3). Such uneven development is the outcome of systematic capitalist dynamics (D'Costa Chap. 2).

In contrast to the urban context of the discussion by Gibson (Chap. 10) and Walters (Chap. 9), this chapter explores the role technology plays in development in rural regions of South India. It interrogates one specific ICT4D project in empowering rural communities in the state of Tamil Nadu (TN) and the Union Territory of Pondicherry (UTP). Through primary data collection, the chapter argues that ICTs do offer limited opportunities for empowerment through enhancing technical and computing skills and improved employment prospects. Information gathered in the field showed that particular services were utilised by some villagers more than others, and by specific socialities, such as youths and children. In other words, only certain groups who have had access to education, assets, and resources utilise the services of the ICTs. Such uneven gains are reflective of the larger impact of globalisation and neoliberalisation. It is also reflective of the village level power structure. Furthermore, the chapter argues that the ICT-enabled empowerment opportunities are not transformative as they do not challenge the key drivers of marginalisation in rural communities—structural and systemic conditions—that perpetuate social inequities and uneven development.

An important shift in the terrain of development practice and planning in the neoliberal era is the emergence of ICTs as key allies in development, referred to as ICT4D. The exponential growth of ICTs in the form of the Internet, mobile, computing, and digital technologies in the 1990s and the Millennium Declaration by the United Nations (UN) in 2000, catapulted ICTs as tools of development. The publication of *Knowledge for Development: World Development Report of 1998/99* by the UN witnessed the launch of numerous projects to provide public access to ICTs, with the aim of bridging the digital divide, especially in rural India. Currently, India has the highest number of ICT4D interventions and it is not coincidence that such an approach manifests after the NEP. It is within this larger context that the village knowledge centres (VKCs) and village resource centres (VRC) ICT4D initiative[1] implemented by M.S. Swaminathan Research Foundation (MSSRF), an NGO organisation based in Chennai, south India, emerged.

11.2 Methodology

This chapter draws upon data collected over three rounds of field visits between 2008 and 2011 to 15 villages across five districts in TN and UTP, which have distinct livelihood options and particular caste compositions.[2] I have strived to make the sample representative by including a cross section of villagers including men, women, members of the Panchayat, people from the dominant and marginalised castes and community members belonging to different class and religion. The sample also incorporated members who were users as well as non-users of the ICT initiative. Fieldwork yielded 420 key informant interviews—38 representatives of the NGO, 42 knowledge workers and 340 community members. Out of the 340 community members 248 identified themselves as users and 92 were non-users. The remaining 107 users were children. While this distribution between users and non-users is not reflective of the utility of the Centres per se, it was driven by my attempt to gain an in depth understanding of the pattern of usage. The study adopted a mixed methods approach and used methods of semi-structured interviews and participant observation. In eight out of the fifteen villages included in this study, agriculture is the main source of livelihood, while in two villages only a small proportion of the population is involved in agriculture. The other seven

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[1]Henceforth, I will use the term VKCs and Centres interchangeably to refer to the village knowledge centres (VKCs) and village resource centres (VRCs) initiative of MSSRF. Where significant, I will delineate and identify VRCs and VKCs separately. The initiative is part of Mission 2007, a coalition of government agencies, NGOs, private sector and civil society organisations formed in 2004 with the target of establishing 600,000 VKCs in each of the villages in the country. MSSRF was one of the founding members of Mission 2007. To date MSSRF has set up Centres across five States and the Union Territory of Pondicherry in India.

[2]The five districts are Kanchipuram, Nagapattinam, Thanjavur and Pudukkottai in TN, and in UTP, the district of Pondicherry. Furthermore, the district selection also facilitated comparisons across four distinct geographic regions—delta, rainfed, coastal and peri-urban.

villages are predominantly coastal communities and fishing is the main source of livelihood for the majority. Based on the field findings, this chapter argues that the VKCs initiative has empowered certain segments of the community, such as youth and children who have developed digital literacy through attending courses and use of Microsoft Basics. It has also empowered knowledge workers[3] (KWs), particularly women, who have developed confidence and self-esteem through their role. At the same time, the field research suggests that the empowerment impact is minimal because the skills developed through the VKCs do not engender individual or community level transformation and benefits are limited to certain segments of the community. To a large extent, this is due to the uneven power relations, structural inequalities, and politics of discrimination in the village micro-context, which impede the possibility of transforming certain practices and prejudices.

11.3 Empowerment and ICTs

Since the 1990s, the concept of empowerment has gained significant importance in development discourse and has been accorded a central position in development theory and practice. In a development context, empowerment has been associated with concepts such as improving rural livelihoods (Chambers 1997), involving NGOs (Thomas 1992), alternative development (Friedmann 1992), grassroots development (Narayan et al. 2000), self-determination, participatory techniques (Scheyvens 2009) and even poverty reduction (World Bank 1999). Empowerment is also understood to offer tools to address issues such as a top-down approach to development by promoting grassroots involvement, especially for women (Parpart et al. 2002, p. 338). In short, empowerment has been conceived as a remedy for the maladies that beset the modernisation paradigm, the hegemonic development ideology that reigned over development practice in the previous decades.

Scholars have argued that prior to the appropriation of the term in the 1990s by mainstream development agencies, empowerment was mobilised within feminist discourse as a tool for women to overcome gender inequalities (Parpart et al. 2002; Batliwala 2007). The introduction of the term in development studies has been attributed to Sen and Grown (1987) to stand for collective action that is organised and informed by the lived experiences of women (and men) in the global South. Scholars have also traced the origin of the idea of development through empowerment in the works of Paulo Freire, the Brazilian educator (Rowlands 1995; Thomas 1992). In fact, "consciousness raising", inspired by Freire's[4] *Pedagogy of the Oppressed*, is a key activity in Sen and Grown's conception of collective action (1987, p. 87).

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[3]Knowledge workers are the volunteers who manage these Centres and are from the village in which the Centre is located.

[4]Although Freire never used the term 'empowerment' (Thomas 1992, p. 136), the central concern of his work is to advance tools for the oppressed to eradicate class oppression, in other words, empowering the disenfranchised.

Within ICT4D the idea of the empowering potential of ICTs is ubiquitous (Friedman 2005; World Bank 1999, 2002). The WB's sourcebook on empowerment (World Bank 2002) asserts that when poor people have information about various government services and assistance, their own entitlements, the performance of state and private sector, markets and services available, they are better placed to utilise the opportunities and resources presented. This in turn enables people to hold both state and non-state institutions accountable. ICTs can thus be a vital conduit for the dissemination of this type of information (World Bank 2002, p. 15). ICTs have also been acknowledged as empowering by Skuse (2001), Ashraf (2008) and notably by Sen (2005) in his discussion of capability approach. Sen notes, "access to the web and the freedom of general communication has become a very important capability that is of interest and relevance to all Indians" (2005, p. 160).

The optimism advanced by these scholars is questioned by Beardon and Williams (2004, p. 3), who enquire whether ICTs "can enable people to actively challenge and change the power structures which keep them powerless and marginalised?". Their findings indicate that information, undoubtedly, is crucial for poor people's empowerment, but information alone cannot lead to a shift in power structures. As Beardon et al. comment,

> Information is not neutral. The very power attached to it makes it a valuable commodity, which is not shared fairly or equally. People hoard information, or spread misinformation to gain a competitive advantage. Those who are most marginalised are most likely to suffer the consequences of a lack of timely, reliable and quality information, leading to a vicious cycle. But providing them with tools to access it is not enough when the power relations underlying the problem are still there. Information cannot solve the problems of poverty unless it is accompanied by the skills, confidence and knowledge to seek and use it. Uneven power relations operate at all levels of society. *Just like any other development work, an ICT project needs to be based on an understanding of how such power dynamics work and affect access to resources and opportunities* (2004, p. 6; emphasis added).

In Harris and Rajora's consideration of the role of VKCs in empowering rural communities in India, they found that, the users of the Centres [VKCs] seem to express that while they are satisfied with the benefits the projects bring, they do not feel fully empowered by receiving them (2006, p. 3).

The premise of empowerment through ICTs has been highly contested. Scepticism about the potential of ICTs to empower is based on the dependency discourse (Schech 2002), while the optimism is built on the assumption that information *in itself* stands for power. Hamelink (2002) demonstrates that arguments affirming ICTs are highly problematic because the empowering potential can be unleashed only when other material conditions such as infrastructure and social setting are adequate. He clarifies further that marginalised people are aware of inequalities and injustices as well as the causes of oppression and a key impediment to their action is a lack of material sources. Thus, for empowerment to be meaningful and transformative, it should lead to structural inequities being challenged. Otherwise it would be rendered tokenistic.

Reflecting the larger trope of optimism regarding the role of ICTs in development, the goal of the MSSRF's VKC project, as stated on the NGO's website, is to *empower* vulnerable people in order to make better choices and achieve better

control of their own development and *to build skills and capacities* of the rural poor with a view to *enhancing livelihood opportunities* (emphasis added) (MSSRF 2007).

The initiative has been accredited for bringing "about a paradigm shift from unskilled to skilled work and from routine on-farm work to value-added non-farm activities" (Padmanabhan 2004a, b) and is often cited as a successful attempt at empowering rural communities (Raman 2006, p. 409). The Centres have also been credited as empowering Dalits to overcome caste-based discriminations (Senthilkumaran and Arunachalam 2002, p. 73) and gender disparity (Arunachalam 2002, p. 6).

A VKC is an ICT-enabled centre equipped with computers, telephone or public address system or other such communication technologies and ideally connected to the Internet. The VKCs are located in villages/hamlets and are managed by volunteers from the community. A VRC is situated in towns or cities and staffed by paid employees. Each VRC is connected to a number of VKCs in the regions and these VKCs fall within the administrative jurisdiction of a VRC. All the VRCs are linked to the head office located in Chennai through satellite connectivity. The NGO envisages empowering the community through the services offered at the VKCs and VRCs. In the study, 15 VKCs,[5] 4 VRCs and the main office based in Chennai have been included. Figure 11.1 illustrates the 15 villages, where the VKCs included in the study are located.

In the interview with the author, M.S. Swaminathan, the Founder and Chairman of the organisation explained the role of the VKCs in empowering the rural communities in these terms:

> First, they [the Centres] could empower them [the villagers] with the knowledge about the various government schemes and programmes which are available to them. Secondly, the important information needed in villages is related to meteorological conditions and information related to marketing factors like prices of commodities, what should be the prices for their produce, so they are not exploited. Thirdly, generic information which is important to their day-to-day life including examination results, railway reservations.

The subsequent sections of the chapter will discuss the role of VKCs in empowering rural communities by drawing upon the field data.

11.4 Field Findings

Data from the field shows that the utility of the VKCs is not uniform not only in terms of the services availed but also along gender, class and literacy skills. The empowering potential is further curtailed due to inadequate infrastructure and

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[5]The villages included are: Kovalam (Kanchipuram district); Akkarapettai, PRpuram, Agalankan, Chinangudi, Pillaiperumalnallur and Poombuhar (Nagapattinam district); Vilangudi, Thirupazhanam and Rajendram (Thanjavur district); Oonangudi and Attani (Pudukottai district) and Thirukanchipet, Veerampattinam and Abhishekapakkam (Pondicherry district).

Fig. 11.1 Field research sites. *Source* Author
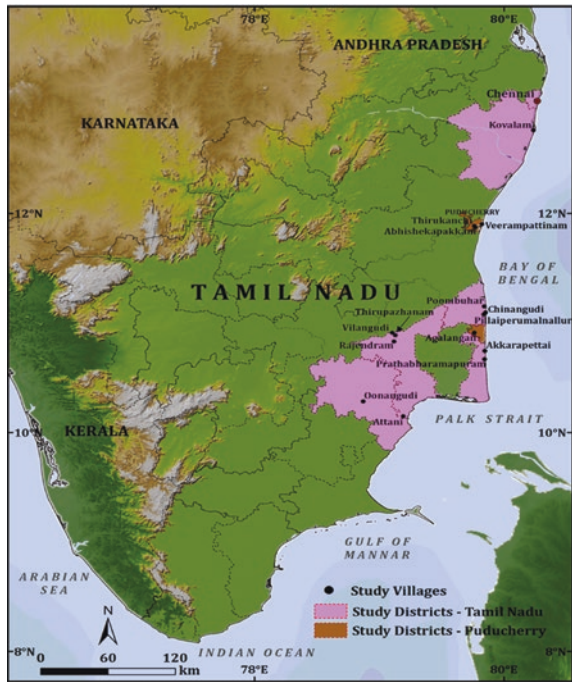
technological facilities and the Centres do not benefit the most marginalised such as Dalits, women and poor people, especially those who are involved in manual labour. The Dalits are largely precluded due to their marginal location in a village except in the case of three villages where the Centre is located closer to the Dalit settlements. Further, in all the Centres, the people who are more powerful in the village such as members of the Panchayat or their families, land owning class or those with higher levels of literacy, accrued more benefits. Geographically, more people in peri-urban villages utilised the Centres.

11.5 User Pattern: Based on Services Availed

The services provided by the VKCs can be classified into three categories—ICT skills, information services and improved livelihood opportunities (see Table 11.1). The NGO envisages empowering rural communities through provision of these services, and has identified information as key to overcoming the problems confronting rural communities. Knowledge and information is presumed to have a democratising impact. Similarly, information pertaining to livelihood can assist in supplementing income, while ICT skills training programmes can facilitate other work opportunities, thus empowering the villagers.

Table 11.1 Classification of services at VKCs

Provision of information	Improving livelihood opportunities	Imparting ICT skills
• Related to agriculture, horticulture and cattle rearing information for agri-based communities	• Training programmes for setting up cottage industries including: fish pickle, detergent, incense sticks, phenyl, and small artefacts manufacture	• Microsoft unlimited potential programme (MUPP)
• Related to weather, wave height, sea conditions and information on availability of fish for fishing communities	• Setting up SHGs	• Computer aided learning programme (CALP)
• Related to government entitlements, schemes and employment opportunities	• Imparting new skills	• Intel learn programme (ILP)
• Related to market prices, education and bus timetable		
• Availability of newspaper and CNP		

Source Author's fieldwork

The field data shows that out of the three categories of services outlined above, the most utilised is Imparting ICT Skills. Three courses are offered as part of this: the Microsoft Unlimited Potential Programme (MUPP), which is availed by most adult users, and the Computer Aided Learning Programme (CALP) and the Intel Learn Programme (ILP), which are taken up amongst children. To provide a quantitative perspective, out of the 233 adults key informants interviewed, 92 are non-users and 141 are users of the Centres. Amongst the users, 74 are enrolled for MUPP, out of which 42 are women and 32 are men. Secondly, the utility of the VKCs is also skewed according to age, as the majority of the users are children (below 15 years), followed by young people (16–35 years). Most of the young users are enrolled for MUPP courses, or visit the Centre to hone their computing skills. Another category according to the type of service availed of users are those who come to read newspapers (published hardcopies which the VKC subscribes to), and in some instances to play computer games and socialise. These are mostly men and among these men, the older men do not use the computers at all. Older men and women do not engage with the computers directly, but they do participate in organised programmes or video conferences relating to agriculture, fishing or such vocation related events. Younger men (under 40) also use computers for activities such as playing games or downloading photos and seeking information about job opportunities. Overall more men than women come to the VKCs, whether it is to seek information or otherwise. Out of the 85 male users interviewed in this study, 39 of them are men over the age of 40 and visited the VKCs mainly to read newspapers.

