

Environmental Governance in Vietnam

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Institutional Reforms and Failures



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List of Abbreviations

ADB Asian Development Bank

AQI Air Quality Index

CARE Cooperative for Assistance and Relief Everywhere

CCTV China Central Television

CCWG Climate Change Working Group CEA Canadian Executing Agency

CED Centre for Education and Development
CEM Centre for Environmental Monitoring

CEO Chief Executive Officer

CERED Center for Environment Research, Education and Development

CG Consultative Group

CIA Central Intelligence Agency

CIDA Canadian International Development Agency

CIDSE CoopérationInternationalepour le Développement et la

Solidarité

CIEM Central Institute for Economic Management
CIVICUS World Alliance for Citizen Participation
COMINGO Committee for Foreign NGO Affairs

CP Cleaner Production

CSCEC Steering Committee for Environmental Management System

Certification

CSO Civil Society Organization

x List of Abbreviations

DANIDA Danish International Development Agency

DHMCC Department of Hydrology Meteorology and Climate Change

DONRE Department of Natural Resources and Environment

DPP Democratic Progressive Party (Taiwan)
EIA Environmental Impact Assessment
EPA Environment Protection Agency

EU European Union

EVN VietNam Electricity Group

FLEGT Forest Law Enforcement, Governance and Trade

FPDF Forest Protection Development Fund

FSC Forest Stewardship Council
GDP Gross Domestic Product
GEF Global Environment Facility

GONGO Government-Organized Non-Governmental Organization ICCO Interchurch Organization for Development Cooperation IFAD International Fund for Agricultural Development INEST Institute for Environmental Science and Technology INGO International Non-Governmental Organization ISEM Institute of Science for Environmental Management

ISG International Support Group

ISGE International Support Group on Natural Resources and

Environment

ISO International Organization for Standardization

ISPONRE Institute of Strategy and Policy on Natural Resources and

Environment

ISS Institute for Social Studies

IUCN International Union for Conservation of Nature MARD Ministry of Agriculture and Rural Development

MBI Market-based instruments

MCD Centre for Marinelife Conservation and Community

Development

MEET-BIS Mainstreaming Energy Efficiency through Business

Innovation Support

MEP Ministry of Environmental Protection (China)
MOLISA Ministry of Labor, Invalids and Social Affairs
MONRE Ministry of Natural Resources and Environment

MOST Ministry of Science and Technology

MOSTE Ministry of Science, Technology and Environment (now

MOST, MONRE)

MoU Memorandum of Understanding
MPI Ministry of Planning and Investment
NEA National Environment Agency (now VEA)

NGO Non-Governmental Organization

NIMBY Not-in-My-Backyard

NRERP National Resources and Environment Research Programme

ODA Official Development Assistance

OECD Organisation for Economic Co-operation and Development

PanNature People and Nature Reconciliation
PES Payment for Environmental Services

PMB Project Management Board PSC Project Steering Committee

REDD+ Reducing Emissions from Deforestation and Forest

Degradation in Developing Countries

SEA Strategic Environment Assessment

SECO Swiss State Secretariat for Economic Affairs

SEMLA Strengthening Environment Management and Land

Administration

SEPA State Environmental Protection Agency (China, now MEP)

SIDA Swedish International Development Cooperation SRD Centre for Sustainable Rural Development

TPP Trans-Pacific Partnership

UN United Nations

UNDP United Nations Development Programme

UNIDO United Nations Industrial Development Organization

UNU-WIDER United Nations University-World Institute for Development

Economics Research

VACNE Vietnam Association for Conservation of Nature and

Environment

VAWR Vietnam Academy for Water Resources

VCP Vietnam Communist Party

VEA Vietnam Environment Administration
VEPF Vietnam Environment Protection Fund
VFEJ Vietnam Forum of Environmental Journalists
Vinashin Vietnam Shipbuilding Industry Group

VNCPC Vietnam Cleaner Production Centre
VND Viet Nam Dung (Vietnamese currency)
VNGO Vietnamese non-governmental organizations

VNS Viet Nam News

xii List of Abbreviations

VPD Vietnam Partnership Document

VPEG Vietnam Provincial Environmental Governance Project

VRN Vietnam Rivers Network

VUFO Vietnam Union of Friendship Organizations

WARECOD Center for Water Resources Conservation and Development WCED World Commission on Environment and Development

WEPA Water Environment Partnership in Asia

WVS World Value Survey

WWF World Wide Fund for Nature

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Introduction: The Environmental Challenges in Vietnam

The growing environmental crisis in Vietnam has largely been ignored in the academic literature, while most of the research has focused on China (see e.g. Kassiola and Guo 2010; Shapiro 2012; Zhang and Barr 2013; Ren and Shou 2013). Although the northern neighbor is much larger, it is still somewhat surprising considering that the country is the world's 14th most populous nation with a population of almost 90 million. In merely two decades, Vietnam has industrialized and consequently significantly reduced poverty and improved the lives of the majority of the population. Unfortunately, in the process, the natural environment was often sacrificed. According to some estimates, air and water pollution alone has resulted in economic losses of up to 12 percent of the gross domestic product (GDP) (Tran and Nguyen 2014). This happened even though there was an official discourse which increasingly emphasized environmental protection and sustainable development as an important national goal. Even as the Vietnamese government devoted much effort to developing and reforming environmental institutions and a sophisticated legal framework for environmental protection, the decline of the natural environment continued unabated. The emerging environmental state has so far been almost completely helpless in enforcing its own legislation and holding polluters and other environmental offenders accountable.

Vietnam provides an important case study for understanding why in developing countries institutions often fail to be effective despite significant institutional development. This is accomplished by using an innovative theoretical framework which applies a modified theory of gradual institutional change that stresses the role of different actors including the change agents and their opponents. These actors are situated within the political system which responds to various inputs and outputs while constantly being modified. The institutional reform process can be observed within the environmental state as well as in regard to the growing role of the society, businesses, and international organizations. Many reforms have sought to enhance the environmental governance which not only requires top-down management but also involves bottom-up participation. In order to capture this emerging dynamic, it is necessary to analyze the institutional changes within the multilevel government, the state-society interaction, the attempt to develop marketbased governance mechanisms, as well as the influence of international organizations.

The analysis of the institutional reform process focuses on two main actors: the institutional reformers and the reform opponents. While the latter are very powerful, reformers were able to significantly advance the country's environmental institutions. The changes within the environmental state are largely the outcome of reformers seeking to increase their influence and trying to empower the institutions of the environmental state. Even in light of relatively small resources, they have achieved an increasingly professional environmental state which relies on empirical evidence and has become much more transparent. Far-reaching environmental laws and regulations have been enacted and ambitious environmental strategies have been conceived. Moreover, together with international organizations, they have promoted societal and business participation which has resulted in a vast array of new governance mechanisms. As such, they were able to gradually promote the institutional improvement and adaptation. Despite these successes, the opponents of reform have pursued a strategy of undermining the new institutions by depriving them of sufficient resources and blatantly disregarding them.

While this so-called institutional drift has seriously impacted the reform progress, it has also continuously created the need for further reforms.

This book thus demonstrates that the development of environmental politics is a highly contested institutional reform process. This runs counter to the notion that an authoritarian regime should be able to simply pass legislation and implement them. In fact, not only have authoritarian regimes performed very poorly when it comes to environmental protection, they often rely on economic performance to maintain legitimacy. In particular, a small group of elites relies on the extraction of resources to distribute the spoils and maintain unity. It is thus not surprising that environmental goals are not at the top of their agenda. Armed with this understanding, it is possible to make sense of the opportunities and challenges that can arise in the process of improving the institutions of the environmental state.

Before discussing the institutional changes, however, this chapter will provide a broad overview of Vietnam's mounting environmental crisis during the period of rapid economic development. The goal of this selective analysis is to demonstrate weaknesses in the current developmental approach. The first section deals with Vietnam's oldest problem, deforestation, which has received significant attention from the government, as large amounts of financial resources were poured into reforestation projects, particularly in areas officially designated as "barren hills" (McElwee 2009). While the country has recovered some of its forests, it still suffers from illegal logging. Another topic that Vietnam's policy-makers have dealt with at an early stage is the constantly declining biodiversity, which is, in part, caused by the reduction in forest cover but also by the growing appetite for rare animal species as food and traditional medicine. Then, I will turn to the failure to contain the increasing air and water pollution. While they will be discussed separately, it is necessary to recognize that both of these forms of pollution are often combined to form an especially deadly mix. To illustrate this, I will also devote a section to the growing problem of waste, a by-product of the country's economic development path, which has generally been disposed off under extremely poor conditions and has led to leaks into the groundwater and putrid smells for people living nearby. Finally, Vietnam also faces growing threats from climate change, which require both a reduction in greenhouse gases to mitigate

possible effects and strategies for its large population to effectively adapt to. Taken in combination with the other environmental problems, climate change could exacerbate an already quickly deteriorating situation.

Deforestation and Land Degradation

There was once a time when almost 60 percent of Vietnam was natural woodland. This, however, has changed dramatically during the twentieth century as a consequence of wars and a growing population which resulted in the disappearance of large swathes of Vietnam's forest cover. In the 1960s, forests already accounted for only about 40 percent of the country and by 1983 it had reached an alarmingly low rate of only 23 percent (Kelly et al. 2001). Even after the famous leader Ho Chi Minh became aware of the seriousness of the problem and started a tree planting initiative in 1959, the decline continued unabated. The US military moreover used approximately 72 million liters of herbicide as a chemical weapon against the Viet Cong during the Vietnam War (1955-1975), which led to the destruction of about 36 percent of the mangrove forests in the south. In more recent years, Vietnam has, however, seen significant progress following massive afforestation campaigns, which has increased the overall forest cover. For example, while in 2003, 34.4 percent counted as forest land, it had increased to 39.5 percent in 2010, much closer to the density of the 1960s. The government promoted conservation and initiated a ban on the export of timber (McElwee 2009).

While this is a great achievement, much of the forest land gained actually consists of mono-culture tree plantations which are not nearly as healthy as natural forests. They cannot maintain the ecosystems usually associated with forests. In addition, the most valuable natural grown forests are still declining mainly due to massive illegal logging. Two-thirds of Vietnam's forests are classified poor or regenerating (Nguyen 2011). Vietnamese non-governmental organizations (NGOs) estimated that 63,000 hectares of green natural forest are lost every year (Dat Viet 2012). This poses serious challenges for biodiversity (which I will discuss later) and also is much less resilient in the face of adverse weather conditions or as carbon sink.

Not only are natural forests in Vietnam's inland areas ravaged by legal and illegal logging but the important mangrove forests along the coast are also still in decline. Over the past 30 years, more than half of the country's precious mangrove forests have already been lost to agriculture, particularly rice cultivation and shrimp farming. Today, only 21 percent of the mangrove forests are natural while the rest have been replanted (Fabres 2011). The destruction of these forests had a significant impact on the inland. Violent storms have become much more severe resulting in increasingly serious flooding. This has brought saline water to areas much further away from the coastline than in the past and is thus threatening more and more agriculture (IFAD 2014).

In addition, Vietnam also faces the problem of land degradation, which threatens the country's food security and the economy. The two problems are, of course, linked, as deforestation contributes to land erosion. With a very high pressure on land use, about 19 percent of the total land mass underwent continuous declines in terms of agricultural productivity since the introduction of economic reforms (Vu et al. 2014). The driving force behind this growing problem is the increase of the population, particularly in rural areas (Ibid.) (see Fig. 1.1). Not surprisingly, there has been

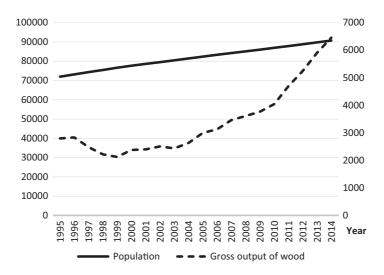


Fig. 1.1 Population increase (millions) and Wood consumption Source: World Bank Development Indicators 2016

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an increasing demand for food and farmers have responded by changing their cultivation practices. For instance, in mountainous areas, farmers have reduced or even abandoned fallow periods, which is the time when land is supposed to restore its fertility by remaining uncultivated, in order to produce enough food. This unfortunately has the consequence that there is long-term degradation of the land as nutrients are lost and soil erosion may occur (Quyet et al. 2014).

Vietnam's landscape contributes to the problem of land degradation. About two-thirds of the land are mountainous or sloping and 9 percent of the country is classified as unused land (MARD 2013). This has led to the classification of "Barren Hills," which exist particularly in the poor northern mountains and are regarded as an obstacle to the country's development, although a clear definition of these hills and their vegetation does not exist (Nikolic et al. 2008). The land degradation is serious as the country is increasingly facing the problem of desertification. Approximately 9.3 million hectares, or 28 percent of Vietnam's land area, have been affected of which about 20 percent is considered to be seriously degraded (Government of Vietnam 2012a).

Vietnam's forests and lands are still under growing pressure as the economic development continues and the population is still growing. As of 2013, still 47 percent of the labor force was employed in agriculture, forestry, and fishing (MONRE 2014). The unsustainable use of the land is likely to increase over the years. This will have a great impact on other environmental problems from biodiversity to climate change as habitats of rare species are lost and carbon sinks are degraded. At present, the government is, however, seriously overwhelmed by the extent of the problem. Violators of environmental regulations have rarely been punished adequately. According to officials within the environmental state, the priority on economic development is driving the destruction of forests. Even state enterprises are involved in the logging. As To (2009) demonstrates, local officials collaborate with park officials to maximize their own gain from forests. At the same time, villagers depend on forests for their own livelihood. As the market price of wood has increased and local residents often rely primarily on the land for their survival, illegal logging has become an important source of income for many. In addition, agriculture and especially rubber plantations have contributed to the declining forest

cover (Nguyen 2011). Due to the higher rate of yields, the productivity of farm land is simply greater than forests (McElwee 2012).

Biodiversity

Vietnam is experiencing significant decline in animal and plant species. This is demonstrated in the 2007 Vietnam's *Red Data Book*, which reported 418 animal species and 464 plant species as endangered, an increase of 167 species compared to the previous assessment in 1992. Totally 116 of these are even considered to be extremely critical. This is very unfortunate because Vietnam is naturally endowed with a very high degree of biodiversity due to the country's elongated form and its three different climatic zones ranging from the subtropical north to the tropical south as well as numerous different ecosystems. According to estimates, 10 percent of animal and 40 percent of plant species are endemic to Vietnam (Zingerli 2005). In 1999, researchers of an international study headed by the United Nations Development Programme (UNDP) reported at least 12,000 different plants, 5500 insects, 2470 fish and 800 bird species, 275 mammals, 180 reptiles, and 80 amphibians within the country (IUCN 1999).

Similar to the fight against deforestation, biodiversity protection also has a long history in Vietnam. The first national park, Cuc Phuong National Park, set between the provinces Ninh Binh, Hoa Binh, and Thanh Hoa, was established in 1962 and remains the largest nature reserve (*Thanh Nien News* December 20, 2015). In 1986, the year of the introduction of economic reforms, the government passed a National Conservation Strategy and established a system of national protected areas. In addition, several collaboration agreements were signed with neighboring Cambodia and Laos in order to cooperate in the protection of wildlife. Finally, in 1995, as one of the first countries in the world, Vietnam devised a Biodiversity Action Plan, which is a requirement of the International Convention on Biodiversity that was signed in 1994 (Sterling et al. 2006).

There are currently 30 national parks and 58 nature reserves which are managed by the Ministry of Agriculture and Rural Development

(MARD) and not by the Ministry of Natural Resources and Environment (MONRE). Overall, the management of these parks varies greatly and it is often impossible for the authorities to effectively control them from illegal hunting. Nevertheless, unlike in other countries, there are no parks that exist merely on paper as every park is required to employ rangers to protect it. As such, they constitute an important part of the conservation strategy. However, it should be noted that support for these parks has not been primarily for environmental reasons. In fact, local government officials and other elites consider these protected areas as sites for eco-tourism, making them more into profit-making ventures than important places of nature preservation (Zingerli 2005). Cuc Phuong, for instance, is only 120 km southwest of Hanoi and thus an ideal tourist location for the increasingly affluent urban population. According to estimates, 80,000 people have visited the park in 2011 (cucphuong.info November 7, 2015).

In some of these parks, there are rescue centers for endangered species such as primates and bears. For instance, in 1993, the Endangered Primate Rescue Center was established in Cuc Phuong National Park under the auspices of the Frankfurt Zoological Society. It currently houses 150 primates of 15 different species and subspecies. Except for those animals that were bred in captivity, the center provides support for primates that have become victims of poaching or the illegal wildlife trade. To achieve its goal, employees at the center often have to travel thousands of kilometer across the country, especially to remote areas in the south and center of Vietnam. In addition to the primate rescue center, Cuc Phuong also hosts the Carnivore and Pangolin Conservation Program as well as a turtle conservation center. In 2012, the attempt to close the country's only bear sanctuary in Tam Dao National Park in Vinh Phuc Province made international headlines. The Ministry of Defense had argued that the Bear Rescue Center, which is operated by Animals Asia, an international NGO based in Hong Kong, needed to leave the site for national defense reasons. The animal activists, however, asserted that the real reason was the attempt to gain control over the land for profit (Bowden 2012). Finally, in January 2013, after months of debate, the government changed its mind and the center was allowed to continue its operation.

Despite the tremendous efforts by the government, NGOs, and international organizations, the biodiversity is still declining. This is, in part,

related to the destruction of habitat as a consequence of deforestation and land degradation. It is, however, also due to the active poaching of many wild and endangered animals. Much like the Chinese, the Vietnamese are also traditionally inclined to eat any kind of animal. Rare species, which are extremely expensive to buy, are often regarded as special status symbols for important occasions such as weddings. For some animal species, such as the African rhinoceros, which is now threatened from extinction due to massive hunting, traditional medicine is the main cause for their plight. It is moreover not surprising that besides poaching, there has also been a boom in the domestication of some rare animals such as bears. Currently, about 3500 bears are raised as livestock for eventual consumption but the practice was officially phased out in 2005 which allowed farmers to keep their existing bears but prohibited them from acquiring new ones (Thanh Nien News April 30, 2013). As the belief in the medicinal value of some species has increased, animals found in traditional Chinese medicine textbooks have become the objects of illegal wildlife traders who hope to fetch high prices on the market. Various organizations have conducted numerous campaigns against the use of Rhino products which try to stop the practice and convince the people that there is little evidence of the usefulness of these components (Huong Tu 2013; Mai Anh 2013).