Subsequent sections will discuss the role of each of the three facilities and services in empowering rural communities.

11.5.1 Imparting ICT Skills

Field observations and data reveal that the majority of the users of VKCs are children and those enrolled for MUPP. Children came to the VKCs to learn computing skills by using applications such as Paint, WordArt in the MS Word programmes, in addition to accessing CALP or other interactive CD-ROMs, depending on their age. Mostly, they played and worked on the computers in groups (as there were not enough systems). Observation showed that they were proficient in independently learning the required skills. In many instances, children had also installed games from their personal copy of CDs on the system to play. At least in three VKCs, I witnessed children playing games. According to the KWs, over the weekend and during summer vacation, when school is off, the number of children visiting the Centre swelled substantially. The analysis of data also revealed another trend, that in villages where there is a school in close proximity to the VKCs, more schoolchildren come, in comparison with Centres where there were no schools nearby.

This usage pattern is further corroborated in interviews with the KWs. In response to my question as to who are the majority of users, most KWs replied that MUPP students and children are the major beneficiaries. For example, Bharathi, a KW from one of the villages in the Thanjavur district told the researcher:

> CALP and MUPP students are the majority of the users, otherwise farmers rarely visit the Centre, and instead we [KWs] go door-to-door and canvas. Then people come to the VRC for videoconferencing. Every month we visit people's houses personally, ask them why they do not come and request them to come. Then few people come. We have been trying to do this every month and, hopefully, people will come.

In another district, Niveditha, a KW elaborated:

> Mostly it is schoolchildren who come in large numbers, whereas adults, probably one or two men come. Women come rarely to the Centre, when men are around. They [women] worry that people would make fun of them and tease them (*Vedipaanga*). We try to approach people individually, go to their house and suggest that they [women] should come and we will make sure that there is no problem. We do try to give assurance like that but they still do not come. Adults do not come, as they feel that it is not of much help to them.

The MUPP course has been positively received by a majority of the users across the communities. According to informants, the availability of such the course in the village offers some distinct advantages to the community. First, the course is being offered for free, whereas the same course offered by private institutions in nearby towns would cost at least between Rs. 1500 and 5000 (NZD 30–100) rendering it prohibitive for many people with limited means. Secondly, enrolling for this in the city or town nearby would mean having to travel and the time and money spent in commuting would be significant for a part-time course. This is exacerbated for women. Thirdly, as the computers are located in the VKC, there are no restrictions in terms of time to work on the practical components of the course. If they were to go to a private institution, they could only work on the practical sessions for an hour or for the allocated time.

One of the rationales for the provision of ICT skills as tools for a source of empowerment is to help successful individuals to find jobs, and, hence, MUPP has been targeted at unemployed youths and housewives, according to the key informants from the NGO. Microsoft, the donor of the software for the VKCs, envisaged that "with Microsoft Unlimited Potential, we're taking an innovative approach to *enabling new avenues of social and economic empowerment for the underserved populations of the world*" (Microsoft 2007, p. 1, emphasis added).

Similar benefits are also projected by the employees of the NGO at various levels. Senior level key informants from MSSRF regarded the prospect of job opportunities presented by MUPP for the villagers as part of the emancipatory role of the VKC. For example, one representative noted, "With the help of the (MUPP) certificate, people have secured jobs in nearby factories, companies". In another district, another staff of the NGO expressed similar enthusiasm and pointed out that the "MUPP course is very useful, if they complete it they can get jobs". It must be noted here that such optimism emerges from the representative of the NGO who are paid employees and who rely on the success of the project for their employment to continue.

A majority of the MUPP participants were students pursuing degree programmes and many were studying towards a degree in computer science. Among the 74 MUPP course participants interviewed, the course led to employment opportunities for 3 people in 3 VKCs, 2 men—Manickam and Durai, and 1 woman—Akhila Devi. Akhila Devi secured a position as a sales person in a textile shop, and when the employers found that she was familiar with the Microsoft platform, she was offered the higher position of Assistant Manager. Many informants interviewed were hoping to enhance their employment prospects on completion of the MUPP course. However, the training did not culminate in improved prospects for a majority of informants. For many, there were no opportunities within the village and in a number of remote villages with inadequate public transport options, seeking employment in the town or city nearby, especially for women, was difficult. Even for those who were successful, employment prospects and opportunities offered through such skills trainings are not comparable with the "digital haves" of India, or globally. As Beardon and Williams (2004) in the context of another project note:

> IT skills can lead to higher earning potential and more job opportunities. However, while the ability to secure higher wages is undoubtedly important to an individual and their family, *the simple training of people to* operate *machines does not constitute empowerment. Unless people can appropriate the technology, they will not gain any power to determine their terms or conditions of employment, and will remain vulnerable to exploitation*. Furthermore, while some individuals may change their status, the gap between rich and poor, informed and vulnerable, still remains the same. (2004, p. 6, emphasis added).

Disparities of this kind are revealed further in the comments made by the key informants who participated in the training. A majority of informants from different VKCs commented that they had requested training in computer programming languages such as 'C' and 'C^{++}'. However, field research showed the NGO did

not address these needs. Secondly, it also emerged that the notion of harnessing the potential of partnership with the private sector is not robust. The private sector's philanthropy or corporate social responsibility (CSR), in this instance, is limited only to the provision of free copies of software that equip the villagers to become users of the proprietary software. There is not much scope to nurture the potential among the individuals to learn more advanced computing skills such as programming. The course fails to prepare the participants to engage with computing technology in any sophisticated manner. False generosity also underpins the views of most of the employees of the NGO, as articulated in their opinions about the limited needs of the rural populace, including Swaminathan who informed me:

> What is important is that minimum essential technological empowerment should take place. For example, the village people do not need very sophisticated computers, they do not want supercomputers. Those have to be used by people who need them, the specialists. The results should be available to them [villagers]. For example the Meteorological Department people might need it to calculate a number of factors. The results should be made available to them … ICT revolution therefore must be made friendly to the poor.

The point here is not about equipping the villages with supercomputers, given that there are many constraints in villagers' ability to use them. The point is that even in instances where there were people in the village who wished to pursue their technological knowledge further, there is no scope or opportunity in the project to do so. The issue is that the NGO's reliance on the false generosity of a private sector renders it strictly limited and the key to empower the oppressed lies in good generosity that enables them to be independent, and in this case, not to be reliant on the largesse of the private sector. Clearly, such an approach is not very conducive to empowerment that is transformative.

11.5.2 Provision of Information

Kanungo (2004) in his study of the MSSRF's Centres contends that the information provided would strengthen the ability of people to access the benefits of the various schemes offered and ensure no one is left out due to a lack of access to information. Many representatives of the NGO also listed information provided at the VKCs as a frequently used service. The significance of access to information directly can be discerned in the observation made by Asokan, a key informant employed by the NGO:

> The important information first reaches the Panchayat[6] president or members, the headman or other such powerful people in the community. On receiving such information, they will consider the aim, the purpose and the benefits of the information received and then they decide if they want to share it with others or keep it to themselves and benefit from it. This is how [powerful] people think, they do not share it publicly … only select

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[6]Panchayat is the local governance body that has been revived following the 72nd Amendment making elections mandatory.

information is disseminated amongst everyone and that too because there would be no alternatives and under compulsion. Generally, this is what happens and people have suffered like this a lot. We [at MSSRF] have changed this. Since the Centre has been setup, we do not discriminate in sharing the information with people. We share it with everyone publicly.

The VKCs thus helps the democratisation of information and overcomes the problem of lack of access and gatekeeping. Such a view about the benefits of the VKCs is also shared by other community members. In the VKCs that have PA systems, the participants also appreciated the various kinds of information shared as this helped overcome the tyranny of distance and time. The benefits were summed by Velu, a key informant, in this way, "when they make announcements on the PA system I can get important information without leaving my home. Even when I am working the field I can get information about weather. I do not have to come to the VKCs". Further, this service also helps to overcome the need to use literacy or technological skills.

In discussing the benefits of information, it must be noted that Asokan is from a coastal community, where the Panchayat is stringent and also acts as a gatekeeper, according to the informants. In such instances, the VKCs have played a significant role in ensuring that important information reaches everyone. However, it must also be underscored that being equipped with information helps only to a certain extent. For example, as another participant in a coastal community explained, when the government announced a benefit scheme for the fishing community, members of the Panchayat approached the district officials and suggested that the distribution of benefits should take place under the purview of the Panchayat. In effect, the Panchayat collected all the monies allocated for the village and, according to the informant, distributed it to Panchayat members and those closely connected to them. In short, the provision of access information did not alter the power relations at the village level, which play a significant role in who has access to benefits. The local level power structure renders information or access to information as a means to control those who do not have access to it. Nor does technology make the underprivileged more powerful.

According to the key informants and the KWs of this study, information pertaining to employment opportunities and education related details are in high demand, and it is mostly the younger people who have already had access to education who seek information of this kind. The following point, made by one villager, Gunasekaran, who is in his thirties, represents the views of young, educated people in the villages:

Information about education and jobs would be useful. In fact, even farmers do not want to send their kids to farming, they want them to study. So education is more important … Farmers' kids do not want to become a farmer or barbers' kids do not want to become a barber … they all want to study and progress and improve their lives.

Thus, the VKCs are utilised more by people who have had access to education rather than by those seeking information regarding traditional livelihood such as agriculture and fisheries revealing that the inequalities within the community are reinforced.

The Centres' utility for women also reiterates their role within the domestic sphere. Women, mostly homemakers, often come to the VKCs to obtain information regarding services/facilities in the vicinity, or any other information pertaining to *balwadi,*[7] the public distribution shop[8] (PDS), kitchen remedies for minor ailments and recipes. For example Komathi visits the PRpuram VKC to inquire from the KWs details about the workings of the PDS—when goods would be arriving and if new ration entitlements are available. In one instance, during the fieldwork, a woman lost her house keys and used the PA system at the VKC to make a village level inquiry. Again, Centres do not provide opportunities for extending their engagement with other aspects of village life, nor do they provide the opportunities for women to challenge or question their gendered roles in rural communities.

The field visits showed that very few people relied on the VKCs for information pertaining to agriculture and fishing. A larger overarching issue that plagues the attempt to provide information about agriculture and fishing is that both these sectors have changed significantly since the advent of the NEP. In interviews with key informants whose source of livelihood is agriculture or farming, the decline in their source of livelihood emerged as a key concern. As one informant put it,

> The policy of liberalisation has totally ruined farmers' livelihoods. Agriculture no longer yields profits and cannot be a source of livelihood. The government stipulates minimum wages for labour, but it does not offer assistance in dealing with the increased cost of production and investment—Neelakantan, a farmer in Pudukkottai district, TN.

The negative impact of neoliberal policies on their livelihoods affirms the interconnectedness between policies put in place at the national level and the impact on village life. It also confirms that distribution of growth in India post-1990s has not been even. Most importantly, in relation to the central argument of this chapter, services provided by the ICT4D initiative, which seek to improve livelihood of farmers and coastal communities do not address the needs of these communities.

Villagers involved in farming, for example, were already familiar with the practices and problems they confronted. A representative response from interviews with farmers is Pechimuthu's comment, "We have been doing farming for generations, what is the computer going to teach me now". Similarly, another informant, Sridhar asked, "are we going to learn about farming from the Centre now?" This rationale prevails among the villagers who own or lease land. However, for the poorest and most disadvantaged, such as Dalits, who constitute the majority of the disempowered, and who work as daily waged labourers carrying out tasks like weeding, sowing, and harvesting, services such as information pertaining to agriculture, pest control or market prices for produce are not relevant.

Another service that is in demand is information regarding entitlements or benefits for rural citizens as announced by the government. Information regarding entitlements, however, in itself cannot assure the poor of securing these benefits.

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[7]A government-run crèche.

[8]PDS provides essential commodities such as sugar, rice, cooking fuel at subsidised prices.

Corbridge et al. (2005) have pointed out that the poor in India, in their encounter with the state, face many barriers to access their entitlements, and they have to jump a series of hurdles to the point that even a simple task, such as entering a government office is overwhelming for a poor villager, and more so for Dalits and women. The constraints for the poor and oppressed are, in that regard, structural. The programmes and services offered by the VKCs initiative are accessed, mainly, by people who are better placed in the community. This includes, the younger, educated or those with a certain level of literacy skills who enrol for the MUPP; landowners and rich farmers who participate in videoconferencing events; and those with time and confidence. The VKCs programme fails to include the poorest and the most marginalised. Such user pattern corroborates Rowlands' (1995) argument that only people with some means and assets benefit from development projects. People who do not own land or belong to the labouring class do not have time or stand to gain much from the ICT4D initiative.

Thus, the distribution of benefits through the Centres reflects the larger inequalities, both in terms of the social and economic milieu at the national level as well as the local power structures. Such selective participation stems largely from an issue that Rowlands (1995) points to by drawing upon Batliwala's (2007) work on empowerment. The argument is that the empowerment approach is a long drawn out process in which individuals work at their pace and, as such, does not yield immediate benefits. Development agencies like NGOs are required to show tangible results, and this means there is tendency to focus on people who are slightly better placed, and "even empowerment-focused programmes often fail to engage with the poorest and most marginalised" (Rowlands 1995, p. 105). Just like the gains of growth, the benefits of ICT4D are also bypassing those at the bottom of the ladder. The process of empowerment, if it is to be transformative and bottom-up, takes time (Rowlands 1995; Cornwall 2007).

11.5.3 Improving Livelihood Opportunities

The third category of service provided by the VKCs (Table 11.1) is organising training programmes that would help people establish small-scale industries, or undertakings that would enhance rural livelihood options. The rationale is that exposure through training programmes in tandem with loans procured through SHGs can enable the communities to supplement their income and would lead to economic empowerment.[9] A number of scholars have argued that the microfinance loans facilitated by MSSRF have improved livelihood opportunities for the villagers (Alberts 2012; Thurow and Solomon 2004; Kanungo 2004). Alberts notes the empowering impact of the VKCs thus:

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[9]MSSRF has assisted in organising 9,600 people in 800 SHGs in five states across the country (Thurow and Solomon 2004).

[Centres] have been used to improve livelihoods through the development of a large number of small 'science franchises'— village efforts that produce mushrooms, dairies, or biopesticides, for example—supported by loans provided by the Indian Banks to 'self-help groups' and individual villagers (2012, p. 1).