While rare animals are often on the menu and part of traditional medicine, some are also accorded mythical significance, which has proven useful for promoting environmental protection and the conservation of rare animal species. Perhaps the most prominent example was a giant turtle, called Cu Rua or Great Grandfather turtle, which inhabited the polluted Hoan Kiem lake in central Hanoi. It weighed a staggering 200 kg and was altogether 1.8 meter long. Some residents believed that the animal had helped the country defeat its many enemies. When the turtle became sick in 2011 with visible wounds in its skin, hundreds of people worked feverishly to clean the lake and help the turtle recover (*AP* 2011). Unfortunately, the animal died in January 2016 at a time when the Vietnam Communist Party (VCP) was about to decide on its new leadership, which many interpreted as a bad omen (Ives 2016). The concern with such rare animals is also reflected in the worries of the Vietnamese population in regard to the loss of biodiversity. Ninety percent of the

people consider the situation serious, while only 0.5 percent believe it is not serious at all (World Value Survey 2006). In contrast, only slightly less than 60 percent were concerned about the problem in China (World Value Survey 2007).

Air Pollution

Perhaps the most tangible fallout of Vietnam's rapid economic transformation is the increase of air pollution in the major economic centers of the country. In fact, air pollution is now so bad that the country is near the bottom of the list of the 2014 Environmental Performance Index, where it ranked 170th out of 178 countries for its air quality. On March 1, 2016, residents of Hanoi were shocked to learn that the monitoring station of the US embassy had reported an Air Quality Index (AQI) level of 388, which is considered as "hazardous" (*Tuoi Tre News* May 3, 2016). As the situation is worsening in recent years, people show a high degree of awareness about the seriousness of the problem. According to the 2006 World Value Survey (WVS), the Vietnamese are greatly concerned with the deteriorating air quality as over half of the population regards it as a serious problem, which perhaps surprisingly exceeds that of China where two-thirds of the population do not consider it as a serious problem.

A leading factor is the massive increase of traffic in urban centers with countless motorbikes that crisscross the streets in a never-ending stream. There has been a massive increase from 3.5 million motorcycles in 1995 to more than 37 million in 2013. In addition, the number of cars has also grown greatly from a mere 340,000 in 1995 to more than 1.6 million in 2013, which competed not only for space on the roads but also for emissions (Nguyen HD 2011) (see also Fig. 1.2 for the increase). Despite the adoption of European Union (EU) emission standards, the clogging of the streets has done little to mitigate the roadside pollution affecting the cities. In 2011, *Tuoi Tre* reported that in Vietnam's largest city, Ho Chi Minh City, 90 percent of the pollution stemmed from the city's motorbikes and cars. To curtail the rapid increase in private vehicles, the city's Department of Transport is planning to restrict the number of vehicles in the downtown area by raising tariffs and fees on ownership and usage

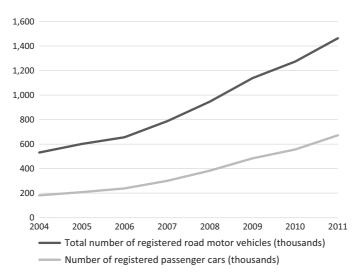


Fig. 1.2 Increase of vehicles
Source: ASEAN-JAPAN Transport Partnership 2012

while tightening registration requirements (*Thanh Nien News* 2015). The situation now is so bad that many Vietnamese have to wear masks every day to reduce the impact of dust and other polluting particles on their health.

Overall, the public transport system remains extremely poor and inefficient. The public bus networks in Vietnamese cities are still underdeveloped with few routes and greatly outdated and uncomfortable buses. In addition, the buses are very slow as they often get stuck in traffic where they have to compete with the constant flow of motorcycles that inundates the cities. It is thus not surprising that only 3–10 percent of Hanoi's population relies on buses (Yeh 2016). The train system in Vietnam is also greatly underdeveloped. Especially in comparison to China, trains lag far behind. On the very long train connection from north to south, there is only a single rail which is not yet electrified. Train stations tend to be rather small and are rarely crowded. Due to the high costs involved, a proposal to build a high-speed rail link between Hanoi and Ho Chi Minh City was rejected by the National Assembly in 2010, the first time a major developmental project was voted down by what is normally a rubber-stamp parliament. Presently, none of Vietnam's major cities have

a metro rail system but both Hanoi and Ho Chi Minh City are in the process of building their first lines. These ambitious projects, which hopefully should bring some relief to these two urban centers, are extensively supported by international donors such as the World Bank, the Asian Development Bank, as well as the European Investment Bank. Progress, however, has been extremely slow with a number of deadly accidents, overrunning budgets, and unmet deadlines (Yeh 2016).

With petroleum and coal as the most important sources of energy, Vietnam relies heavily on non-renewable sources of energy to power its economy. It is estimated that about 48.9 percent of the country's electricity comes from fossil fuels (CIA 2013). While China relies heavily on coal due to its large reserves, Vietnam boasts substantial reserves in oil, making it the third-largest owner of oil reserves after China and India, although a large extent of it is near its coast in Vietnam's East Sea, internationally known as the South China Sea, which is also claimed by the Chinese government. In 2013, Vietnam produced about 353,700 barrels of oil every day which was already less than at its peak in 2004. While the country thus is a main exporter of crude oil, the lack of refineries means that it is also an importer of oil products. Nevertheless, the large amount of available fossil fuel reduces the incentives to switch to renewable energies and thus contributes significantly to the growing problem of air pollution in Vietnam as well as poses a threat to climate change.

Another factor contributing to the intensifying air pollution is the growing number of industrial plants across the country. In particular, poorly regulated state-owned corporations and countless small household enterprises release significant pollutants into the air. While the former often have special relationships with the government which can help them to elude regulations, the latter are too numerous to effectively control. Moreover, these micro-enterprises generally lack the financial resources to invest in more advanced and environmentally friendly technologies. Foreign enterprises moreover are moving into the country aiming to produce cheap products, including many which are concerned with higher labor costs and stronger enforcement of regulations in China. At least some of these multinational companies are hoping to profit from the even weaker enforcement of regulations to draw a higher profit. For instance, the Luks Group, a cement producer based in Hong Kong, was accused

of releasing serious amounts of pollutants for many years since it started operating in 1996, which caused damage to crops and led to an increase in diseases. As a consequence, affected residents repeatedly protested against the plant, blocking its entrance, and demanding compensation. Although the company officially agreed to the demands, residents were dismayed when it did not actually follow through (Ngoc Duong 2015).

Water Pollution

Not only is it difficult to breathe clean air in many parts of the country, but being able to drink clean water is also becoming a challenge. Vietnam is blessed with large amounts of surface and groundwater. There are a total of 2360 rivers with a length of more than 10 km and thousands of lakes, ponds, and manmade reservoirs. Similarly, there are large reserves of groundwater which, according to the Water Environment Partnership in Asia (WEPA), could be exploited at an estimated 60 billion m³ per year. However, unfortunately many of the water sources are now polluted or overexploited and the situation is getting worse every year. There are now rivers that have turned black and sometimes it is also possible to smell a foul odor when you approach the water. This affects particularly water sources in urban areas. Rivers such as the Red River, the Saigon River, the Dong Nai River, or Cau River have become seriously polluted (Tateda and Fujita 2005). Only a few sections of the Red River even meet second class standards in the Water Quality Index, which means that the water is safe for irrigation. All of the rivers in Hanoi are extremely polluted (Thien Nhien 2014b). Many other waterways across the country are facing similar crises. For instance, in Bac Ninh province, wastewater from the craft villages of the paper-making industry is released without any treatment into the river and as a consequence the Ngu Huyen Khe River has become known as the "Dead River" among many residents and even officials who live on its banks (Nguyen MD 2011). In 2014, research by the Ministry of Health found that between 20 and 25 percent of the tap water in Ho Chi Minh City failed to meet the standards while in Hanoi 20 out of 196 samples of tap water were considered unsafe for consumption (Thanh Nien News August 25, 2014).

There are many sources for the pollution. More than 90 percent of the wastewater in Vietnam is discharged directly into the rivers and lakes (*Vietnam News Agency* December 24, 2013). This applies to most of the wastewater from households and 60 percent of industrial wastewater which enters the waterways without treatment (Nguyen TPL 2012). As much as 75 percent of industrial estates do not have any central wastewater treatment system (Dao and Ofori 2010). Besides large factories, Vietnam's countless craft villages are a major source of water pollution because they mostly lack any technology to clean water and wastewater is released untreated. Another source is poorly regulated agricultural enterprises such as animal husbandries or farms, most of which use large amounts of pesticides on their fields. Moreover, mines cause massive pollution even beyond their closure because of the failure to apply remediation measures even though it is required under the law (Tarras-Wahlberg and Nguyen 2012).

Water pollution has an observable negative impact on the health of those forced to consume contaminated water. There have been increasing number of reports in the media about the rapid increase of deadly illnesses including cancer in certain locations which are known to be affected by severe water pollution. In October 2014, the official newspaper of the Communist Party, Nhan Dan, reported that in some localities, water pollution accounted for 40-50 percent of the cancers and gynecological infections (Duong 2014). Following a detailed study, the MONRE blamed the contamination of drinking water for the emergence of 37 "cancer villages" in northern and central Vietnam in which 1136 people succumbed to the disease in the previous 20 years (Phan 2015). The government funded project studied the pollution in 22 provinces and cities across the country and came up with a list of the top ten most affected villages, which was released in February 2015 (see Table 1.1, Le 2015). The problem unfortunately extends further as much industry can also be found in the South. One such place is Tho Khuong village in Southern Vietnam, which is located next to a heavily polluting industrial zone. The village head, Nguyen Van Tien, told reporters in 2014: "More and more children have caught diseases. Our two hectares of land have been left uncultivated. The water wells, which are the main source of water for locals, have turned black" (cited in: VietnamNet Bridge June 9, 2014).