Several (15) key informants of this study have participated in such training programmes—9 women and 6 men, who were part of the microfinance and SHGs project, discussed this aspect of the services offered by the VKCs.[10] The breakdown of the 14 informants, according to training programmes they had participated in is as follows: 4 women had attended fish pickle training; 4 people (3 men and 1 woman) attended Phenyl[11] and soap making; 3 people (2 women and 1 man) took part in incense stick making; 2 participated in mushroom cultivation (1 man and 1 woman); and 1 person obtained training for making ornamental artefacts. Of these, only one woman has been successful in supplementing her income through newly acquired skills while others are facing a range of problems in augmenting their income in a sustained manner.

To illustrate the impact of such training programmes, I will detail the case of Pushpavalli, a woman who has been able to generate income through such training programme. Pushpavalli, from Akkarapettai, a fishing community, attended the Phenyl and toilet soap making training programme. She prepares these products at home and sells around 20 litres of Phenyl every week, packaged in 40 bottles. She supplies these to the school and a few households in the village and generates an income of around Rs. 200 (NZD 4) a week. Her success has been recognised by the NGO and was selected as a National Virtual Academy Fellow[12] for her services to the SHG movement in the village. She faced a problem when two other women in the village who attended the same training programme begun to prepare similar products for sale. I was at the Centre when Pushpavalli came to discuss this issue with the KW, who informed her that the VKC cannot do much as they are unable to prevent others from pursuing such projects. The design of the project does not incorporate the wider setting in which such programme are implemented and is myopic, while gainful empowerment essentially has to be driven by long term viability and sustainability.

This issue is further compounded by the fact that most people in the village do not have toilet facilities, and among those who do, the toilet is not used for that purpose.[13] Lack of basic infrastructure such as toilet facilities cannot be simply overcome by the introduction of new products or for that matter access to

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[10]The higher number of women is reflection of the government-mandated policy of allocating SHG loans to women. It is not uncommon that women remain the beneficiaries on paper.

[11]A chemical compound used in the region as a toilet cleaner and disinfectant for Indian style commodes.

[12]The NGO elects members of the rural community as National Virtual Academy Fellows in recognition of services provided to the community. On occasions, these Fellows are invited to talk about the benefits of the VKCs to the village.

[13]The relationship to toilets is informed through the idea that human waste is a contaminant and therefore should not be indoors.

information through ICTs. Defecation in the open is a common practice in Akkarapettai. Even though new houses with toilet facilities have been built as part of the post 2004 Boxing Day Tsunami Rehabilitation Programme, according to Pushpavalli, most people do not use the toilets as they think it is dirty to defecate in the house. She took me to a house where the toilet was being used as storage facility and was packed with firewood. In other words, there is not much market for a toilet-disinfecting product. The issue for Pushpavalli is that the entry of two more women poses competition in a very small market for her products. The NGO, in its offering of training for livelihood opportunities, has not considered the cultural milieu and appropriateness of the product for a village that lacks facilities and has a culture of open defecation.

Two more women informants, Komathi from PRpuram and Devika from Akkarapettai, who had participated in similar training programmes, experienced other problems. For example, Komathi found marketing her products difficult and sought assistance from MSSRF. Again, a simplistic transfer of information about how to manufacture goods does not in itself solve the issue of poor people having to overcome the constraints of their social habitus. The NGO did not help as it viewed the provision of information and training as their responsibility and did not see marketing as part of their role. While Devika, who required information about procuring raw materials at competitive prices and details of vendors was not assisted by the NGO.

Similar issues regarding the trainings programmes not being conducive to improved livelihood options were identified by other informants as well. Marketing and procuring raw materials at competitive prices remained a major hurdle for those willing to start cottage industries. Likewise, many members of SHGs were advised to start ventures for which they did not have prior experience. For instance, in the case of raising cows to sell milk, a villager said "We have worked as labourers most of our life, we do not know how to rear cattle, that is why we failed". In another village, some people were advised to start entrepreneurial ventures such as renting utensils for commercial kitchens. The respondents said, "We are labourers and do not possess skills to run such ventures". In short, although such training programmes have the potential to empower participants and improve rural livelihoods, field data showed that the design and implementation of the programme are not viable for sustained improvement in livelihood opportunities and fail to consider the cultural and pragmatic impediments of rural communities. Nor do they factor the fundamental inequities that prevent the poor and marginalised from pursuing the livelihood opportunities offered.

An important observation made in the field was that the VKCs are highly gendered spaces and I will examine the role gender plays in access to and utility of the Centres in the next section.

11.6 Gender and the VKCs

An important claim by MSSRF is that the NGO is 'pro-women' and that the Centres have contributed to women's empowerment (Arunachalam 2002; Kanungo 2004; Vedavalli 2009). However, field data shows that the utility of the Centres is highly skewed along gender: across all the villages, it was observed that more men visited and utilised the services at the VKCs than women. This largely stems from the gender disparities that inform the distribution of power at village level and within the Indian context.

While men visited the VKCs for a range of different purposes such as to solicit information, read newspapers, attend MUPP classes, play video games and to learn and enhance their computing skills, women, other than those enrolled for the MUPP, come either to socialise or, in isolated cases, for general queries. Although I interviewed 109 women, the number of women users of the VKCs is a minority of 56 users. Younger women come to seek information such as the courses being offered or employment opportunities. Importantly, these are women who are enrolled for MUPP courses, but they do not access the information services provided at the VKCs as envisaged by the NGO. Key informant interviews show that only 6 women came to the Centre seeking livelihood related information—two had come to seek information regarding the small-scale entrepreneurial venture they had taken up following a training programme organised at the VKC; two women had come to inquire about agriculture related information; and two women sought information for problems with ornamental plants at home. The remaining women users had come to meet other women or the KWs, share kitchen recipes and obtain remedies. More women participate in the training programmes for small-scale industry, and this, to a large extent, is because microfinance and SHGs are targeted towards them. Thus, in order to avail the SHG loans, more women are involved.

The reasons for not frequenting and using the VKCs cited by women participants were numerous:

- They did not see the relevance of the VKC to their lives.
- They felt they did not possess adequate literacy skills.
- They did not find time due to the many demands placed on them by the range of responsibilities, such as cooking, taking care of children, working in farms or on the coast and a host of other domestic duties.
- It is more useful for younger people.
- They do not directly benefit from acquiring computing skills.

Women are hesitant to be seen in public places without any specific goal or purpose, especially younger women. There are more regulations and social norms around young women's mobility in rural communities.

These reasons reflect the place of women in rural communities and their perceived role in private and public spheres and in development agendas. Such gender disparity was more pronounced in the VKCs located in coastal communities. This is largely because fishing communities in TN and UTP are highly gendered and

patriarchal in structure. Fishing communities in TN generally have higher population density, lower literacy levels and lower gender ratios at village level in comparison to the indicators at the district level (Sugimoto et al. 2011). Field research showed that women in fishing communities face more stringent social norms and restrictions on their movement. For example, they cannot venture in public spaces without specific purpose or participate in their village council meetings. Campbell (2003) argues that women in fishing communities involved in marketing of fish face double censure: first, from a society which is highly prescriptive, and second, women involved in marketing were looked down upon as it is considered degrading in the cultural milieu. Such social norms translate to less mobility and discourage young women from pursuing higher education.

An important group of women who found the VKCs extremely useful were KWs. Most women KWs noted that their position at the Centres had facilitated empowerment. Specifically, they listed social and personal recognition, acquisition of technical skills and improved employment opportunities as key empowering impacts of their involvement at the Centres.

11.7 Conclusion

This chapter has argued that the VKCs can facilitate limited empowerment opportunities for rural communities by providing a narrow range of information, the prospects of becoming familiar with ICTs, and through training programmes. It also argued that these empowerment opportunities are not equally distributed as only certain segments of the rural population stand to be empowered by the VKCs, reflecting uneven development at both the micro and macro levels. The services offered by the VKCs, which seek to empower individuals and communities, do not have a transformative impact as they do not empower the community to challenge existing structural, social and cultural inequalities and discrimination. The NGO's foundational document, grey literature and the voices from the villages show that such ICT4D initiatives are premised on a simplistic relationship between ICTs and empowerment. Empowerment, as has been argued in development debates, is a slow and long drawn-out process (Rowlands 1995; Batliwala 2007; Parpart et al. 2002), and structural inequities are a major impediment for the dispossessed (Freire 2000; Corbridge et al. 2005). Empowerment through ICTs also encounters these foundational development issues as the field research has shown. New technologies in themselves cannot alleviate the unequal distribution of power and growth. Thus, ICTs cannot empower and leapfrog rural communities in developing countries until structural disempowerment of the marginalised such as poor, Dalits and women is integrated into the design of such projects.

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Chapter 12
Paradigms of Digital Activism: India and Its Mobile Internet Users

Paula Ray

Abstract India has the deepest penetration of mobile phone usage, and the second highest usage of mobile Internet in the world. Even the low-end mobile phones are enabled with options to access social networking sites (SNS). It helps that SNS can now be accessed in vernacular languages, too. This development in mobile telephony has the potential to mitigate the socio-economic disparity of the country's population (D'Costa, in this edition) and make SNS available to the people, which in turn can connect millions of users instantly and efficiently. It is not surprising then that Indian SNS users are beginning to harness this capacity to digital activism. Any form of communication, non-profit or commercial, must involve a level of persuasion to be considered successful. While persuasion can take many different forms, in activism mediated through digital communication tools, it tends to follow two paradigms: to inform and to inspire, depending on the socio-economic development of the people to be persuaded; in a developed country, digital activism is used to inspire people on an issue of concern, and in a developing country digital tools are used foremost to inform the people about a cause. The choice of paradigm is also guided by access to communication technology. I argue that given the disparity in socio-economic development (D'Costa, in this edition) between urban and rural regions in contemporary India, both paradigms coexist within the Indian context. The way inspiration-based activities are managed and implemented is comparable to the persuasive strategies of a multinational corporation seeking global recognition. I conclude that digital activist "branding" has the potential to bring about social change, depending on how the communication tool is being used along with the nature of the issues raised online.

Keywords Rural-urban divide · Activist branding · Paradigms of activism · Facebook activism · Anti-corruption movement

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12.1 Introduction

"We are the 99 %". "I am sluts". These are some of the status messages that have gone viral on SNS in the past few years. Media consumers can immediately identify with the movements and their issues the moment these phrases are mentioned. The tactic is similar to the taglines retail consumers have come to associate with certain popular consumer products like Coca Cola or McDonald's. Perhaps the recall value of "We are the 99 %" is today almost as high as that of "I'm lovin' it". The difference, of course, lies in the fact that both the Occupy Movement protesting worldwide socio-economic inequality and the Slutwalk against male appropriations of feminine sexuality are successful cases of digital activism. In both these cases, information exchange by distribution and redistribution of relevant text via SNS has facilitated the spread, organisation and outreach of these movements.

SNS is frequently used to send out information with a call for action. As the message is distributed, it compounds its own distribution channels through repostings, creating a network of SNS users who receive the message. This network of users, representing a nexus of distribution channels, then becomes the field of mobilisation for organising an activist movement. Sandor Vegh (2003) assigns three key features to digital activism: advocacy, mobilisation and reaction. These features can easily be linked to the way SNS operates with regard to digital activism. Information circulates via SNS either in the form of story sharing, advocacy or reactions from users voiced through online lobbying, and this pushes the movement forward. The circulation of these online lobbies has the potential to gather supporters, form coalitions and influence worldwide opinion. In fact, SNS works as an asynchronous message distribution board by providing a forum for dialogue and channelling information beyond geographical limits. The wide visibility gained through micro-expressions within cyber campaigns makes SNS the most effective forum for publicising issues of contention and sparking action through online mobilisation of participants in offline events.

In this chapter, I examine the effectiveness of SNS activism within the context of contemporary India. Because information distribution depends on socio-economic infrastructure, the socio-economic disparities between urban and rural India make communication flow within the country complex. The unique development of SNS activism in this national context has led to two distinct paradigms of digital activism: one seeking to inform and the other to inspire. I elucidate the veracity of this claim through references to recent incidents of protests against corruption and sexual harassment in India. The way these protest activities were managed and implemented is comparable to the persuasive strategies of a multinational corporation seeking global recognition. I conclude that digital activist "branding" has the potential to bring about social change, depending on how the communication tool is being used along with the nature of the issues raised online; and thereby I propose ways in which SNS activism can be sustained in this environment of fast-paced technological development.

12.2 Paradigms of Digital Activism

SNS activism incorporates the two layers that Richard Pollay assigns to the communication process: informational and transformational (cited in Leiss et al. 2005). While the former details the primary features of the issue to the recipient of the message, the latter tries to alter the attitudes of the recipient towards the topic of the message conveyed. Vegh's concept of awareness or advocacy in digital activism begins with information distribution. It informs the recipient in order to generate awareness. When the message seeks to mobilise recipients by influencing their attitude to the issue at hand, however, then the communication process is transformational in nature. A successful transformational communication generates reaction in some form from the recipient of the message.

On the basis of this distinction, we can assign digital activism two paradigms of operation—to empower with information and to inspire for a cause. Activism can therefore serve different or dual purposes of empowerment and inspiration, depending on the target consumer of the mediated message. Traditional, non-digital forms of activism might achieve the same objectives of informing and transforming, but the digitally transmitted message can reach a more targeted audience, unlike the traditional communication process that reaches audiences indiscriminately. In addition, when a message is mediated through traditional mass media, it tends to stay in public memory only for a limited time, whereas a digitally mediated message is likely to come with an extended shelf-life, because the same message can be easily remediated or "shared" through the network of users, even to the extent that the message goes viral. The virtual network of contacts takes the message beyond the territorial and temporal limitations of traditional mass media. The remediable nature of the SNS communication process is thus useful for both paradigmatic operations of activism.

Social media analyst Gaurav Mishra says that the first model, namely to empower with information, is usually associated with the developing nations, where people have limited access to basic information and so the activist tools involve "simple-to-use digital technologies" (Mishra 2010, n.p.) like text messaging via cellular phone. The second model of digital activism is prevalent in developed countries, where people use SNS mainly for three purposes: instantaneous access to information, self-expression and social interaction (ibid). With a consumer profile that includes steady demand for information, SNS activism can begin with spreading the word but lead, in the context of a more developed economy of tech-savvy users, to the message recipients expressing their opinion and engaging in interactive communication with the users. Accordingly, activist groups use digital media as a communication tool to reach out to two distinct consumer bases—one belonging to the developed economies of the world and the other to the developing economies. The success of activism via SNS thus depends on who uses it for what purpose.

The model of empowering with information can be said to have been used in the Ushahidi campaign launched in Kenya, a developing nation. The campaign sought to democratise the flow of information by increasing transparency. It began

with reporting on violence after the post-election fall-out in 2008, but since then Ushahidi, which in Swahili means "testimony", has evolved as a platform for the citizens to voice their opinions and experiences, which primarily amounts to information distribution. The reports are submitted via the Internet and the mobile phone, and the platform is centrally supervised by the Ushahidi activists, giving Ushahidi status as an SNS for grassroots communication. The second model of engaging with inspiration can be traced back to the Seattle protest of 1999 in the US (Kahn and Kellner 2004), which used web-based tools that were individually owned by activists to disseminate information through alternate media sites (like Indymedia), blogging, photo sharing and viral use of email lists.

In the former instance, the movement was launched using digital tools of communication with the objective of keeping people updated on a particular issue. In the second instance, information was shared through a set of communication tools that was considered highly sophisticated at an earlier phase in the development of social media technology, with the objective of garnering support against corporate globalisation. However, information does not stop at distribution; rather, information for activist purposes always demands response and engagement. The citizens in the former example engage with the information they receive through the Ushahidi platform. But, being a developing economy, the people often lack the required level of literacy to use the technology and, in most cases, cannot afford an interactive communication device enabled with an Internet connection, which limits their opportunity to participate in digital activism even though they are able to put the information they receive to use by improving local awareness.

SNS is perhaps the ultimate forum for information exchange in the digital world and an advanced communication tool at the disposal of the users. But unless the consumers know how to process the information they have accessed, the communication tool by itself cannot condition and shape the social order. There is always a certain level of interplay between technology and the society, because none of the elements by themselves can determine socio-economic and political transformation. As Salter (2003) argues,

> [n]o matter how much social shaping takes place, …a cautious balance must be held between the transformative capacities of a technology on the one hand, and the capacity of social agents to utilize technologies, and shape them in their use, on the other hand. (p. 120)

The two paradigms of digital activism suggested here seek to articulate the interplay between technology and society based on the economic development of the society and the access of its people to sophisticated communication tools.

12.3 Situating India Within These Two Paradigms

India has the second largest number of mobile internet users in the world and the mobile phone has penetrated well into the rural landscape, which constitutes appro-ximately 70 % of the population of the country (World Bank n.d.). The

language barrier endemic to this multilingual nation is being overcome through the capacity of both mobile and SNS technology to cover vernacular languages. Given the popularity of SNS, mobile phone sets, considered affordable in the Indian context, are already enabled with SNS options that are easy to navigate. But in spite of such technological advances across the country, economically speaking India is considered a developing nation that houses a population of 410 million living below the poverty line.

The economic development that the country has experienced is restricted to a certain section of the urban populace. The wealth earned through economic growth seldom percolates down to the masses, mainly because of lack of adequate infrastructure and deep-seated corruption within the system. This, in turn, has resulted in an ever-widening economic gap between the urban and the rural population. At the start of the new millennium, ICT4Ds (Information and Communication Technologies for Development) were introduced in India to serve twin purposes in a unique juxtaposition: to gratify "middle-class technofetishism" and to overcome "rural underdevelopment" (Mazzarella 2010, p. 783). As such, the Eleventh Five-Year Plan (2007–2012) was formulated to achieve "inclusive growth" (Deloitte 2011, p. 3) in order to overcome the wide disparities in the economic conditions of the people. The development of mobile telephony is key to the plan, with the intent of making SNS available to everyone, which in turn can connect millions of users in a technological instantiation of inclusivity. While this strategy is certainly affecting the penetration of mobile telephony throughout India, I argue that currently both consumer bases–the developed and developing—are operative in the context of India's continuing urban and rural segregation, which has implications for the mobilisation of SNS-based activism.

Global connectivity in urban India has also been encouraged by SNS access via mobile phone, which increases accessibility and hastens dissemination of information. McKinsey and Co. estimates that India had 120 million internet users in 2012, which is projected to go up to 330–370 million users by 2015 (Gnanasambandam et al. 2012, p. 1). Although he number of internet users on PCs was 100 million at the end of 2010 (Eluvangal 2010), more startlingly there were 500 million users of mobile phones in the country in the same year, with the number of mobile internet users having grown five times between 2005 and 2010 (ibid). The number of internet users on PCs and on mobile phones is about to become equivalent, with the latter soon to outstrip the former, a major share of which will be utilised to channel local connectivity in rural India. Assa Doron and Robin Jeffrey in *The Great Indian Phone Book* (2013, book jacket) argue that this communication device has "disrupted more people and relationships than the printing press, wristwatch, automobile, or railways, though it has qualities of all four". It would be relevant to mention here that online and offline communication, for instance computer-mediated Internet-based communication and mobile-based offline communication, are not "distinct and unrelated" (Foth and Hearn 2007, p. 2). Rather, online and offline modes, particularly through mobile devices, can create "portfolios of sociability" (Castells 2011, p. 132) by binding communicative networks of friendship or kinship.

There is little question that mobile connectivity allows for greater access to sociability. To use a phone, Doron and Jeffrey (2013) observe, the user needs to be familiar with about a dozen keys on the keypad. The literacy level of the user does not come into play, as Doron and Jeffrey found in their case study of a semi-urban community of boatmen on the banks of Banaras in northeastern India, where "[p]eople who could not read or write often had excellent memories" (ibid, p. 141). In fact, it was the efficiency of communication via mobile phones that prompted these people to seek to improve their literacy levels. It made "literacy desirable, useful and attainable and initiated them into a world of record-keeping […and] data-bases" (ibid). These databases in urban and literate societies have given rise to the virtual communities amongst, for instance, booklovers or brand consumers. Such users may never meet in real life, but they share a special bond which supports information exchange regarding an item of mutual desire or inter-est. For instance, those who buy books on amazon.com often write reviews and recommend the best titles to fellow buyers.

Online networks based on the specialised interests of communities are similarly manifested via SNS interactions and their groupings. MySpace, launched in 2003, caught the attention of prospective users in India, as it became the favourite platform for up-and-coming musicians to display their creativity. Orkut, a social media format not unlike Facebook, was launched in 2004 and gradually picked up a strong user-base in India (Mahajan 2009). Even today, it is a close second to Facebook users. Other networking sites that gained acceptance in India include LinkedIn and Hi5; LinkedIn continues to be a favourite with professional networkers to this day. In 2007, Orkut had 64 % of user share (Madhavan 2007) and in 2008 it had 12.8 million visitors. Against this, Facebook had 20.9 million visitors in 2010 (comScore)—which was a notch over Orkut's 19.9 million visitors.

What has helped Facebook push itself up the ladder of popularity is the shift from its global image to a "glocal" image through the introduction of vernacular languages to its interface. Now Indian users can post updates in eight local languages (NDTV 2012). In fact, while collecting data for this project, I observed a marked pattern in SNS usage and migration in India. Most of the long-term users of SNS in the country had started off with Orkut between 2005 and 2007. With Facebook gaining in popularity worldwide, they shifted allegiance by transferring their Orkut profiles to Facebook almost overnight. However, in the semi-urban and rural areas, it is Orkut that still rules the roost, thus maintaining the urban-rural divide even in the choice of SNS. Urban users are often members of more than one SNS, depending on whom they establish a "friendship" with. Apart from professional and personal networking, another invaluable aspect of networking in the Indian context takes place with regard to matrimonial alliances. Accordingly, we find a separate category of SNS aimed only at the current and anticipated

needs of marriage information-seekers (Pal 2010). In these spaces, there is selective dissemination of information, controlled mainly by four big players: Shaadi, Bharatmatrimony, Jeevansathi and Simplymarry.

The frequent use of SNS has made Indian users aware of their rights and liberties as citizens, or has at least increased such awareness and helped them to voice their preferences. Indeed, the popularity of SNS appears to have aroused a sudden surge of "vigilantism" (Mahajan 2009) amongst Indian users. Les Johnston (1996) defines vigilantism as a populist threat of force that "arises when an established order is under threat from the transgression, the potential transgression, or the imputed transgression of institutionalized norms" (p. 220). Because "engagement is voluntary, vigilantism constitutes a social movement" (ibid), which can take the form of vigorous campaigning to bring about social and political changes. Several instances of activism via SNS tools can be classed as digital vigilantism, propagated primarily through Twitter and Facebook. The Pink Chaddi Campaign of 2009, often compared to the bra-burning feminist movements of the 1970s, is the most famous case to date. The terrorist attacks in Mumbai in November 2008 also saw a large number of Indians tweeting live from the insurgency spots and also posting updates on Facebook. In 2006, the anti-India propaganda campaign on Orkut, called "We hate India" with a burning Indian flag for a profile picture, was countered by the formation of another online community called "We hate those who hate India", until the Bombay High Court issued a notice to Google to pull it down. A list of similar instances has crowded SNS forums in recent years, substantiating the increasing vigilantism of Indian SNS users who have the potential to become digital activists.

12.4 Rural Versus Urban India: Information Versus Inspiration Models

In 2010, two associations—GSMA (Global System for Mobile communications Association) and CBFW (Cherie Blair Foundation for Women)—jointly published a paper describing how mobile phones can liberate women, especially in developing nations like India, where middle- and low-income families have at least one member who is a mobile phone user. At the third UN Millennium Development Goals on gender equality, the mobile phone was described as "an effective productivity and development tool which creates education, health, employment, banking and business opportunities" (GSMA and CBFW 2010, n.p.). As a communication tool, it plays a crucial role in connecting people and families "at the bottom of the economic pyramid" (ibid, n.p.). Research conducted by Deloitte (ibid) has further shown that an increase in mobile phone usage is directly linked to a growth in the GDP of a developing country's economy. Armed with a mobile phone, women not only feel more independent, but it also provides them with increased income and professional opportunities.

Jo Tacchi discovered this in her field research in rural India, where the mobile phones appeared "prominently and emphatically in the data about the women's 'communicative ecologies'" (2010, n.p.). The mobile phone is considered a more personal communication tool because the caller can uniquely target the recipient, as opposed to a landline phone that is usually shared by a household. It is understood that ICT-enabled networking overrides "physical closeness" to establish "social closeness" (Wellman 2001, p. 234), but Tacchi found that the mobile phone as a communication technology has opened up avenues for intimate conversations amongst rural women in India who belong to the same family. Tacchi relates the story of an Indian family in which the mother feels comforted because she can interact with her married daughter every day about things that cannot be discussed over public phones. The mobile handset gives her daughter both freedom and privacy from her in-laws, with whom she resides in the same house, as she can speak comfortably without being overheard by her husband or his family. Tacchi (2010, n.p.) argues, "This is a significant relationship for these women, and following this discussion we asked all the women we met about their mobile phone use, and sure enough it was talked about most animatedly". If this is the impact that the mobile phone has on its women users in a predominantly patriarchal society like India, we can only imagine the potential of SNS access through the mobile Internet by these same women in the near future.

Indian "mobile activists" have already begun to harness the capacity of the mobile Internet for digital activism. Following closely on the paradigm of empowering users with information, Ravi Ghate's SMSONE revolves around the concept of "mobile journalists" comprising school dropouts from rural areas of Maharashtra. They deliver community-specific news for free to people living in some of India's most unconnected areas, along with paid promotional messages. The ratio is one free community news message to four revenue-generating messages per month, with the mode of communication being a basic text messaging service. Although in essence this is a digital newsletter, in practice it empowers the villagers with information that was previously unavailable to them. For this local newsletter aimed at "the base of the pyramid" (Lacy 2009, n.p.), Ghate scouts villages for unemployed youth with good local sales or campaign experience and helps them make a decent living—although it is never enough to make them so ambitious as to pack up and leave for the big city. The employee gains a social standing from his apparent authority to disseminate information amongst the masses, but what the subscribers gain is more powerful. Armed with just a basic mobile phone, but no TV or local newspaper and an infrequent electricity supply, the farmers receive "instant updates about crop pricing or news of a seed or fertilizer delivery a town away" (ibid). Accordingly, the farmers plan their trips only when they are certain to benefit from them, rather than wasting time and energy on a futile trip and coming back empty-handed. This access to information has political implications for the farmers, because in these unconnected villages information is power and the oft-corrupt government officials or middle men suppress facts to exert their superiority. The information distributed by "mobile journalists" helps these farmers ascertain their rights and protect themselves from the politics

of the middle men. The politically motivated struggle for hegemonic control of information is countered by mobile activists who take advantage of digital technologies to resist the powerful elite.

CGNet Swara is another such enterprise set up by an ex-BBC journalist, Shubhranshu Choudhary, who was frustrated by his inability to report on people living in remote tribal areas of India. He devised a news service that is distributed on mobile phones. The Gondi-speaking community of Chhattisgarh region had no means of communication with the exterior, as their villages had no radio, television or newspaper. The only device that worked across the rough and often impassable terrain of their tribal land was the mobile phone connected to distant telephone towers. CGNet Swara made available information on local concerns in their local language. The villagers, who often have to climb up a tree to capture the phone signal, have to dial a number which prompts them to press "1" to record a story or leave information, or "2" if they want to hear the day's bulletin. At the same time, when any piece of information is validated by a substantial number of villagers via option "1", it is translated by journalist activists into English and uploaded to the CGNet Swara website. Information posted online has prompted activists from other parts of the country to take up the cause of the Gondi community and at times even challenge the central government for their unbalanced allocation of resources to these far-off communities. Choudhary argues, "Mobile technology is better than radio. Mobile is a two-way communication" (Doron and Jeffrey 2013, p. 161). Interestingly, the Indian government could not crack down on Choudhary and his team's activist enterprises because the privatised mobile phone service does not violate the broadcast laws of the country.

These are all examples of using information via mobile telephony for empowerment. With regard to the other paradigm, that of engaging users with inspiration, there are several instances of urban-based digital activism, the most recent being Anna Hazare's campaign against the Anti-Corruption Bill. Hazare provided a voice for the middle class population's frustration with what seems to be irrevocable corruption (Khandekar and Reddy 2013). A retired soldier and activist dedicated to the cause of rural development, 75-year-old Kisan Baburao Hazare, popularly known as "Anna" (which translates to "father" in the Indian language Marathi), launched his non-violent, fast-based protest to demand a "comprehensive anti-corruption law and draft a citizen's ombudsman bill" (Chand 2011, n.p.), named the Jan Lokpal bill, which would protect whistleblowers against corrupt politicians and government officials. Inspired by the India Against Corruption team, Hazare's supporters mobilised the entire country to join the protest movement and garnered support from all sections of society, In a move to offline activism, people poured into the streets to celebrate a "people's victory" when the Indian Parliament gave into the Gandhian activist's demands.