Rank	Name	District	Province/city
1	Thong Nhat Village	Ung Hoa District	Hanoi
2	Lung Vy Village	Chuong My District	Hanoi
3	Man Xa Village	Yen Phong District	Bac Ninh province
4	Tho Vy Village	Nong Cong District	Thanh Hoa province
5	Yen Lao Village	Kim Bang District	Ha Nam Province
6	Co Do Village	Dien Chau District	Nghe An province
7	An Loc Village	Loc Ha District	Ha Tinh province
8	Phuoc Thien Village	Binh Son District	Quang Ngai Province
9	Xuan Vinh Village	Hoai Nhon District	Binh Dinh Province
10	Me Pu Village	Duc Linh District	Binh Thuan Province

Table 1.1 List of "cancer villages" with most polluted water

Source: Project "Investigating and searching hygienic water resources for a number of 'cancer villages' in Vietnam," as cited in Le 2015

Only about 70 percent of the population actually has water that is safe to drink (US Commercial Service 2014). Polluted water not only leads to many serious health problems but also threatens the food security of the country as farms face the challenge of finding clean water to irrigate their fields and fishermen lose their ability to catch fish which can be safely consumed.

The majority of the population is aware of the problem of the pollution in the country's rivers and lakes. Only 5.4 percent of people think there is not a serious problem and a majority of 53 percent of the population consider the situation very serious. There is, however, less awareness of the problem of clean drinking water. Surprisingly, about 40 percent of the population does not consider the water quality in their location as a serious problem (WVS 2006).

Aside from the growing problem of water pollution, Vietnam is also increasingly facing water shortages. This is the case despite the fact that the country has more than 2360 rivers and streams as well as thousands of lakes. The depletion of groundwater resources has been a serious concern. Already today, there is less groundwater available than is considered sufficient by the International Water Resources Association and the country has been included in a list of countries that suffer from water shortages (VUFO-NGO Resource Centre 2011). A similar problem exists for surface water which is unevenly distributed across the country and subject to great differences between seasons. Water shortages appear particularly

in the drought season which lasts in between 6 and 7 weeks. The Asian Development Bank moreover estimates that almost 10 percent or around 8.4 million people in Vietnam will suffer from lack of sufficient water by 2050 (*Vietnamnet*, November 8, 2011).

Waste

Air and water pollution often go together and this is particularly the case for waste, a by-product of the breakneck economic development, which has seen a massive increase over the years (see Fig. 1.3). While in 2001, about 7 million tons were produced, this amount had increased to an estimated 28.5 million tons by 2014 according to official statistics. More than half, namely 19 million tons, came from households. The problem is most serious in urban areas where the waste volume is increasing by ten percent annually. Only a very small amount of the hazardous waste, which is also rapidly growing as a consequence of industrialization, is collected and appropriately treated. On top of this, there is nowadays the problem of the illegal importation of waste (Nguyen TT 2011). In the coming years, the total amount of waste is likely to rapidly increase.

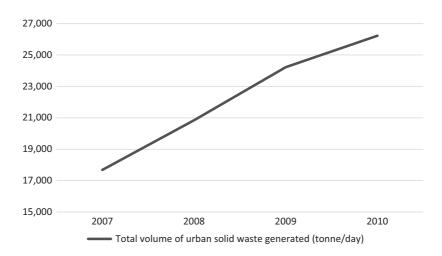


Fig. 1.3 Rate of urban solid waste Source: Ministry of Natural Resources and Environment 2011, p. 16

In the past much of the waste was not even collected. Nowadays, about 72 percent of solid waste, with more than 80 percent in urban areas and about 40 percent in rural areas, is sent to landfills (Thai 2014). This has brought little improvement because the way garbage is being disposed off creates massive air and water pollution around the dumps. Most landfills, namely 80 percent, are unsanitary and do not fulfill national standards (Nguyen TT 2011). In Ho Chi Minh City, only 6 percent of all urban dumps meet Vietnam's sanitation standards, which demonstrate a clear failure of administration. There are 50 sites across the urban area with many of them leaking heavily polluted water into the ground. Overall, 70 percent of the landfills are smaller than 500 square meters even though this is the standard for urban landfills. Although the number of sanitary waste dumps has increased with the help of international donors such as the World Bank and bilateral donors, the rapidly growing amount of waste has allowed the precarious situation to get more serious every year (Tuan and Maclaren 2007).

In neighborhoods, which are close to landfills, farming has become impossible and people are suffering from serious health problems. The rubbish sites often are very close to residential areas and schools because of the shortage of available land in urban areas. The black water that often leaks from these sites makes it impossible to grow vegetables as the water cannot be used for irrigation. The bad odor that permeates the air threatens to fill the living rooms of the residents and thus forces them to keep windows and doors shut at all times. Naturally, this can only partially reduce the negative impacts of the pollution on the health and the quality of life of residents. On the outside, the houses get muddied when it rains. In one instance, a private nursery was faced with a declining number of students as the school was facing the refuse tip and black puddles were forming from the leakage of the landfill (*VietNamNet Bridge*, June 3, 2014).

There are only very few incinerators because of the high investment costs (Nguyen Duc Luong et al. 2013). Most of them are used for hazardous waste and are not effectively monitored as very little data exists about them (Thai 2014). Instead, there is sometimes open burning of waste to reduce the volume of garbage and increase the capacity of the sites. Since this occurs without any filtration or other mitigating processes, many

highly polluting gases including the extremely toxic dioxin get released into the environment.

While the government has experimented with various methods to reduce the overall amount of waste, this has not been very successful. Only a very small amount of the waste gets recycled. Unlike in some Asian countries, there are almost no bins for recycling and no government regulations. Only very few generally poor people sort their waste in order to reuse it or sell it to scrap collectors (Thai 2014). Most people do not understand the benefits of separating the garbage and, even though theoretically it could be collected in different bags, this rarely happens (Nguyen TT 2011). Pilot experiments in major cities such as Hanoi, Ho Chi Minh City, and Da Nang have failed which officials have blamed on a lack of public awareness. In addition, it was argued that there is a shortage of treatment facilities which could deal with the large amount of sorted waste (Thai 2014). Trash collectors still generally work with small hand-drawn carriages that go from door to door according to a planned schedule and collect the waste that is dumped by people in front of their houses without much containment, and thus it occasionally gets blown away (Thai 2014). These low-paid workers neither have the time nor ability to separate the waste by themselves, which would also be harmful to the health of the collectors.

Attempts to create incentives to reduce waste have similarly faced significant obstacles. In order to create incentives for using biodegradable plastic bags, the government decided to tax single use plastic bags heavily. The government hoped that the higher price for non-biodegradable bags would motivate retailers to switch to the more environmentally friendly product. For each kilo of bags, the government charged VND40,000 (US\$1.8), while some plastic bags only sell for VND30,000 (US\$1.35). Unfortunately, the measure failed because manufacturers simply refused to pay the tax and continued to sell cheap plastic bags to merchants (Thanh Mai 2014).

Finally, reusing waste has also made very little progress so far. It is hard to estimate how much of the household waste is reused but judging from the increase in volume, it is likely to be less than in the past. The government sees it necessary to step up its effort to promote reusing waste. A case in which waste has a great potential to be reused (or recycled

depending on the definition) is organic household waste which could be collected separately and after processing reused as compost to provide valuable nutrients for depleted soil. Most of the waste that occurs in farming is already reused. However, even though Vietnam has built an increasing number of composting plants, it has so far not played a significant role because the quality of the generated fertilizer is poor. In particular, there are small pieces of glass or metal in the compost, which does not make it particularly attractive to farmers (Thai 2014).

Climate Change

With 3260 km of coast and no location more than 500 km away from the coast, Vietnam is one of the countries most threatened by any rise in the sea levels. According to UNDP and World Bank estimates, the country is even one of five countries which will suffer the most from the effects of global warming. If the sea level rises by only 1 meter, which some scholars believe could happen by 2100, about 11 percent of the Vietnamese population will be at risk (Bass et al. 2010). If the projections are correct, 10 percent of the area of Ho Chi Minh City alone would be covered with water by 2050 and 20 percent by 2100. Already, the consequences of climate change can be felt along Vietnam's very long coastline and across the country (Shaw 2006). In general, violent weather has become more frequent and unpredictable while it has also brought more serious consequences for the Vietnamese people (MONRE 2010). The most common natural disasters are floods, hailstorms, and storms. Floods also account for 67 percent of all deaths. However, despite the increase in the number of natural disasters, fewer people have been killed every year, indicating Vietnam's growing ability to adapt to the worst effects of climate change (Oanh et al. 2011).

As cyclone storm patterns and the distribution of rainfall have changed, the lifestyle of farmers across the country has been impacted. Large swaths of land along the coast have been contaminated by sea water which has driven farmers from their traditional crops such as watermelons, peanuts, and sweet potatoes to fish and shrimp farming. Even 60 km inland, farmers are impacted by saltwater that flows upstream during the dry season. If it is used for irrigating the fields, it can potentially destroy the whole

rice crop (IFAD 2014). Large amounts of money are needed to enable local people to adapt to the consequences of climate change. The central and local governments with the assistance of many international NGOs are working on many projects ranging from fortifying the coast to finding new crops for local farmers.