Leading media outlets in the country joined hands with social media and helped spread the buzz about Hazare's fast almost overnight. Several Facebook pages were set up and profile badges were distributed both offline at the protest points and virtually on Facebook. A "missed call campaign" asking the supporters to leave a missed call notice on the mobile numbers posted at the meeting points

or on SNS, to express symbolic support for the cause, collected over 20 million responses. Online petitions via Avaaz.org registered above 6,17,000 supporters, along with Twitter trends with hashtags like #janlokpal, #annahazare and #meranetachorhain (which translates to "my leader is a thief"). YouTube shows over 2,000 uploads, many of which are amateur videos shot by participants (Kurup 2011). The total number of Hazare supporters was estimated at over a hundred million across all forms of social media. It is not easy to put a figure to the offline supporters who made it to the street-side gatherings across the length and breadth of the country. The promotion-based campaign showcased in Hazare's movement has, in the recent past, become a characteristic feature of digital activism. Such a heavy use of promotional tools recognisable from corporate and guerilla marketing should, however, force us to ask whether this form of activism can be considered democratic. To explore this question, we must consider the persuasive qualities of promotion and interrogate how they help recuperate the possible "democracy" of SNS activist practices.

12.5 Promotion as Covert Persuasion

The level of stimulation or "inspiration" encountered at Hazare's campaign is dependent on "promotion", which is an act of publicising a venture to generate desire. This verges on Pollay's concept of transformational communication in the garb of increasing public awareness. A deeper look at the "inspiration" model reveals "persuasion" as a possible technique that can be used via SNS to encourage people to engage in discursive interactions. Activism, in this sense, can be said to verge on "craftivism". The term "craftivism" is usually associated with third wave feminists who reclaimed knitting, sewing and other handicrafts traditionally regarded as women's work and integrated them into profit-making enterprises (van Zoonen 2002). Here, however, I use "craftivism" in the sense of being crafty, which can be interpreted as a conscious effort to strategise a plan of action that draws on the public's emotions to bring about change.

This is what former US presidential candidate Ralph Nader was referring to when in 2008 he criticised Barrack Obama's online election campaign. Criticising Obama's efforts to use SNS as a democratic tool to urge people to vote, he reinterpreted it as a celebrity marketing strategy used for personal promotion. Much like the Hollywood celebrities who influenced American politics by turning citizens into fans and thereby undermining democracy (Ross 2011), what Obama created through his tweets, according to Nader, was a pool of ardent supporters who would vote in his favour. This form of "personality politics" (Street 2011), prevalent at the level of formal presidential politics, has percolated to the grassroots level of informal politics with the help of digitised communication tools. A similar personality-based call for digital democracy (van Dijk 2000) was at play in the Hazare campaign and had much to do with why it was picked up successfully by the celebrity-obsessed media.

With reference to the Obama-Nader debate, both forms of promotion—activist and personality-marketing—can potentially affect the audience, encouraging them either to endorse a leader who has been digitally quantified as a product or to embrace socio-political change. In the interactive world, with SNS as a popular vehicle for communication, passive users are not the norm. Digital communication tools mark a shift in the meaning of "activity", whereby the consumers of information are expected to be more proactive than their traditional counterparts (Stolle and Micheletti 2005). Information can empower consumers and perhaps increase democratic access, but unless the consumers respond to the information, either positively or negatively, there can be no activism. In this sense, the two paradigms of digital activism can be said to follow each other in succession: from empowerment to engagement, wherein the former is passive consumption while the latter is active response. In the former, activists promote the democratic distribution of information, which in turn equips the consumers to actively engage in a cause and voice their grievances or preferences. Digital activists enact the latter by using the persuasive interactive feature of SNS, in an attempt to inspire the consumers to bring about changes in their life situation by raising issues of concern.

Attitudes are normatively acquired and sustained, but they are also subject to change with enough motivation. Advertisers, for instance, cash in on the insecurities of consumers about their appearance and body image. This creates a tension between the consumers' attitudes and behaviour, which is resolved by altering their beliefs and thereby effecting a change. In other words, the consumers are persuaded to believe that the product the advertiser wants to promote is best suited to overcome their insecurities. Persuasive messages are inherently aspirational in nature. Moved from the commercial to the political realm, this aspiration is for justice rather than for products, and it is the potential eradication of power imbalances that social activists leverage when they attempt to promote their cause. Their persuasive messages create similar tensions between attitudes and behaviours amongst the recipients, which effect a change in their value judgment. While Dainton (2012) notes that persuasion involves intent on the part of the message sender, and hence a goal, she also points out that the recipient must have the freedom to accept or reject the message. Thus, a persuasive communication is neither accidental nor coercive. It seeks to bring about an attitudinal shift in the recipient of the message.

12.6 Politics of Persuasion: Sharmila Versus Hazare

"Indian politics has evolved from caste-based politics to fast-based politics", claimed a recent poster on SNS when Anna Hazare's anti-corruption campaign was as its peak. His campaign is a prime example of how media attention generated through SNS usage along with other commercial promotional techniques contributed to its success, when compared to similar protests in the course of the country's history. In a comparable campaign, Irom Sharmila from the Indian

state of Manipur has been on a fast for over 10 years. Her crusade is against the Government of India's Armed Forces Special Act that gives the armed forces special powers to shoot or arrest on mere suspicion in the northeastern states of the country. Needless to say, the Special Act has set off a cycle of violence arising from abuse of power and Sharmila is fighting for the freedom of her home state from such atrocities.

The 38-year-old lives in a high security prison and has not eaten a morsel for the past 10 years. The national government "has kept her alive on a cocktail of vitamins and nutrients. She is force-fed twice a day" through a nasal drip, reports CNN-IBN (2011). In this country that reveres Gandhian principles of non-violence, however, Sharmila's campaign has been seldom reported until recently in the context of Hazare's similarly designed fast-based campaign. The Jan Lokpal movement spearheaded by India Against Corruption unfolded over several phases, but it went viral when Hazare, who is decorated with the *Padmashree*, which is the highest civilian honour conferred by the Indian government, began his fast on August 16, 2011. This was timed to fall a day after India's Independence Day, since Hazare was claiming to fight for a free country all over again. As was expected, the government ended up arresting Hazare in an attempt to rein in the momentum. Although both the activists, Sharmila and Hazare, were arrested for their protests, I would argue that it is the age of rampant social media that determined the outcome of their situations.

News of Hazare's arrest spread via social media and the nation spilled onto the streets. The government changed its mind and decided to release Hazare, but the Gandhian refused to come out of the jail and continued with his fast on-site. This opened up a series of discussions between the protesters and those in power. "Hazare's fast brought tens of thousands of people onto the streets of New Delhi; it was covered round the clock by more than a score of television channels. Within hours, the movement and its message had spread to 400 Indian cities and tens of millions of people" (Chadda 2012). The campaign was not only the breaking news on national television, but also leads the trending topics on social media platforms, with hashtags like #hazare or #isupportannahazare. This translated to more people on the ground protesting across the country, which drove public opinion against the ruling political party to an unprecedented level, and Hazare was permitted to campaign at a designated place in the capitol city. It was a peaceful protest, which "was attributed to the social position of the protesters" (Khandekar and Reddy 2013, p. 2). The middle classes, who until now had remained unresponsive to any calamity hitting the nation, and are usually not prone to street violence, rose in unity to support the cause of a corruption-free India. News reports pointed out the significant number of young urban white-collar professionals, housewives and university students who joined the gatherings. Importantly, they were conspicuous by their use of digital media to make their presence felt and voice their opinion.

Soon, the Gandhi cap sported by Hazare became a mass fashion accessory, along with slogans of support like "I am Anna" converted into T-shirt sales. "Brand Anna" (ibid, p. 19) united people across cultural and religious divides, including a few popular Bollywood stars, who appeared to promote the cause on

prime time television (Mathur 2011). At the same time, all of these practices contributed towards Hazare's popularity via personality politics. Helpdesks at protest points were manned professionally, with long yet organised queues of people waiting to send postcards to the government; the participants later reported on the efficiency of the process that was managed like any corporate project (ibid). The messages communicated to the masses—through mass and social media or the electronic boards physically present at the venues—were simple, direct and catchy, and their positioning ensured visibility. Supporters had only to look up the white boards at the venues or online to find out the time, location and intent of the next rally, along with a name and a cellular number—and the calls were always answered promptly and in person. Every question was efficiently responded to, urging callers to congregate at the next protest site. Updates on the campaign were distinctly visible at every venue of the protest, physical and virtual.

The faces of the supporters comprised the old and the young, the conservative and the cosmopolitan. "A significant feature of the nationwide demonstrations was that the bulk of the protestors were urban and middle class. Many of the protestors were well educated, relatively affluent professionals" (Chadda 2012). Smartphone-toting, mobile-camera wielding youths were a common sight, as were traditionally attired elderly activists. As an information-sharing tool, SNS played a vital role in organising the operations, communications, marketing and customer service of the campaign, as well as promoting merchandise for the cause by playing up gimmicks such as the Gandhian cap and attractive T-shirt slogans (Burke 2011). Through its social media presence, the campaign gathered momentum much faster and more efficiently garnered support amongst the urban middle classes than any other protest movement in the country's history.

The corporate organisation and commercial promotion of the cause can be argued to have tipped the movement in Hazare's favour. The government had no other choice but to accept his demands on August 27, 2011 (Chadda 2012). However, Hazare ended his fast only the next day—a Sunday morning—almost 15 h after the government had responded to his wishes (NDTV 2011). This can be interpreted as another of his media publicity stunts, because Sunday mornings are considered a dry spot for news gatherers and a report on Hazare breaking his fast would invariably make front-page headlines. Leading national news organisations glorified Hazare's fast-breaking with headlines like "Anna Hazare Breaks Fast After 288 h, Nation Relieved" (*Times of India*, August 28, 2011), "Anna Hazare to Break his Fast Today at 10am, Govt Accepts his Key Demands" (India Today, August 28, 2011), while live telecast of the fast-breaking ceremony on national television became the "breaking news" of the day and was aired repeatedly for maximum viewership. The impact of the campaign was taken to be unquestionably positive, even ground-breaking: "This movement represented [for] the first time… that the Indian middle classes have played a determining role in counteracting abuse of power by elected officials" (Chadda 2012, p. 120). Given these occurrences, it can be argued that Hazare's campaign was well charted to gain media attention, in keeping with established marketing strategies.

The persuasive strategies that were used to inspire the people combined with personality politics to make this a successful case of digital activism. The success of this protest movement has often been referred to by traditional news media as a "people's victory" that "exposed a weak government and ushered in a new middle-class political force" (Banerji 2011). This only goes to emphasise the absence of "a significant centre" that characterises the digitized decentralisation of decision-making. However, Khandekar and Reddy (2013) attribute the gradual weakening of the anti-corruption campaign after 2011 to the fact that the movement had become a "genericide" (p. 20), that is to say, had met its death by being generic. According to them, the movement reduced the cause to a "product class" (ibid) by virtue of failing to raise its voice on specific cases of corruption, and ending up with a string of casual disputes.

12.7 Facebook Activism: What Works and What Does not?

In a digital democracy, computer-mediated communication facilitates the democratic practice by overcoming spatial and temporal constraints. Similarly, for digital activism this form of communication reduces the overall time traditionally taken by activists to organise a movement (van Dijk 2000). However, "[c]ulture is central to development" (Servaes 2008, p. 390) and so the intended message has to be communicated in a culturally conducive language or approach. The form of communication engaged in by Hazare's FB group can be considered culturally conducive. A "multi-faceted, multi-dimensional" (ibid) participatory programme, for instance, via constant posting of comments, "likes", shares, status updates and chats on FB informs and empowers people, because with every such act they exercise their choice and express their opinion. That is one of the most remarkable social changes enabled by digitally-induced political participation. J Hands (2011, p. 3) claims, "the underlying power of digital communications… [is] a limitless snowball effect…". Although this does not necessarily ensure that all the information passed between the connections is relevant to the activist's cause, it can build up pressure and mould public opinion.

In the networked age, any form of activism can transcend territorial boundaries and promote participation and organisation of activist movements "made possible by the design and structure of modern digital communications" (ibid). In recent times, SNSs like Twitter and Facebook have provoked activism against several dictatorial regimes via the online forum, which have translated to street processions in real time. The contribution of SNS to activism came to widespread attention, for example, during the Arab Spring. It showcased an unprecedented incident of "horizontal connectivity" (Khondker 2011, p. 675) that facilitated "social mobilisation" (ibid) by combining digital with traditional tools of activism. The use of SNS helped "advance a political cause that is difficult to advance offline" (Howard 2011, p. 145). In fact, the MENA (Middle East and North Africa) revolution was difficult to contain within state borders. "[T]he global information"

(Howard and Parks 2012, p. 361) flow spread across the Arab world and inspired subsequent uprisings with a "catalytic spread of unrest" (ibid). Although many of these uprisings have not yet had a conclusive resolution, the capabilities of FB in promoting participation and organisation of these political acts has already been established beyond doubt.

Technological evolution has an impact on social change (Moore 1960). But when it comes to digital communication tools like Facebook, the question arises, what kind of political projects are most suited to socio-political changes mediated by SNS and how do we determine their impact? The usage of SNS has become so intense that the communication equipment appears to have "withdrawn" as technology and become embodied in the user (Heidegger 2010). As such, the users are seldom conscious about the changes SNS is bringing to their behaviour and mostly fail to recognise the socio-political impact of their usage of this communication device. This is the effect technology has on the digitised society we live in. This is made possible by the constant use of smartphones, but the users are seldom conscious about their engagement with media consumption. This is not only an instance of the technology being "withdrawn" whereby the user does not realise the level of consumption, but it is also comparable to Haraway's cyborgs (1991) that live in a world characterised by constant feedback which is considered to be a key element to determine progress (Wiener, cited in Mindell 2000). To make an activism Facebook-able, the SNS user has to actively collect and respond to the feedback online, especially on the FB wall so that they are visible to other members of the activist group. An activist uses this digital communication tool to spread the word, with the ultimate purpose of organising a movement to bring about social change.

The newly constructed model offered by SNS can change power relations and the outcome can effect "fundamental social transformation" (Young 1997, p. 147). These apparently minor shifts ultimately facilitate an attitudinal change in the people which has an impact on the society. To counter the general apathy of citizens towards the voting process, the Jaago Re! One Billion Votes campaign supporters formed Facebook and Orkut communities, which registered more than 15,000 followers ["Jaago Re" translates to "Wake Up"]. This created an inevitable buzz by generating higher traffic on the main campaign website, which hosted India's first online voter registration engine in 2008–2010, claims activist Jasmine Shah who I had interviewed during the course of my research, along with other experts on digital activism in India. They are experts in the sense that they have used SNS tools for activist purposes or are observers of digital activism.

"SNS also allowed us to engage and establish a real time communication channel with the most enthusiastic followers/volunteers of the campaign who were spread across 37 cities in India", Shah adds (interview). Covering such an extended physical space within a limited time-span demonstrates how electronic communication can overcome time and space constraints (Innis 2007). As an immediate impact, this SNS-mediated campaign successfully registered over 620,000 young voters online during the 2009 Parliamentary elections in India, making it the largest such initiative in the country.

Speaking on the impact of SNS in digital activism, Sonali Khan of Bell Bajao campaign refers to a case in Abu Dhabi (UAE), where a victim of domestic violence got in touch with them via Facebook, while another member from Dubai (in UAE) volunteered to help her out (interview). Though the campaign is based in India, the FB group helped them reach out to activists beyond the country, whereby SNS overcame the temporal and spatial constraints of traditional communication tools. This is another instance of activism that FB can perhaps mediate successfully. However, the interactive nature of SNS, especially Facebook, requires sustained intervention to keep the users interested in a cause, which could make it a difficult process for the activists. But if the activist can sustain the momentum of FB communication and thereby keep the group members focused on the issue at hand, it offers the activists an opportunity to voice their cause at almost negligible expense, which is also another reason for activists to opt for digital tools of communication. In this way, the more active an FB group, the more successful is the cause it promotes.

The interactive nature of the tool provides user-generated content in the form of feedback from SNS consumers, which in turn help activists streamline their strategies to reach out to their target communities. "We are also trying out other technologies like the mobile internet to reach out to people with our cause and pool in more support", says Shah. This illustrates the extent to which SNS can influence the decision-making of strategists by providing constant feedback on user choices. Barbara Smith, former publisher of *Kitchen Table: Women of Color Press* (cited in Young 1997, p. 32), says about feminist publishing that "you never know who you might reach. People who you can't ever meet and have a dialogue with, you can reach through words… [I]t's a synergistic process… that can inspire [them] to keep on struggling". This can be said of SNS posts too. As Keith Gomes, Bollywood filmmaker and member of Jagrut Nagrik Manch (Citizens' Awareness Forum), says, "You post something on FB and the world reads it" (interview). He experienced it when he posted photographs of an orphanage in a politically disturbed region of India and received requests for adoption from as far as California. This was made possible via the feedback process of SNS communication; besides, it was its digital nature that helped carry the message far and wide to reach the relevant target consumer.

Encouraging a shift in consciousness and ultimately transforming the cultural paradigm through such communications is what digital activists prompt through their SNS-based campaigns. These updates are so easy to post and comment on that it encourages use and even extends its tools to those who ordinarily lack the expertise to articulate their thoughts eloquently. Many users benefit just from reading the posts, as they are informing, and by "Liking" them, they express their preferences which they may not be able to do in the real world they live in due to cultural constraints. Quite similar to the "cultural arm" (Young 1997, p. 32) of feminist presses, these posts can be termed catalysts for change, indicated in the cultural shifts within a given community. The Blanknoise campaign believes in sustained engagement with the people to promote awareness on sexual harassment and create a space for interactive communication which has a personal impact and

can bring about attitudinal changes in the people concerned. Jasmeen Patheja, cofounder of Blanknoise, says:

Tangible results have been a challenge. But we don't strategise and so we are not worried about the numbers. The fact that people, including men, write back to us and join into make our events a success, shows that there has been some impact. But we don't want to quantify it.

Such impacts mark cultural shifts in these communities facilitated mainly by their access to SNS tools. As Patheja explains, as long as people respond to the posts on the Blanknoise FB page, the coordinators consider it a success, because it signifies support for a cause and group identification. In this way these FB posts bring about changes in the real society in which the digital netizens inhabit.

Most of the feedback they receive via Facebook denotes constructive changes in the perception of the supporters, which can perhaps be considered the strongest impact of SNS activism. For example, a victim of sexual harassment once wrote back saying: "Now, I walk on the side of the pavement and not in the middle anymore". This could be quantified as a tangible outcome of digital activism. It is making the victim confident and strong enough to voice her discomfort in a public domain. Even if she is not courageous enough to walk in the middle of the road, the public admission of her fear, albeit on a virtual platform, can be considered a form of participation, however infinitesimal a shift it might be, achieved through Facebook politics. This form of influence on people's world view is reflected in their collective action. As such the success of social movements is indicated not only by policy change but also through more fundamental transformation reflected in the psyche of the community—the way they assess a situation, make decisions and also advocate their peers is indicative of the social and emotional transformation of the people as a whole. Gomes says that the SNS updates on the No Vote campaign, which asked citizens to refrain from voting due to the absence of uncorrupted leaders who can represent the country, resulted in initiating a debate. Although nothing concrete came out of it, the discussions that followed on the SNS platform made people aware of their voting rights.

Facebook often brings a discussion from the virtual world to the street by organising the supporters into a real time community. If the community is affected, its members attend the real life gatherings—they are the doers in the real world, too. In this context, Gomes talks about the debate that is easy to begin on an SNS forum. He explains that not only does the world read what is put up on FB, but "you are immediately connected with them. When the world starts talking about an issue, the government is forced to take action or implement changes". On the 12th day of Hazare's fast-based campaign, the Indian government conceded to the demands of India Against Corruption and agreed to make amends to the Bill as suggested by Team Anna (India Today 2011, n.p.). That was a "great moment in India's democratic history" and a momentous victory for digital activism. As Garonna and Triacca (1999) point out, when our faith in the economic and the political system is eroded, social change is imminent. But this change may not always be reflected in policy.

Blogger Dina Mehta, however, is not convinced of the potential of SNS. It can amplify the cry for help, but not necessarily lead to political solutions: "It can make a lot of noise with regard to micro causes—idiomatic, one-off campaigns, like eve-teasing [a euphemistic expression commonly used in India to refer to random instances of sexual harassment that women are subjected to on the streets]. But it does not work in the case of bigger issues like sexual harassment". SNS in activism has a limited role on limited issues. "[T]he digital zone facilitates unprecedented levels of spontaneous affection, intimacy and informality" (Sadie Plant, cited in van Zoonen 2001, p. 68). As such, one-off issues are easily promoted by SNS, as stated by Mehta. It can give the user the visibility to market their campaign. This is precisely why the Pink Chaddi campaign, in 2008, received unprecedented response via their Facebook page and is rated as one of the successful cases of digital activism. But it could not encompass the larger issue of sexual harassment that, for example, led to the Delhi gang rape incident of December 2012.

One of the prime reasons as to why the Women's Reservation Bill FB group did not work is because FB is not at its activist best with goals that aim directly at legislative change. The reason it worked in the case of the Anti-Corruption Bill was because of the personality-oriented campaign of Hazare. SNS is good tool for political participation based on informal, personal and even gossipy modes of engagement. With regard to the India Against Corruption movement, Facebook could help amplify the cause because every person in the street is affected by it and a major section of the campaign took place on mobile phones, whereby people could call up and speak to volunteers who were physically present at the venues of protest. In this way Facebook reached out to a bank of likeminded people who could discuss issues across all socio-economic strata more efficiently on the virtual platform than they could through traditional tools of activism.

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Part IV
Conclusion

Chapter 13
Approaching Contemporary India: The Politics of Scale, Space and Aspiration in the Time of Modi

Douglas P. Hill

Abstract This chapter aims to reflect back upon the contributions of the volume, and suggests what they may elucidate about the complex, dynamic and multifaceted set of processes by which power is contested in contemporary India. A multi-scalar analytical framework is utilised to discuss processes of uneven development and changing state–society relations, which together will continue to condition the trajectory of India's polity and society. It examines how researchers can critically engage with orthodox approaches to the study of India in ways that challenge the epistemic and ontological closures of the current neoliberal conjuncture. In doing so, the chapter places the contributions of this volume into a broader examination of how different disciplines have approached the study of India. The chapter then looks forward and asserts that the politics of space, scale and aspiration will be enduring concerns in understanding how India is transforming. The last part of the chapter is focused on what the election of Narendra Modi's NDA government may portend for the possible futures of India. It argues that we may see the ascension of Modi as evidence of the rise of a strain of neoliberal, semi-authoritarian populism.

Keywords Space · Scale · Neoliberalism · Aspiration · Modi

This collection emerges at a time when we can say India is at an important juncture. The economy is growing, a new government has energised many people who believe that the country can capitalise on its considerable potential and that the ambitions for material progress and enhanced international standing will be realised. Democratic traditions continue to be strong, with a vibrant civil society and an electoral system where an enormous number of parties seek to mobilise and speak for a range of different social groups, including those that historically have

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been the most economically and socially marginalised. Thus, despite significant constraints on the agency of the poorest within society, it is not an exaggeration to say that the polity—indeed society as a whole—is becoming more inclusive. Ideas about what India should or could be are also changing, precipitated by rapid social change, particularly in the urban centres, a young population, multiple medias and new mobilities. All of these factors mean that, from a scholarly perspective, this is an exciting and fruitful time to be writing about the possible futures of India.

Certainly, then, there is a great deal to be optimistic about the possible futures of India. However, as the chapters in this volume demonstrate, there are also unquestionably significant challenges ahead and no guarantees that the multiple transformations India is undergoing are necessarily socially inclusive or environmentally sustainable. The much-vaunted economic growth (Bhagwati and Panagariya 2013) has arguably done little to combat intractable chronic poverty (Ray, this volume) or social discrimination, particularly in the inland regions of the BIMARU states or in the expanding *bastis* of India's growing cities (Dreze and Sen 2013). The neo-liberal pattern of development has undoubtedly led to new opportunities for some people within society, including a boom in the services and consumptions sectors (Athique, this volume) but this has been far from inclusive and has largely failed to move beyond the better off parts of the large metropolises or well connected small towns (D'Costa; this volume). Moreover, this exclusion is matched by a growing authoritarianism (Padel, this volume; Hill 2013; Samaddar 2010). If India is always discussed as an example of where democracy is its greatest strength, it is also the case that there is a growing group of influential commentators—mostly from the right of the political spectrum—who say that India's issue is 'too much' democracy. Regardless of whether one agrees with such a prescription or not, it is certainly the case that the Indian state frequently exercises coercion in pressing for outcomes it favours, particularly against the most marginalised in society. Further, while current rates of growth increase the purchasing power of sections of the population, a great majority of the population continues to hover just above or close to the poverty line, with estimates using multidimensional poverty index (MPI) putting the proportion at around 75 % of the total (Alkire and Seth 2008; Chatterjee this volume).

The individual chapters in this volume each demonstrate a range of different ways that we can understand the issues around nutritional status, agriculture, food security, poverty, urban issues and the promise and limitations of information technology. Taken together, they demonstrate the tremendous dynamism, as well as the considerable exclusions, of India's economic transformation and the dynamics of its political system. Individually, each is rich in contextual information exploring the broader dimensions of their subject. We have both broad reaching chapters that provide a macro view as well as closely observed ethnographic pieces, often focused on a case study approach. Moreover, as is noted in the introduction by Venkateswar and Bandyopadhay, the chapters have been chosen to closely build upon each other, so that they should be read together, as each form a part of a larger statement on globalising India and its contemporary challenges and opportunities. Taken together, these demonstrate the considerable depth and breadth of scholarship associated with the NZIRI.

Certainly, as with any collection of this kind, there is a limit to the extent to which they can highlight particular aspects of India's contemporary transformations, so that some groups of people and some geographic regions receive less attention. Indeed, as van Schendel (2002) has persuasively argued, the study of particular regions or countries in the Area Studies tradition (such as South Asia), tends to be dominated by particular disciplinary approaches and focus upon particular geographic sub-regions. Scholarship on India has certainly been subject to these self-reinforced boundaries, which have tended to create a body of knowledge by which we understand the people of India, but which is in fact representative of the specialisms of the academic gatekeepers of the discipline. In this collection, we move beyond a focus on North India and engage in multi-sited and multi-disciplinary investigation of many parts of the country, including some that have received comparatively little scholarly attention including Telengana, Howrah, rural Tamil Nadu and Uttarkhand.

As researchers, each of these chapters takes what might be called a critical perspective. They do not consider that the current distribution of resources, or indeed opportunity, across time and space are in any way 'inevitable' or 'natural'. Rather, the biases and exclusions of contemporary India are as a consequence of a set of interrelated and sometimes contradictory processes that have developed through time and vary at different scales. As well as critically analysing these processes, the chapters in this book are all interested in challenging the status quo by pointing out ways that marginalised groups have been exercising agency. In doing so, they largely attempt to privilege the perspectives and needs of the marginalised and excluded.

13.1 Approaching the Study of Globalising India at Multiple Scales

Rather than simply restating the individual contributions in this volume, this chapter aims to reflect back upon what they might tell us about the broader processes at work in contemporary India and the many ways we might go about researching these. Central to this task is a reflection on how we might understand the complex, dynamic and multifaceted set of processes by which power is contested in contemporary India. In doing so, I assert that this volume demonstrates that as researchers of globalising India, we are mindful of multiple, overlapping and sometimes contradictory trends at a range of scales. Previous thinking assumed that social relations took place at certain global, regional or local scales and a whole range of social and political processes taking place at those scales were not scale dependent. In contrast, this chapter argues that we can only adequately understand the processes of social and political contestation, that continue to be such an important feature of how contemporary India is changing, if we do so through a multi-scalar analytical framework.

How might we go about developing a conceptual approach that can take forward the critical potential of these chapters and demonstrate the broader lessons they hold for other researchers examining contemporary India? The chapter is structured around 6 major themes, which I have chosen because they collectively provide an overarching approach that unites the concerns of each chapter while also showing why the choice of research site and approach is a strategic choice made by each researcher. These strategic choices contribute to how each researcher engages with the broader theme of the volume namely India's transition from a decolonising to a globalising country.

The first part of this chapter suggests how we might conceptualise how disadvantage is distributed in India and what this tells us about the evolving patterns of structure and agency. Here I suggest three interrelated concepts:

Uneven development;
State-society relations; and
Epistemic challenges.

In the second section of the paper, I take these three concepts and examine how they have been and will be contested in the future. The second set of concerns is around various interrelated kinds of politics. Politics is used here in the broader sense of contestation rather than only being conformed to formal institutions, although the latter can certainly be one avenue of such politics. These are defined according to a typology of:

Politics of space;
Politics of scale; and
Politics of aspiration and constraint.

13.2 Uneven Development

A defining feature of India in the post-Independence period has been the continuation of patterns of *uneven development*. At the broadest scale, we can see significant variation between different states with regards to their development, and these differences change depending on whether we seek to place greater analysis on economic growth, human development or multi-dimensional poverty. There are a number of chapters that assist us with this macro view, including those that focus on all-India economic transformations (D'Costa; Rajan Ray; and Athique), investment (Padel) and nutrition (Chatterjee). But this recognition of the profound disparities that exist between different groups at the macro-scale is also complemented by a range of chapters whose focus is at localised scales, such as at the scale of the city (such as Gibson and Walters) or village (Chatbar). At the simplest level, they all describe how resources are distributed, and the societal and institutional processes that propel and constrain this distribution amongst particular groups or regions within India.

As we have seen, we can usefully begin to think through the complexities of uneven development in terms of the *spatial distribution of poverty*. The contours of this spatiality are well documented both in this volume and elsewhere. Mehta and Shah (2003), for example, talk about the fact that most of the regions of intractable poverty in India are those that are forested, mountainous or isolated regions and where people are asset poor and depend upon rainfed agriculture. Similarly, it has been widely demonstrated that those who work in the informal economy are at greater risk of being economically marginalised or adversely incorporated. This suggests that we also need to understand the basis of people's livelihoods as a highly significant part of their vulnerability or resilience, leading to a sense that socio-spatial dimensions of uneven development are a phenomenon of both geographic location and power relations, including but not only the politics of class (Harriss 2009).