Not only is Vietnam threatened by the increase of global temperatures, it is also increasingly becoming responsible for contributing massively to climate change, even if developed countries still bear the main historical responsibility. In 2000, Vietnam's energy usage relied on 1.5 million tons of fossil fuels. According to the World Bank Development Indicator, in 2012, the equivalent of 310,664 kilotons of carbon dioxide were emitted, an increase of more than 200 percent over the period from 1990 to 2012 (see Fig. 1.4 for the increase of the total of greenhouse gases). In order to meet the growing energy demand while not increasing the output of greenhouse gases, the government has considered nuclear energy since 1995. There were plans to install up to ten nuclear power plants by 2030. However, despite many studies together with international experts from South Korea and Japan, worries about the safety of nuclear energy have in 2014 prompted the prime minister to postpone the construction until 2020. This was an extremely long delay as originally the government had

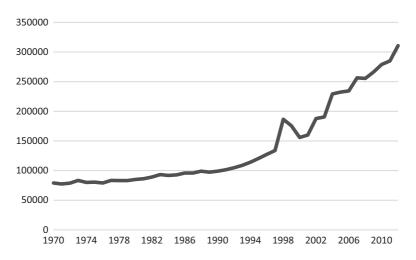


Fig. 1.4 Total greenhouse gas emissions (kt of CO2 equivalent) Source: World Bank Development Indicators 2016

hoped that the first plant could begin operation by 2019. In addition, it remained unclear where and how the nuclear waste could be disposed off (Lam 2012). This posed significant challenges because it involved not only significant long-term costs but was also potentially a highly contentious issue for the affected communities. On November 22, 2016, the Vietnamese legislature voted to cancel two of the nuclear power plant projects due to the high costs required (Mai and Ho 2016).

In order to reduce the reliance on fossil fuels, the government has furthermore heavily invested in hydropower, which generates more than one third of the country's electricity. In 2013, 268 large-scale plants were in operation while another 205 were in the works and scheduled to start running by 2017 (The Economist 2015). Despite the advantages of the clean energy, the construction of about 3600 reservoirs, which are not only aimed at energy generation but also flood control, irrigation, and water supply, often had unintended consequences for the people who live along the rivers. The projects not only result in the resettlement of thousands of people to less-fertile lands but also cause significant environmental destruction, including deforestation in the affected areas. Defective technology and improper use of dams has led to flash floods in certain areas. Downstream, many dams have impacted the agriculture of farmers who traditionally relied on the flooding of the land for their crops (Nga 2011). In addition, a number of dams have led to an increase of salt concentrations in rivers, which has exceeded the allowed levels. As mentioned earlier, higher levels of salinity can have serious consequences for farmers if they rely on river water for irrigation. Increasingly, the dams also lead to water shortages for drinking water and industrial use during the dry season. It is not rare that operators of the power plants aim to maximize the generation capacity over the needs of the population downstream. As a consequence, the government shut down 167 smaller power plants while 75 hydropower projects were canceled (Tuoi Tre April 15, 2014).

The rising demand for energy will pose significant challenges for Vietnam to reduce its own impacts on climate change. For more than a decade, the need for energy has increased annually by about 14–15 percent and this rapid growth rate is likely to continue if not even accelerate until 2030 (Nguyen et al. 2011). With nuclear energy being postponed and hydro energy reaching its limits, wind and solar energy could be regarded as other potential alternative sources of energy. However, there

has been very little progress in this regard. Even though Vietnam is geographically in a very good position for wind energy, there has not yet been any significant push toward using the technology. Fossil fuel prices (particularly diesel), which are heavily subsidized, are simply too low to compete with renewable energy, which faces significant initial investments. There are relatively high investment costs because, for instance, wind turbines need to be imported from abroad and staff needs to be trained to operate them. In addition, the government has not yet developed a framework which would make wind energy profitable for investors (Nguyen DL 2015).

The Failure of the Environmental State

According to the UNDP, environmental sustainability is the only millennium developmental goal that Vietnam did not reach in 2015. The target was not only missed but the country is facing an increasingly serious environmental crisis. This is echoed by government officials such as Tran The Loan, the deputy director of the Vietnam Environment Administration (VEA) who in 2014 asserted "Environmental pollution in our country has become alarming. (...) Industrial plants use many chemicals, but their waste treatment methods are often poor and outdated" (cited in: *VietNamNet Bridge* July 24, 2014). This raises an important question: why are government officials voicing such strong warnings? The many Vietnamese who are expecting the government to deal with the situation may wonder why the government seems to be unable to do anything about the problem.

Environmental officials repeatedly draw attention to the country's fixation on economic growth as the main reason for the failures of the environmental state. For instance, an employee of the local Department of Natural Resources and Environment (DONRE) asserted that the focus on key economic indicators resulted in a lack of attention on proper waste disposal (Tuan and Maclaren 2007). Moreover, O'Rourke (2002) concluded in his study of environmental politics "Vietnam appears to combine the worst of both Soviet-bloc environmental callousness with East Asian development-at-all-costs" (p. 222). This is confirmed by my own

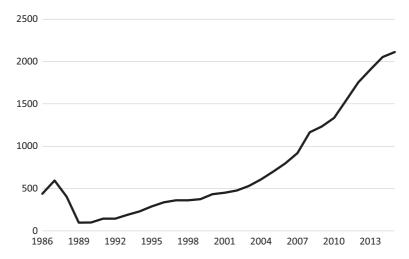


Fig. 1.5 GDP per capita (current USD) Source: World Development Indicators 2016

interviews with government officials and environmental activists, who assert that Vietnam is emphasizing growth over environmental protection. Since economic reforms were introduced with *Doi Moi* (Renovation) in 1986, the Southeast Asian country has rapidly developed its economy from a GDP per capita of only US\$437 to US\$1911 in 2013 (see Fig. 1.5). With an overall GDP of US\$171.4 billion, Vietnam is now a lowermiddle-income country, a status it had reached in 2010. Despite its rapid growth, there are some signs of stagnation recently. In 2013, economic growth stood at 5.4 percent, which, even though it was relatively slow for Vietnam in recent years, was still impressive in international comparison. The most visible aspect of the rapid growth are the roads which were once filled with bicycles and are now teeming with the constant flow of motorcycles and a growing number of automobiles. At the same time, despite a two-child policy, the population has also been increasing significantly from 60 million in 1985 to 92 million in 2010. By 2050, this number is expected to nearly double again to a staggering 150 million.

Environmental reformers place their hope on the environmental Kuznet curve, which suggests that environmental protection would likely follow once the country reaches a certain per-capita income, and which was popularized in 1992 through a World Bank development report (Stern 2004). For instance, scholars have argued that air and water pollution decreases when per-capita income is between US\$5000 and US\$8000 (Dasgupta et al. 2002). In regard to Vietnam, this would mean the country would have a long way to go because as mentioned the percapita income is still below US\$2000. At the same time, scholars have raised serious questions about the curve's validity because of problems with the statistical analysis (Stern 2004) and the fact that Asian countries have a much higher population density and thus cannot afford a similar degree of pollution than Western countries. Al-Mulali et al. (2015) who have studied the issue in the Vietnamese context find that there is no evidence of the effects of the environmental Kuznet curve as there is both an increase in GDP and pollution. The scholars of the study thus argue that "Vietnam's remarkable boost in its economic development, urbanization, industrialization, energy consumption, and consumption of natural resources caused an increase in the environmental pressure" (Al-Mulali et al. 2015, p. 123).

The inadequate government response to the environmental crisis is certainly not because of a lack of trying. Policy-makers, with the help of many international organizations, have continuously improved the legal framework and enhanced the governmental organizations tasked with dealing with the problem. In some ways, the Vietnamese government has even reacted faster than the People's Republic of China. Already in 1985, the government passed a formal decision which declared that any development should take environmental protection into consideration. In 1986, the government then worked together with the International Union for Conservation of Nature (IUCN), an international environmental organization, on a National Resources and Environment Research Programme (NRERP), which proposed the introduction of a national strategy on environmental conservation. In 1991, the government released its first National Plan for Environment and Sustainable Development 1991-2000. Following the country's participation in the Rio de Janeiro Earth Summit in 1992, the government then passed its first environmental law in 1992, which came into force in January of 1993. In comparison, China only made its own environmental law permanent in 1989, even though its economic transformation, known as

"Reform and Opening up," had already begun in 1978. In addition, the Vietnamese government elevated its environmental institution to ministerial level in 1992, six years earlier than China.

Unfortunately, as Drury (2009) points out, improving only the regulatory framework is not sufficient but government agencies must also be able to implement the laws, which in Vietnam happens far too rarely. For example, the Hao Duong Leather Tanning Company was fined ten times for discharging excessive amounts of pollutants into a river but the company neither paid the fines nor made any changes to its operation. Finally, in October 2013, the factory, which is located about 19 miles south of Ho Chi Minh City, was forced to temporarily shutdown operations (*Radio Free Asia* November 22, 2013). However, even after two years of being closed, the company refused to pay the fines. Instead, it negotiated with the government for an extension and demanded to be allowed to reopen again to be able to pay for the fines. The resistance by Hao Duong is typical for Vietnamese companies as many of them are either unwilling or unable to pay for the pollution as well as to make any changes to their operations.

The case of the leather tanning company demonstrates that the failure of the environmental state can be blamed on strong economic interest groups which profit from the ability to avoid the environmental regulations. While reformers have been able to improve the legal framework and to some extent the institutions, these strong opponents have been able to deprive the emerging environmental state of the financial resources that are necessary for effective enforcement. To overcome this problem, reformers have sought to adopt new and innovative approaches, some of which were adapted from other counties. In the forest sector, there has been an attempt to develop an environmental market that distributes the costs and benefits which has become known as payment for environmental services (PES) (McElwee 2009). The declining biodiversity has brought together many organizations, who seek to change the mindset of the increasingly affluent population. In regard to both air and water pollution, there have been attempts to induce corporations to switch to greener technologies, for instance, by promoting Cleaner Production (CP) mechanisms. The issue of waste has motivated reformers to emphasize educational efforts to change the mindset of people. Finally, climate change has become the most important issue for networking between the

government, donors, as well as VNGOs. All of these aspects demonstrate the slow emergence of new governance mechanisms which are the focus of this book and will be discussed in depth later on.