In addition to class being an important factor in uneven development, when we examine who the poor are in terms of social categories, we find overlapping axes of disadvantage, so that gender, caste and ethnicity categories also feature significantly. As a number of chapters in this volume point out, the most marginalised people within society frequently suffer from a double or triple disadvantage in terms of ascribed social status (Walters; Chatbar). The concept of intersectionality, which has gained prominence in feminist theory in particular (Menon 2015; Kumar 2010), is clearly useful here as a way of describing the multiple axis of disadvantage. Thus, the obstacles a landless woman from a lower caste may face stems not just from her occupation, or lack of access to political and social networks that might in other situations assist in mitigating these problems.

What these articles bring to the forefront of our analysis is that this socio-spatial pattern of uneven development is reinforced and perpetuated by a range of institutional, economic and political practices. Indeed, almost all the chapters in this volume have detailed and rich discussion of how this manifests in different parts of India. At the local level we can see this in the continuation of discrimination against marginalised groups; it can be seen in the perpetuation of significant inequalities in the agrarian structure specifically but not only related to agriculture; it can be understood in how the new economy of India is built upon a different set of exclusions and violence. To many of the commentators here, the past two decades, when economic liberalisation has assumed ever-greater ascendancy in policy and discourse, has had the effect of intensifying these patterns of uneven development.

What emerges clearly throughout the volume, therefore, is that patterns of uneven development are a consequence of power relations within society that are consistently defended by those who benefit by their continuation as well as contested by those who seek to alter their adverse position in the status quo. To understand how different groups contest these processes of uneven development, and the difficulties that some groups may face in achieving social, political or economic change, we now turn to the second of our analytical categories, namely state-society relations.

13.3 State-Society Relations

What opportunities are there for these socio-spatial patterns of development to be overcome? A key notion of our next analytical device, namely *state-society relations* is that the state matters in understanding the distribution of power in India, and that the state consistently favours particular groups within society at the expense of others. The study of the role of the state in India's development has a long and distinguished history. Undoubtedly, the role of state as the preeminent development actor for much of the post-Independence period has given salience to analysis that focuses on this lens. Many commentators have argued that there was a discernible class character to the Indian state (Sathyamurthy 1995, 1996; Kaviraj 1995; Byres 1994). Certainly, it has been widely noted that India's passive revolution meant a conservatism that arguably constrained the achievements of the post-independence period right from the beginning (Frankel 2005; Moore 1966). This kind of work problematised the transformative rhetoric of early governments, by questioning how radically different India's new economic and political order could be from the past one, if the social structures, upon which it is built, were not challenged. A particular focus of this kind of work has been the early constraints of the Congress system, of a chain of command stretching from the centre of government to the village leadership, because in practice this meant that asset rich, high caste landowners dominated the state-level politics and there was not a serious attempt given to asset redistribution (Kohli 1994). Writing in the year 2000, Corbridge and Harris (p. 63) argued that:

> [T]he failure to tackle the agrarian question in the early years of independence was, we believe, the primary cause of the failure of Indian planning (in relation to the high aims which was set for), and it has exercised the most profound influence upon the subsequent social and political development of the country.

Given the limitations and conservatism of the post-colonial transformation in those early years, it is unsurprising that many commentators continued to assert that it was imperative to understand the relationship of dominant classes to the Indian state if we were to grasp the tenacity of social inequality and its reproduction in India. In a now widely quoted work, Bardhan (1984) argued that power within India is largely controlled by what he refers to as three dominant proprietary classes. To him these dominant classes consist of the intelligentsia or the bureaucracy; industrialists; and the rural elite. His argument suggests that, collectively these groups have been able to monopolise the vast majority of resources as well as the decision-making processes in post-independence India. We can locate this in the passive revolution of the independence period and the subsequent Nehruvian model of state-capitalism. Bardhan is at pains to point out that the interests of these three groups are not necessarily always in concert and that they will inevitably be conflict between the three dominant proprietary groups when it comes to different processes of development. In updating Bardhan's argument, Munster and Strümpell (2014) argue that neoliberalism has impacted upon the relationship between the classes in different ways, so that the balance of interests in India should always be taken as contingent and dynamic.

In the chapters in this collection, there is a consistent assertion that India's pattern of development is mediated through the continuing dominance of elite classes within society. D'Costa's opening paper, for example, makes an argument that these classes might be usefully seen as compradors for global capitalism and the transnational elites that manage the global economy. Similarly, Padel leaves us in no doubt that the state apparatus is working for the interests of dominant sections in society through processes that Banerjee-Guha (2013) following Harvey (2004), has labelled 'accumulation by dispossession'. Athique demonstrates how provincial level states are able to leverage financial instruments such as tax incentives and land zoning to induce investment into leisure sectors that appeal to newly prosperous middle classes.

However, the chapters in this volume do not make an argument that everything that occurs throughout India and at all scales can be seen in terms of these three dominant classes. Instead, they point to the fact that while this kind of approach still has considerable explanatory power, it necessarily simplifies an incredibly complex political economy and to understand the everyday politics of dispossession, injustice and corruption, we need to include other social groups. Those such as Barbara Harris-White (2003) have long asserted the need to be attentive to the significant role in India's political economy of what she refers to as the intermediate classes. Indeed, in the agricultural sectors (Thakar and Datta this volume) or in the neighbourhood of cities, people such as land-mafiosa, traders and moneylenders exercise considerable economic and social power (Chatterji 2013). Their interests need not be the same as those that Bardhan (1984) might consider the dominant proprietary classes and indeed frequently constitute a different political constituency. Nor are these intermediate classes unified and they find different expression in different parts of the country.

What has been the spur for the kinds of transformations that are identified in this volume? Clearly, the Green Revolution was an early driver for these transformations (McCrae, this volume), as surplus generated from high yielding varieties was initially reinvested in urban centres, and with a diversification of rural dominant classes, often toward agro-based industries but also into other sectors (Gill 1994; Banaji 1994). Similarly, and allied to this, new regional capital has become significant in a range of different areas. Since that time, there has been a continuing diversification in rural areas into non-agricultural employment and the accumulation of capital. Remittances, both from India and abroad, are contributing to new sources of capital as are the sale of agricultural land for the transformation into peri-urban settlements. As researchers, we need to be attentive to these changes and develop new modes of analysis.

If it is clear that societal forces have changed over time, it is also the case that the role of the state has also changed. In different states we have seen the emergence of new groups that are dominant only in those particular states. Gathering pace by the 1960s, the emergence of state level political parties that have a base in regional social structures has produced new centres of power that did not owe much to the chain of command traditions of the Congress party. The vernacularisation of the polity and the subsequent rise of coalition politics means that India's political

system has become a complex array of different alliances in different states and within different states and that these alliances can move around depending on the opportunistic calculations of different parties (Jaffrelot 2003; Corbridge and Harriss 2000; Hasan 2000; Yadav 1999). New political identities have arisen, some of them pan-Indian in character, or at least in affiliation.

What emerges from this perspective of the transformation of the class basis of Indian society and politics has varied across time, space and scale? Elsewhere, it has been widely explored how Indian political parties have been adept at cultivating particular constituencies, often vote banks of certain castes or classes, and then nimble in distributing largesse to these groups. At the same time, it is clear that for many people in India, accessing resources is a challenge that involves negotiating different kinds of power relations, state and non-state, at a variety of scales. In this volume, we can clearly see that there is a very localised, everyday politics at work here through which people display considerable agency in how they negotiate their struggles. Indeed, the chapters of Walters and Gibson can be both understood as part of a broader tendency within scholarship that argues that a new ideal of 'subaltern citizenship' (Pandey 2010; Chatterjee 2004) has seen working and middle class groups seeking to contest urban space and in doing so empower themselves with the assistance of NGOs and people's movements (McFarlane and Desai 2015; Harriss 2006).

It is not only in the urban context that we see an examination of the agency available to oppressed or marginalised groups to resist adversarial social, political and economic relations. Indeed, this is a key notion throughout this volume, although the contributors do not speak with one voice, nor are collectively mobilised around a singular notion of what resistance or social change might look like. Padel, for example, highlights the capacity of people's movements and civil society organisations to resist the state-corporate nexus that is responsible for the plundering of resources throughout the country at the expense of dalits and adivasis. In contrast, Paula Ray argues that anti-corruption movements, voter registration and cultural change can be engendered utilising the now widespread uptake of SNS. To her, digital activism has the capacity to either inform or to inspire, depending upon the particular circumstances and context with a resultant shift in consciousness that might create new cultural paradigms. Chatbar also sees ICTs as having the potential to engender social change, but has greater reservations about the extent to which this technology is a necessary catalyst, given the prevailing social structures that continue to exist in rural Tamil Nadu. Gibson suggests that, with regards to the most marginalised groups, a responsive state is necessary to provide basic needs such as education, and so create pathways towards empowerment.

The state is positioned in a Janus-faced manner in how different people encounter neo-liberal India. On the one hand, the dismantling of the old dirigisme regime since 1991 is often constructed as the central problematique of India's contemporary challenges (Srinivasan 2000). On the other hand, as the contributors in this volume have demonstrated, the state is also undoubtedly the facilitator of neo-liberal growth. It is the transformation of the state, then, rather than simply its diminution, which underlies the changing relationship of state-society relations and a central facet

of any understanding of India's contemporary political economy (Munster and Strümpell 2014). All of those chapters in this volume that examine how India's embrace of neo-liberalism has facilitated economic growth are clear that this has often strengthened the hand of established business houses whilst also giving rise to a range of new actors, many of whom are involved in sectors of the economy, such as land speculation, real estate or resource extraction, that encourages those opportunistically looking for investments that promise high returns over a short period.

As well as changing the economic landscape in a variety of ways, the neo-liberal era has considerably narrowed the opportunities for the country's vibrant public sphere to contest policies. Indeed, as the first set of contributions in this volume demonstrates, the state increasingly appears to be led by corporate and elite concerns. To Padel, Athique and D'Souza, the entry of formal capital into the economy has not lessened the incidence of speculative and often corrupt practices. Whether it be in land acquisition for Special Economic Zones (Levien 2012), slum clearances or bauxite mining (Oskarsson 2013), India is now frequently associated with zones where dissent is effectively marginalised by what Samaddar (2010) calls the 'securitisation of governance'. Elsewhere, I have argued that the contours of this are significant enough that we must now consider that India is at best, a semi-authoritarian democracy (Hill 2013). If anything, the reduction in the space for dissent has lessened with the arrival of the more explicitly pro-business NDA government. The targeting of NGOs associated with controversial environmental causes and the black-listing of certain groups, such as Greenpeace, from receiving foreign funding (Mazoomdar 2014) suggests an intensification of the role of the state as the guardian of both domestic and foreign corporate capital.

13.4 Epistemic Challenges

How we talk and think about contemporary India's transitions are delimited by how ideas of progress and development are discursively constructed. Whether it is in the language of inclusive cities, of modern agriculture or of technological leaps, in the post liberalisation era a new language has come into force that privileges a different set of categories. The debates around the definition of the poverty line (Chatterjee, this volume) are the clearest examples of how politicised the production of knowledge is in contemporary India (Deaton and Kozel 2005). However, most chapters in this collection urge us to consider *whose* knowledge is significant and outline why the discursive construction of knowledge in particular ways (and thus not in others) matters. They suggest that part of the politics of development must necessarily be a discursive challenge to the status quo as such we urge to listen to the voices of Himalayan farmers, maize growers in Telengana and basti dwellers in Howrah.

Of course, contests over what constitutes legitimate knowledge are far from novel, even if the substance of these debates has shifted over time. As the work of Cohen (1996), Ronald Inden (1990) and others have demonstrated, during the

colonial period, the British employed various modalities to 'establish' how Indian society worked, including the setting up of various knowledge producing institutions and to manage the native inhabitants accordingly.

In the post-colonial period, the Nehruvian project of development privileged Western scientific knowledge as the basis for nation-building and the management of the country's resources. In the contemporary period, we might argue that neo-liberalism has finally become ascendant in public discourse in a way that looked uncertain in the early 1990s, with the result that discussions over contemporary policies are framed within that overarching logic. As such, debates around India's economic policy the construction of 'world-class cities' justifies a range of punitive measures against the poor (Walters), while large swathes of the population are forgotten (Gibson, this volume) in the rush to build satellite cities that cater to the aspirations of the new middle class (Athique, this volume; Hill and Athique 2013; Athique and Hill 2010).

We can think about how the contributors to this volume confront these discursive shifts in terms of *epistemic challenges* because most are positioned in ways that either reject or at least contest the prevailing discourses around globalising India. In previous eras, scholarship on India has built a significant corpus of work that locates the failings of the project of development in the hegemonic working of westernised scientific discourse and the valourisation of imported technology (Alvares 1991). Indeed, at its most strident, such work is explicitly positioned as a challenge against the epistemological and ontological basis of development itself (Shiva 1991; Visvanathan 1988; Nandy 1987; 1988a, b). The Chipko Andolan serves as an inspiration here, even if the original movement itself is more complex than Gandhian, feminist, pro-indigenous knowledge orthodoxy of these counter-discourse traditions allow (Gadgil and Guha 1995).

In this volume, the contributions of McCrae and Thakar and Dutta both arguably work within these traditions and the post-development critiques that they inspired. Although analysing different geographic settings, in Himalayan and southern India, respectively, both argue that Indian agriculture needs to move away from reliance upon imported knowledge and technologies. Indeed, the epistemological challenge for Thakar and Dutta as researchers is to co-produce new knowledge with their partners in the field, while McCrae seeks to revive older more ecological sustainable knowledge and practices in Uttarkhand. His chapter moves somewhat towards the same kind of principles that Padel speaks about as Adivasi ecological thinking.

There are clearly methodological questions evident in this volume that are concerned with how we approach the study of India. One of the most significant is whether our approach is derived from the categories of analysis developed in Western social science or whether it is focused on the specific conditions and approaches that have arisen within India (Nandy 1987). Clearly, there is an unresolved tension that is brought out well by the contributions of those such as Thakar and Dutta, who argue that it is only by co-producing knowledge that we can seek to overcome these difficulties. If such a co-production is not as evident in all the chapters, what we certainly find throughout is an intellectual commitment to an *epistemic privileging* of the voices of the marginalised.

13.5 Politics of Scale

Part of the issue that we confront as researchers working on India in an age of globalisation is the methodological difficulties in moving from the general to the particular and back again in an iterative process. The book is structured so that the reader can begin to move between these scales. Ray helps us by thinking about the sub-national level, while Padel's work ranges across different parts of the country, particularly in the resource rich areas. The chapters in the latter two sections of this volume are closely observed pieces that focus on one or two geographic contexts in different parts of India, more often than not at a local scale. For most of these commentators, there is an understandable and quite justifiable need to firstly attend to the local-scale issues, whether they are specific histories of social categories, political processes, or economic transformations.