Outlook

Without a doubt, Vietnam is now facing a massive environmental crisis. The majority of natural forests have disappeared and are still being replaced by inferior mono-cultures. As more and more land is becoming degraded, a growing number of animal species in one of the most biodiverse countries in the world is being threatened from extinction. With the increasing number of motorcycles and the rapid industrialization, many urban areas currently suffer regularly from extremely serious air pollution. As much wastewater is released untreated, Vietnam is moreover suffering from massive water pollution. Some rivers have even become black and cannot be used for irrigation. Combined with the depletion of many water sources, the country increasingly faces water shortages. The rapid economic development has also resulted in a massive mountain of waste, which is mostly disposed off in unsanitary landfills and which exacerbates both air and water pollution. If all of this was not bad enough, Vietnam is one of the countries most affected by the increase of violent weather and sea water rise as a consequence of climate change. Taken together, these problems are a major obstacle for the future development of Vietnam and require a very urgent and thorough response. Unfortunately, so far the government has only succeeded in building environmental institutions including a very sophistical legal framework while it has almost completely failed to translate these changes into outcomes.

This book discusses the institutional reform process which is targeting the increasing environmental degradation by focusing on the actors that seek to improve the environmental situation and how they deal with the opponents in the process of gradual institutional change. To systematically analyze the institutional transformation, Chap. 2 will lay out the theoretical framework for the book. The overall transformation has to be seen within the context of attempts to shift power from government to governance and entails greater involvement for societal actors and seeks to introduce new

market-based governance mechanisms. The analysis will include a discussion of the strategies of reformers and their opponents in their continuing struggle to either promote the development of the environmental state or to resist its efforts. Finally, it is important to discuss the role of international organizations and how they are shaping the process both as a resource for reformers but also as actors which are promoting their own reform targets.

Following the theoretical discussion, the book will turn toward the main empirical analysis. The progresses made in the reform process are the focus of Chap. 3. I will demonstrate how reformers have been able to develop advanced laws and environmental institutions which are, at least on paper, very strong. In this context, I will devote attention to the development of environmental impact assessments (EIAs) which are now required before most developmental projects. Unfortunately, this already demonstrates the major shortcoming of the institutional reform process: the disconnection between the formal institutions supported by the reformers and the informal reality of avoidance and non-compliance. This will be explored further in Chap. 4, which will delve more deeply into the reasons why reform opponents have been so successful in countering the environmental state. Despite much effort, the implementation of environmental regulations continues to lag far behind which unfortunately means that much of the environmental state is rendered meaningless as a consequence.

Although the implementation of environmental rules and regulations has been vastly inadequate, environmental reformers have sought to promote alternative channels to achieve their goal. The society is playing an increasingly prominent role in this regard. Chapter 5 discusses the emergence of a civil society in Vietnam and analyzes the different actors in this context from mass organizations to the newly emerging autonomous NGOs. All of these organizations have played some role in environmental efforts, ranging from assistance in the implementation of environmental laws and regulations to policy advocacy. In order to increase their strength, a number of these largely small organizations have decided to join networks to combine their resources and share information. However, at the same time, this has also increased the competition over the limited available resources. The chapter furthermore draws attention to the media as an important player. Through the use of environmental reports, many problems have been revealed which increase pressure on the environment

tal state to become more effective. In particular, it helps the central government in their efforts to enforce environmental regulations at the local level.

The society can be an important partner for environmental reformers but the real concern has to be the need to deal with businesses which are an important source of pollution. As mentioned above, resistance comes from economic interest groups which see little value in environmental protection. The reformers have sought to change this mindset. Chapter 6 devotes attention to the attempt of reformers to gain more support from the business sector, which is not easy considering the business structure in Vietnam. Aside from large state-owned and government-linked corporations, there are many smaller privately owned corporations, including thousands of household corporations. In addition, Vietnam has been attracting a growing number of foreign enterprises, some of which have been in the news for environmental violations. Despite the lack of a full market economy, reformers have experimented with various market-based governance mechanisms, which have shown some success.

While institutional reformers have played an active role pressing for these changes, a great deal of progress would not have been possible without the involvement of international organizations. Following the opening of the country in 1986, Vietnam has attracted bilateral and multilateral donors from around the world including from Europe, Japan, the USA, and Canada. These organizations have provided significant funding for many environmental projects or required environmental concerns to be taken into account in development plans. Moreover, many international NGOs have also opened an office in the country. The existence of foreign organizations has provided reformers with additional resources including funding and knowledge exchange. Foreign experts have helped Vietnam in the development of the legal framework and the institution building. In addition, international organizations have pushed for the involvement of the society. For instance, many projects require local NGOs. Despite these positive effects, the foreign aid has also come with a catch. The reformers have to some extent become dependent on external assistance as the government as a whole has been reluctant to increase the amount of funding for environmental protection.

The book will end with an attempt to debate possible future trajectories. First, there will be a discussion of whether authoritarian rule could

be perfected to transform into an eco-dictatorship that would more effectively deal with the environmental problems. This idea has repeatedly been promoted by a number of scholars but lacks empirical support. In addition, the chapter looks at the possibilities of progress under the current Communist one-party regime. To do this, the discussion will repeatedly draw on China as a comparative case, which is similar in terms of the political system and the character of the institutional reform process toward environmental governance. Moreover, Vietnam's role in the Trans-Pacific Partnership (TPP) will also be analyzed. Overall, the chapter will demonstrate that there is significant room for improvement under the current regime even if more fundamental reforms remain elusive and an effective environmental state is unlikely to emerge.

Note

1. China claims nearly all of the South China Sea through its "nine dash line" which is based on old maps.

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2

Evolving Environmental Governance

While scholars have worked on many different aspects related to environmental governance, there has been at best a partial understanding of the myriad institutional changes that are occurring. Due to the complexity, it is not easy to gain a comprehensive yet still focused understanding of the ongoing transformations in any country. Vietnam, however, raises an especially interesting puzzle: Even though many important institutional innovations have been realized in a very short time, there has been very little progress in dealing with the destruction of the natural environment, which has continued unabated. This conundrum can only be understood if the political institutions and processes as well as the ongoing changes are analyzed. This is an essential part of the process of determining possible solutions that can actually work and make a difference toward environmental protection. Environmental politics has to be seen within the context of larger social, economic and political changes, which have been especially profound in Vietnam over the past few decades. These tremendous changes are visible everywhere in daily life but their larger transformations are often difficult to estimate. The political system itself is in a perpetual transformation and the eventual outcome is difficult to

predict. It is not my goal to do that. Instead, it is necessary to understand the present situation, how it has evolved, and what possible future paths are presently feasible.

This chapter will first explain the governance concept for the analysis of environmental politics. Many scholars using the term have referred to the change from a hierarchical top-down approach to a more distributed form of policy-making and implementation. At its most basic, governance suggests the need to expand the analysis beyond the state to also include the society and businesses. While Vietnam's political system is still predominantly hierarchical, in recent years, there has been a trend toward allowing more access to bottom-up influences. These institutional changes can be described as the early stages of the transformational process from government to governance. They have occurred in response to the introduction of economic reforms in 1986 which have meant the transformation of the planned economy to a more market-oriented system. In addition, they have been influenced by a global discourse of "good governance" which has promoted ideas such as the involvement of societal actors or the use of markets to achieve policy goals. Lessons were also drawn from a thriving academic discourse which seeks to determine which institutional settings work best for economic development, poverty alleviation, and environmental protection. All of these have contributed to institutional change in developing countries such as Vietnam.

In order to understand what kind of changes have occurred in Vietnam and what kind of challenges exist for the future development if the current development path persists, it is necessary to conceptionalize the institutional change. This book argues for a two-pronged approach which combines an actor-oriented perspective with an analysis of the political system, both of which mutually interact. In response to the insufficient implementation, reformers were able to constantly modify the institutions of the environmental state. Because environmental governance originally had only very little support within the political system, proponents of institutional reforms sought to enhance their power particularly by raising the urgency of the seriousness of the problem through professionalizing the environmental state with a focus on empirical evidence, increasing overall transparency, developing ambitious goals, and increasingly encouraging grassroots participation. First and foremost, there has

been a growing effort to allow society to participate in the process. This included the involvement of communities and the promotion of NGO and significantly reconfigured the Vietnamese political system. Secondly, there have been attempts to incorporate business interests in the environmental state through various market-based approaches. Finally, international organizations have significantly contributed to this process by becoming an important political force in domestic politics. To reflect this, the discussion will devote significant attention to determining the impact of foreign organizations. In particular, the provision of knowledge, manpower, and financial support has helped strengthen the environmental state and augmented its meager financial resources.

Environmental Governance

To solve the myriad environmental problems of industrialization, activists and scholars have initially looked toward reforming the environmental state. As the most powerful and supposedly neutral actor, the government should be able to introduce and implement legislation that reduces the negative impacts on the environment. However, when it became apparent that the government's top-down approach is rarely able to effectively deal with the growing challenges, many scholars and activists have promoted a more inclusive form of governance, in which the government steers society and the private sector (Shapiro 2014). This approach is now generally referred to as governance, which Wanxin Li defines "as government agencies, civil society, and transnational organizations who work through formal and informal institutions to manage and conserve environmental and natural resources, control pollution, and resolve environmental conflicts" (Li 2006, p. 10506). Lemos and Agraval, moreover, emphasize that governance does not only include the state but "in addition, encompasses actors such as communities, businesses, and NGOs" (Lemos and Agrawal 2006, p. 298).