In sociology and anthropology there has been a long-standing and extremely fruitful tradition of village studies, which have been given longitudinal rigour by repeat visits (Beteille 1991). Development economics too, has gained much from micro-level analysis of agrarian change in long-term sites such as in Palanpur (Uttar Pradesh) (Himanshu and Stern 2011). In contrast to these earlier traditions, the village is infrequently now the sole focus of investigation of scholarly works. Indeed, Mines and Yazgi (2010, p. 3) go so far as to lament that:

Villages are desperately lost objects in anthropology of India… [I]t has become tantamount to taboo to write about villages as such even though the vast majority of India's population still has powerful links to villages, either as their primary locus of action, or through more widely embedded nexuses of practices and representations.

While it is clear that contemporary India has been studied at a range of different scales, it is also the case that particular scales receive greater scholarly attention than others. Large metropolises have had greater research than small mofussil towns, with the old Presidency cities arguably having greater attention than other metropolises. There is also an important tradition of comparative studies, including what we might call the inter-states scale (Dreze and Sen 2002; Dreze and Sen 1997; Kohli 1987) or between particular regions within different states. With India's economic liberalisation, satellite cities have had greater attention (Athique and Hill 2010; Shaw and Satish 2007). In this volume, we see an interesting mix of studies that incorporate villages, towns and cities. Taken together, these chapters help to understand the strengths of researching different kinds of sites for what they bring to an understanding of contemporary India.

Arguably, the challenge of globalising India is how we make sense of how these particular case studies reflect and are inflected by broader processes, policy interventions, cultural flows and the like. In the case of India, this task is perhaps as challenging as any other region of the world. It is a well-worn cliché that the startling diversity and complexity of the country's different regions, languages and cultures, means that any all-India account is also fraught. But it is also the case that speaking only about the local scale, or at the scale of a particular state,

is also methodologically challenging at a time when India is globalising and there are clearly multi-scalar processes impacting upon people's everyday life. Indeed, as researchers, we need to be conscious of the extent to which we take particular scales as naturalised categories and the impact that this has on our conclusions. Such recognition suggests that our analysis must be multi-scalar in its approach.

While there are certainly exceptions, it might be argued that undertaking multi-scalar analysis is a much stronger facet of work devoted to examining contexts outside of India. Much of this work has argued that neo-liberalisation in different parts of the world has entailed a rescaling of the state. Thus, rather than a national government creating the regulatory environment to encourage the growth of the economy, it is often the entrepreneurial city or the provincial government which is responsible for setting in place the regulatory conditions and fiscal incentives to enable neoliberalism to become rolled out and thus, transform the conditions under which capitalism may flourish (Brenner and Theodore 2002; Jessop 2000; Brenner 1998).

We can certainly see how the state has been rescaled in India in the last two decades, partly in response to the opening up of the economy. The era of competitive federalism accelerated after 1994, when states were given the capacity to attract foreign investment by themselves (Chakravorty and Lal 2007; Sinha 2005; Saez 2002; Hill 2002; Jenkins 2000). We now see many state governments being extremely proactive in creating what is perceived to be conducive to international investment environment. For those states that have been less successful in this regard, fiscal federalism has become a domain of intense competition between states, which in the era of coalition politics (prior to the election of the current NDA government) was the source of considerable electoral tension. Indeed it remains the case that, as Brass (2000, p. 77) put it a decade and a half ago, for the foreseeable future one of the country's defining features is the 'tension in the Indian political order between centralising and regionalising forces' (see also Hill 2002). At the same time as the increasing competition between states, there has also been stronger trend towards decentralisation and devolution, particularly with the passing of the 73rd and 74th amendments. This localisation of the state has brought these mechanisms of the state closer to the villages of Bharat and wards of the mofussil India.

While this writing has reinvigorated how we understand the relationship between state and capital at a variety of scales, it has also had considerable significance for understanding how scalar processes operate. In the writing of Swyngedouw (1997), we see a contention that socio-spatial processes change scalar configurations and that one cannot understand the scale at which any activity takes place—be it ecological or industrial—if we do not also understand that that scale is the result of a process of contestation. Indeed, the rescaling of economic, political or social processes so that they are dominated at particular scales-whether that is through international institutions, regional bodies or the like, is itself an important part of the politics of scale and goes a considerable way to helping us understand who is wielding control over particular resources.

It seems to me that examining contemporary India in terms of these scalar practices is a very useful way of understanding changes over time and space, since it suggests that how we analyse the politics of scale will influence the kind of approach that we take to the dynamics of social, political and economic change. Given that the current government holds an absolute majority, it is tempting to assume that they will be able to affect change equally throughout the country. Decades of research on issues around social change and on development issues suggest something quite different. Certainly, we have seen instances where particular states have been able to enact change, either through government led initiatives, or by enticing investment. However, the reasons behind a particular state-level regime being willing and able to pursue such development need to be investigated. The wide variance in the performance of centrally planned poverty alleviation schemes, such as NREGA, IRDP, or the PDS (Chatterjee, this volume; Johnson et al. 2005; Corbridge and Harriss 2000; Gaiha and Kaushik 1998; Swaminathan 2000) suggests that regardless of the kind of initiatives that the central government may make to try and intervene, change—if it is to occur at all—it will inevitably be driven at the local level.

There are also significant methodological issues for researchers choosing a particular scale to focus upon, or jumping scale and moving between them, as this enables us to highlight particular processes and connections. Certainly, our positionality as researchers with varying degrees of insider or outsider status (Sultana 2007) means we can move between these scales and social settings in ways that many of our informants or co-researchers are unable to do. At the same time, we need to be aware that this strategic privileging of particular scales may inadvertently elide significant aspects at different scales and in doing so making ontological and epistemological assumption about how power operates in contemporary India. Taken together the chapters in this volume enable the reader to consider the various scalar practices associated with analysing globalising India.

13.6 Politics of Space

The social sciences have been influenced in the past two decades by a 'spatial turn' that has seen increased interest in how space is relationally constructed (Thrift 2006; Harvey 2001; Soja 1989; Smith 1984). Proponents of this spatial turn argue that the influence of spatial practices on everyday life has been neglected until comparatively recently. To them, the dominant traditions of social science from the 19th century onwards, influenced by Marx and Hegel for example, were attentive to change over time but lacked an explicit conceptual vocabulary for analysing spatiality. When we speak of the politics of space in India, we are interested in the different meanings attached to certain spaces by different actors and how spatial practices contest the use of these spaces across time. Certainly, these questions are not new, even if it has not been recognised in Indian scholarship to the extent that perhaps it deserves to be. Indeed eminent scholars, such as Dipesh Chakrabarty (1991) and Sudipto Kaviraj (1997), have drawn attention to the contested notion of a public sphere and public space as an inherent part of India's contested modernity.

Certainly, then, the contest over who occupies space and how it is utilised should occupy a central place in how we approach the study of India. In this volume, we see numerous examples of how what we consider relates to the politics of space. In rural India, the role of space in the perpetuation of particular kinds of social structures and ritual divisions is perhaps clearer than in urban areas. As India has urbanised, there has been a tendency to consider that this division of space has perhaps disappeared; that as people travel from one place to another on buses or jostle through crowded bazaars, the spaces of the city have become a neutral container for the enactment of a new kind of India. The democratic character promise of India as universal franchise has, in this vision, also at last extended to a democratic right to the use of public space.

In fact as the work by Walters, Gibson, Chatbar and Paula Ray in this collection makes clear, space in India continues to be imbued with these kinds of power relations and is far from a neutral empty container inside which power relations, or social life unfolds. In Chatbar's work, we see that the success of new initiatives around technology are hampered or engendered by where they are located. Thus while previous spatial arrangements in the village are challenged through new initiatives such as those by MSSRF, preexisting social relations continue to constrain the possibilities of significant change. Elsewhere in this volume we see that in India's bustling metropolises there is another kind of claiming public space. It has been extensively documented that men have a greater claim over public space than women in India's cities (Phadke 2007; Ranade 2007) and in the chapters by Athique, Waters and Gibson we get a strong sense of the difficulties of achieving an inclusive city. Their work reminds us that the battle for the 'right to the city' is evident in the construction of shopping malls and new high-end real estate developments, such that 'progress' should be dialectically linked with the destruction of bastis and the appropriation of multi-cropped farmland.

Paula Ray's chapter argues that a new domain for the politics of space is opening up in globalising India, namely the virtual world engendered by the widespread diffusion of social networking. Ray shows that a new kind of politics has arisen that has been effective in mobilising great number of people, and in doing so, perhaps had a significant role in changing social and political consciousness. Her chapter also shows us that although this new domain has significant potential, for now the real test of the effectiveness of SNS remains the extent to which such virtual networks can be translated in effective challenges in more traditional spaces, be it the street or the courthouse.

13.7 Politics of Aspiration and Constraint

The final politics analysed in this section is concerned with the politics of aspiration and constraint. It seems to me that much of the period of post-colonial India could be described, following Partha Chatterjee (1994), as an era when the project of Development (with a capital D), has been central to the imaginaries, politics and

plans of the nation. Given the extent to which the neo-liberal era has now come to define what it means to live in India in the early twenty-first century, perhaps it is now appropriate to question whether the project of Development has been usurped by a different kind of imaginary. I would suggest that the discursive dominance of neoliberalism in policy, as well as the penetration of neo-liberal subjectivities into the way that people seek to imagine their possible future (Gooptu 2009; Menon and Nigam 2008), would suggest that India is entering into an era where the politics of Development is being replaced by a politics of Aspiration.

Immediately prior to the epochal 2014 election, which saw the BJP acquire a position of electoral supremacy unparalleled since the Emergency period, the then acting director of the Asia Society Policy Institute said that it could be seen as a "choice between an India whose economy grows, whose people look to better lives through their own education and effort, and an economy of poverty and scarcity" (quoted in Rosenfield 2014). This analysis reflects a broader discourse that surrounded the last election that suggested that the UPA II government had lost its way and that there was a 'policy paralysis'. In this narrative, the ringing endorsement of the NDA government, in North India most particularly, was a reflection of the impatience that the population felt. Regardless of the accuracy of the claim of policy paralysis (Nigam 2014), or indeed whether the current government is less corrupt and more efficient than the last (Ghatak et al. 2014), there is no doubt that the way that politics and social transformation is framed has changed for a significant proportion of the population.

Looking beyond the electoral cycle, we see that this kind of aspirational politics has become deeply entrenched in many sections of society, including, most importantly, those groups whose current socio-economic status means that they cannot, at this time easily enjoy the fruits of India's economic boom. Politics itself has become part of a broader mediascape, with 24/7 news cycles jostling for attention alongside 20-20 cricket, Bollywood and the Kardashians. The users of mobile phones swap Bollywood hits, kirtans and pornography in a way that was unimaginable to a generation before. In mainstream media outlets the opulent lives and travails of celebrities have long crowded out the tales of those who are excluded from, or adversely affected by, this neo-liberal India. The spatially uneven development of contemporary India is rendered invisible, at least for a time, for those who shelter in Café Coffee Day. Those able to travel may glide through freshly upgraded airports whose bookstores are full of hubristic accounts of an even brighter future, once the energies and entrepreneurial abilities of the population are unlocked, or unshackled, so that India is no longer confined to the 'waiting room of modernity' (Chakrabarty 2007).

It is arguable that all of these aspirations dovetail in the election of the figure of Narendra Modi. For many people, his soaring oratory and humble background serve to bridge a distance felt from a political class, while the embrace of 'technological populism' (Jaffrelot 2013) suggests that a range of 'smart' innovations can overcome long-standing difficulties confronting the country. Additionally, aspirational themes and tropes are increasingly employed to appeal to a neo-liberal subjectivity, which creates a new kind of citizen, through whose efforts prosperity will be ensured.

It is surely significant that the successful narrative around Modi was predominantly about the story of the tea seller who grew up to be Prime Minister and along the way demonstrated the efficacy of the Gujarat Model. Such a story is considerably more palatable to a much broader range of people in aspirational India (Jaffrelot 2015) than one about a RSS Pracharak, or one about a Chief Minister whose state has far from spectacular Human Development Indices during his long reign, (Dreze 2014; Ghatak and Roy 2014) while corporate titans such as Gautam Adani were considerably enriched through the maneuverings of the state government.

Undoubtedly, viewed in this manner, Modi's election follows a long trajectory of change that marks India's post-colonial period. On the one hand, the rise of vernacular politicians has culminated in the election of a figure that can symbolically challenge the ongoing dominance of those who led the country in the early parts of the post-colonial period. On the other hand, the technocratic yet populist style and functioning of the government, its prioritisation of the needs of capital at the expense of redistributive functions, and its intolerance of dissent is indicative of the strangehold that neo-liberalism has on policy in India. At the same time, the on-going replacement of 'pseudo-secularist' heads of important cultural institutions with those who are more sympathetic to a Hindutva agenda (Al Jazeera 2015; Bhattacharyya 2015) suggests that there is far more to the platform of the government than simply an efficient managerial state that can unlock the power of the market.

13.8 Conclusion

At this conjuncture, discourses of globalising India are all too frequently framed around a faith in techno-managerialist idea of governance as development, with a particular emphasis on infrastructure as a mechanism of both economic growth and inclusion. The interventions in this volume persuasively illustrate that these globalised discourses become interpellated into local subjectivities in a variety of ways. Indeed, in showing how India has changed across time and space, we see that any intervention, whether it is from the state or the market is not simply uncritically received by passive recipients. Nevertheless, the volume all conclusively demonstrates the significant constraints on the agency of different groups within society, not least those who historically have been marginalised, either because of adverse economic processes, social relations or both.

This chapter has argued that the chapters in this volume can be read together as an indication of the complexity of conducting research in and on contemporary India. It has asserted that a methodological approach that is needed that begins from a premise that India's development processes are inherently uneven, in ways that can be understood according to geographic region, livelihoods as well as the intersectionality of disadvantaged social categories, particularly those around class, caste and gender. Further, that this unevenness must be understood as at least partially due to embedded social relations between different social groups and how these groups engage with the state. A long-standing element of how

these state-society relations are contested is the discursive closure metered out by dominant social groups, such that alternative world-views have little space.

The second part of the chapter argued that in contemporary India, many of sources and axes of contestation could be understood according to at least three broad kinds of politics, namely the politics of scale, space and aspiration. The chapters in this volume all examine these kinds of struggles in different kinds of ways, but taken together they make a strong case for an approach to researching globalising India that is conscious of these dynamics. Certainly, as a group of researchers we see significant grounds for optimism about the possible futures of India and its people. Nevertheless, the chapters in this volume also make it clear that India remains a divided and highly unequal society, with strong indications that the current set of policy approaches favoured by neo-liberal advocates is far from sufficient to advance a more sustainable and just situation.

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