The discourse of governance, which emphasizes the role of non-state actors and local governments, is at the core of institutional reforms promoted by scholars, developmental organizations, and increasingly Vietnamese policy-makers, which highlights the fact that the academic

concept not only is an attempt to capture a changing reality in the world but also constitutes a belief system driving reformers. It is often promoted through the developmental aid of international organizations, who regard it as a set of normative prescriptions on which developmental projects should be based (Grindle 2004). Normative prescriptions in the form of dominant discourses can have a great influence on both the strategic behavior of political groups and the political decision-making process, as I will demonstrate below.

Promoting less-hierarchical governance in a non-democratic one-party state like Vietnam is not uncontroversial because the concept is deeply rooted within the liberal tradition of Western democracies. Communist regimes generally lack the functional separation between state, society, and businesses. The Party seeks to mobilize the society for its purposes and does not allow any independent activism, which is seen as a challenge to its dominance. Moreover, the state in such systems is generally the main owner of key industries and thus more intimately linked with those interests. It is no coincidence that it is difficult to translate the notion of governance into Vietnamese. One project that aimed to strengthen local environmental governance in Vietnam opted to translate it with environmental management (quản lý) rather than governance (quản tri). This is not surprising because traditionally the one-party state has relied on the top-down implementation of policies and corresponds with the notion that all the state's problems can be dealt with a "technoscientific" approach (Sigley 2006), which means that any problem that arises can be solved with a technical solution. In the socialist understanding of the state, the ruling party, which stands at the apex of the state, is capable of determining the truth and then act accordingly. This stands in contrast to a more pluralist understanding of politics in which different forms of truth compete and political leaders need to make crucial decisions about what is more important.

Even though the concept of governance appears to run counter to the principles of the socialist state, there has been a trend toward enhancing governance mechanisms in neighboring China (e.g. Howell 2004; Mol and Carter 2006; Shi and Zhang 2006; Johnson 2009) which is institutionally very similar to Vietnam. This is the case because the still nominally Communist country has embarked on economic moderniza-

tion processes that have led to significant changes in terms of the statesociety and industry relationships. Similarly, in Vietnam, the doi moi process introduced in 1986 started a partial liberalization of the economy and the recognition that market principles are effective for driving economic growth, which transformed the country into one of the fastest growing economies of the world. Unlike during the first years of Communist rule, economic decisions no longer had to follow plans of the command economy and are now primarily determined by market principles. This process of economic liberalization was accompanied by the growing pluralization of the society which has resulted in the rapid growth of increasingly independent organizations that vie for political influence. Individual initiative instead of centrally organized campaigns became the driving force of society. Although these organizations remain closely tied to the state, some of them have emerged as a new force for change. Moreover, the media have become much more independent and market-oriented. The need to remain a viable enterprise has made news organizations interested in attracting a larger audience and as a consequence newspapers, magazines, and television reports are now covering issues that are of interest to the public. In particular, the environment has become a widely disseminated topic because it relates directly to the livelihood of the people. Finally, even in the political field, there has been growing competition within the ruling Communist Party and dissent has become more visible.

Overall, however, the old structures have not been completely abandoned. The actual political system in Vietnam is a hybrid somewhere in between the typical Stalinist Communist state and a liberal market economy. While this has given rise to many neologisms such as "Market-Leninism" (London 2009), one thing is clear: the system is in a transformational state that requires the observer to become open to processes of institutional change. The evolution of governance reveals both the persistence of traditional patterns but also highlight the tremendous upheavals that have occurred. It should, however, be noted that this in no way implies that a fully liberalized political system is inevitably the outcome of this process. In fact, it may describe a totally new form of political organization that remains in this state of hybridity for some time to come.

While the idea of governance has become ubiquitous, it is also a very vague and broad concept. It encompasses a wide array of different mechanisms, which muddle the conceptional clarity. In the context of this book, it refers to the separation of state, society, and private sector. Each of these aspects requires further clarification. The government consists of the institutions of the state at all levels from the smallest local unit to the central authorities. It includes official policy-making and implementation as well as the enforcement and monitoring institutions that are needed to achieve the latter. While the analysis of governance has emphasized actors beyond the state, I think it is of crucial importance to study the institutional changes within the state because of the great implications on the whole structure. As I will explain in the next section, the state can be conceptionalized in the form of different competing actors which seek to either enhance or weaken institutions. The primary goal of reformers is to strengthen the capacity of the environmental institutions, which would enhance their power and increasingly entrench them thus weakening the opponents.

Institutional Change and Evolving Governance

Governance has been described as an approach to study institutional change but, in fact, it provides very little about the processes of how centralized top-down processes are devolving into distributed pluralist mechanisms. In public administration, it has been argued that this has been a deliberate process which accompanied the new public management reforms that were introduced in the West during the 1980s and later spread to countries in the developing world (Kjaer 2004). This demonstrates the importance of political agency in the slow transformation of the institutions. At the same time, the reform process was not a sudden shift but consisted of gradual modifications that have occurred over time. In order to conceptionalize this transformation, the analysis builds on a theory of gradual institutional change, which identifies groups of change agents and accompanying change processes (Streeck and Thelen 2005; Mahoney and Thelen 2010). In order to adapt the theory to the changes of the development of the environmental state in Vietnam, the discussion

will first focus on the reformers and their opponents before explaining the various strategies that are associated with the actors.

Institutions involve both defenders as well as their critics. The theory of Mahoney and Thelen (2010) focus primarily on the latter group as their target of analysis which they regard as principal agents of change. For this, they identify four different types of actors which are called insurrectionaries, symbionts, subversives, and opportunists (Mahoney and Thelen 2010). The first group is the most radical because it seeks to undermine the existing institution while refusing to follow its rules. This could apply to those Vietnamese officials who blatantly ignore the rules of the environmental state. However, in most cases, they are symbionts, actors who want to preserve the institution but do not adhere by its rules. They do this either for private gain or to promote their interests by using the rules in ways that deviate from their original intent. Few if any of the reform opponents can be described as subversives who follow the rules of an institution but seek to displace it. This kind of approach is not realistic in regard to the environmental state because there is no alternative other than to ignore it. Finally, the opponents to the environmental institutions include many opportunists, which are the most ambiguous group because they are mainly driven by their own interests, and their actions are less predictable. They are, however, open to the development of incentive structures and thus can be co-opted into the reform process.

While the model focuses on institutional opponents, it also suggests that the defenders of the institution cannot be classified as change agents. As such, the theory largely ignores actors who are interested in preserving the institution while also following its rules because they are supposedly not responsible for institutional change. This is, however, problematic because it is based on a static understanding of "status quo," which implicitly suggests that the perpetuation of an institution constitutes an absence of change. As such, it is closely linked to the institutionalist literature that has studied the persistence of institutions. However, it is incorrect to assume that the continuity of an institution automatically equates to a lack of institutional change simply because it continues to exist. In fact, defenders of institutions also constantly need to make changes to the institution to keep it relevant. This group of actors will be called the reformers because they seek to preserve the institution by modifying it

Table 2.1	Institutional	change	agents
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Institutional change agents	Associated change process	
Insurrectionaries	Displacement	
Symbionts	Drift	
Subversives	Layering	
Opportunists	Conversion	
Conservatives	Exhaustion	
Reformers	Adaptation	

Source: Adapted from Streeck and Thelen (2005)

according to changes in the external environment. A reformer will constantly seek to improve the institutional rules and regulations in order to strengthen the institution and thus guarantee its relative stability. Many of the environmental officials in Vietnam, who are actively pursuing the reform agenda, can be considered part of this group. However, there are also those who can be called conservatives because they seek to preserve the institution without making changes despite the need for them. Because the environmental state is relatively young, there are few conservatives involved. Nevertheless, they are prominent in the wider political system when it comes to changes to the state—society relationship or the role of businesses (see Table 2.1 for a full list of change agents).

These six groups of actors can be linked to different forms of change processes which can be described as displacement, layering, drift, conversion, exhaustion, and adaptation based on the terminology of Streeck and Thelen (2005) (see Table 2.2). Displacement describes the complete replacement of an institution with a new one and is also most commonly perceived as a radical change. To some extent, this has happened during the time of doi moi when many fundamental reforms took place, including establishing market-based principles and an increasingly autonomous society which are crucial for the more gradual reforms described in the following chapters. Layering occurs when rules are added to an existing institution thus changing its character over time. This has happened in Vietnam when lawmakers do not change existing laws but rather add new legislation, which results in the many overlaps that exist in the current institutions making it more difficult to effectively implement environmental regulations. Conversion is another potential risk in Vietnam when existing rules are interpreted in

Table 2.2 Institutional change processes

Process of institutional change	Brief description
Displacement	Complete replacement of an institution
Layering	Rules are added to change the character of an institution
Drift	Gradual undermining, e.g. deliberate disregard, of the institution
Conversion	Institution is used in a different way to alter its character
Exhaustion	Institutional decay and breakdown
Adaptation	Institution is modified to reflect changing external conditions

Source: Adapted from Streeck and Thelen (2005)

new and altered ways. This is a constant problem because laws are often vague and the legal system not independent from the state. However, currently the most common threat to the development of environmental institutions is called drift, the gradual attempt to undermine institutions. While Vietnam's environmental institutions have become advanced, reform opponents have deliberately disregarded them, essentially rendering the institutional reform process meaningless. Last but not least, there is exhaustion, a process of institutional decay in which the behavior of the change agents leads to the eventual breakdown of an institution. Even though later work including Mahoney and Thelen (2010) exclude this process because the outcome is a fundamental institutional transformation. Exhaustion can be a slow process which is the result of the inability of an institution to adapt to changing conditions, for instance, because political actors want to defend their turf (Van der Heijden 2014). This brings us to a sixth and final process of gradual institutional change which will be called adaptation and has so far not been discussed in the literature on gradual institutional change. It, however, is a very important process which occurs when an institution adapts to constantly changing external conditions to remain relevant. As a consequence, the nature of the institution changes over time. The process of adaptation also includes attempts to build a new institution and defend it against potential institutional opponents. In other words, as the institution seeks to expand its mandate, it needs to react to any challenges that arise as a consequence of potential opposition.

This adapted model of institutional change provides important insights into the evolution of governance in Vietnam. In terms of change agents, the institutional reformers are in a dominant position as the institution building enjoys overwhelming legitimacy. As the next chapter demonstrates, they have been able to develop a sophisticated legal framework while also improving the environmental agencies. Moreover, their efforts have concentrated on increasing their influence, for instance, by making use of environmental data which is drawn from increasingly sophisticated research institutes. The development of think tanks such as the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) inside the MONRE is a good example for this. Reformers generally seek to make use of a process of adaptation in which rules are improved and implementation mechanisms are assessed. Clearly, this also involves some form of layering but without a fundamental change to the goals of the institutions. At the same time, however, reformers are faced with a strong opposition. As Mahoney and Thelen (2010) make clear, the balance of power and conflicts over resources are important factors. Reformers enjoy control over the discourse, which constitutes a high veto potential against any explicit changes to the institutions. As a consequence, there are hardly any insurrectionaries or subversives while opponents to the institutional development can be characterized mainly as symbionts, opportunists, and conservatives. Symbionts dominate because rule conformist behavior is rare, particularly in regard to the implementation of environmental law. They are likely aligned with a high number of opportunists, who follow rules when it suits their interests. Finally, there are also many conservatives who support the environmental state but are reluctant to allow more fundamental changes to the hierarchical governance model because it could threaten the one-party state. Because of the dominant discourse of environmental preservation and the high level of discretion at the local level, institutional development has thus been mainly threatened by drift.

The existence of opponents generally inhibits the consolidation of the institutional reform process but does not undermine it. In fact, the official sanction for the institutions creates significant momentum for reformers. For instance, the inability to find polluters criminally accountable has allowed companies such as Sonadezi, a state-owned enterprise, or Vedan,

a foreign-invested corporation, to illegally release polluted water with relatively minor consequences (the cases will be discussed in more detail in Chap. 6). While both companies paid fines and had to provide compensation, this occurred after a long and protracted struggle. In the case of Sonadezi, the illegal activity did not have any serious consequence for the head of the corporation, who is still a member of Vietnam's National Assembly. The learning process from these instances demonstrates that reformers were able to gradually strengthen the institutions, which happened, for instance, by strengthening the ability of the government to bring polluters to court. As a consequence, gradual institution building is the most likely consequence. This interaction is thus at the heart of the evolving governance structure. In other words, the new institutional structures represent a reconfiguration of power within an existing system of social organizations and actors. Along with the formalization of the institution, reformers can make use of the discourse that helped create the institution to entrench it and strengthen its power vis-à-vis its opponents. As North (1996) argues, institutional change is, in part, the consequence of competition between different organizations over their existence as well as their influence. However, it would also be wrong to see the individual organization independent from the rest of the institutional network. In fact, a ministry, for instance, is limited by its overall standing within the system, which is reflected in the amount of available resources that it has at its disposal as well as the relative importance of other competing discourses that seek to significantly curtail its power. The speed and direction of the institutional change, finally, depends to some extent on the strength of the opponents. Stronger enemies may obfuscate the impact of institutions even when there is overwhelming public support for the institution.

The process of institutional change can thus be described as a constant struggle over the content and influence of the institutions. While it is important to analyze the actors in this process, this does not happen within a vacuum but within an already existing political system. For this reason, it is necessary to determine how reformers and reform opponents interact with the processes of the political system and how this shapes the institutional transformation. The next section thus seeks to complement the actor-centric perspective with a discussion of the political system.

Enhancing the Institutional Capacity of the Environmental State

In order to understand the institutional reform process, the analysis of the institutional reformers and their opponents needs to take the interactions within the political system into account. In Easton's model, the political institutions are the structures of the state which dynamically interact with inputs, outputs as well as the procedures which lead to its persistence (1957). While it thus shares with institutionalism the bias toward durability rather than development, it draws attention to the need to conceive institutional change as an organic process which constantly reacts to external factors. It thus affects the decision-making of the various actors as well as their influence. While it would be possible to theorize on the different effects, I will restrict myself to the reformers, who want to improve the institutions and make them more effective. This is done because this book is primarily interested in whether and how Vietnam's environmental state can become more effective.

An effective system is one which transforms inputs into outputs and uses the feedback generated from those outputs into new inputs (see Fig. 2.1). In terms of inputs, one can be distinguished between demands and support. The former arise from society in response to issues that can come out of the environment or be situational. The latter suggests that demands alone are not sufficient but require supporters within the political system. From the perspective of state capacity, the ability to adequately respond to these demands is crucial. As it does so, it also increases support for

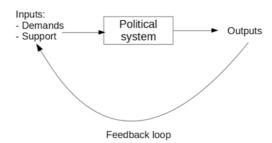


Fig. 2.1 The political system. Based on Easton 1957, p. 384

the political system as a whole. Understanding this part of the process is important as the legitimacy of institutions is crucial, particularly for institutional reformers, who seek to strengthen the environmental state (Fukuyama 2013).

The most crucial aspect for a functioning political system is the ability to produce effective outputs. This is reflected in the state's capacity to successfully implement its policies as well as in the provision of services. Generally, the demands on the political system will increase as the country's economy develops, which means that a solution that worked at a low level of income will no longer suffice at a higher level. This leads to increasingly diverse interests and thus has often been accompanied by calls for greater democratization. As the government fails to provide the outputs that are expected, the regime loses in legitimacy. This demonstrates that the feedback loop, which translates the outputs of the political system into inputs, is an essential part of state capacity. As the complexity of problems increases, the limits of the top-down approach become apparent. The state often fails to provide adequate solutions and it therefore becomes necessary to involve a diversity of stakeholders.

In terms of outputs, it is useful to turn to Fukuyama's (2004) distinction between the scope and the strength of state power. The former refers to the extent of the government functions while the latter refers to the ability to implement existing regulations. His paper aims to counter the common trend to downsize the government across the board. In fact, the state's strength is key to achieving positive developments and a weakening of the institutions would be detrimental, particularly for developing countries. At the same time, many states tend to extend their scope far beyond their own strength. This is the case in Vietnam, where the state aims to solve all of the problems with increasingly detailed legal frameworks. However, will be demonstrated in the following chapters, the state lacks the strength to actually implement its extensive system of laws and regulations. As the state fails to fulfill its own targets, it leads to institutional drift that weakens the reform process.

Outputs can become inputs again as political actors have to modify their approach in regard to the outcome of policy. This constitutes a feedback loop which is based on the assumption that policies should be seen not only as the laws that are written but also constitute of attempts to implement these laws through administrative guidelines or other mechanisms. Hence, "(t)he political effects of policy implementation, in this view, can matter for a society at least as much as the social and economic impacts that scholars typically study" (Moynihan and Soss 2014: 320). The policy implementation process significantly affects the feedback mechanism and thus the demands placed on the political system. Success or failure of new policies constitute important factors in the process of gradual institutional changes. For the reformers in Vietnam, the failure to implement environmental rules has strengthened their mandate and put greater pressure on institutional opponents.

In addition to inputs and outputs, it is also necessary to determine the bureaucratic procedures, which can be understood as two opposite ends of a spectrum between patrimonialism and meritocratic rationalism. On the one side, the system is marked only by relationships between patron and client, while on the other it is based on decisions which are made purely based on whether they are the better solution. Neither of the two can exist fully but systems that are closer to the latter part of the spectrum are considered to be more effective because they are based on established rules. In socialist systems, such as Vietnam, the rationalization of the bureaucracy also comes with a de-emphasis of ideology in the selection process. In other words, the ideal bureaucracy is a clearly defined system which is relatively transparent as well as consistent and fair. This is important for institutional reformers because an effective environmental state relies on the rational implementation of rules regardless of whether a polluter is well connected or not.

Finally, although the primary concern of this book centers around the institutional reforms, it is important to reflect on the nature of the structures of the political system. In order to determine the extent of the power of institutions, it is helpful to draw on Michael Mann's concept of "despotic" versus "infrastructural" power (Mann 1984). While the former rests primarily on coercion for the enforcement of laws, the latter suggests the ability to gain voluntary compliance from both state actors and society, which is clearly the more effective approach. In terms of the bureaucracy, Fukuyama (2013) argues that greater autonomy of lower-ranking officials enhances the policy implementation. As local officials are often better able to understand what is required in a certain circumstance, they

can adapt the general directions from the central government to their particular context thus enhancing the efficiency of the policy implementation. Giving local officials a higher amount of discretion, however, only works when local officials do not intentionally or unintentionally contravene the goals of the center because this would result in the failure to correctly interpret government policy, and in terms of institutional change, it would contribute to drift, the hollowing out of the institutions. This is particularly pertinent in less-developed institutional contexts when it is difficult for the central authorities to trust local officials. For this reason, Fukuyama suggests that the autonomy of local officials should coincide with the extent of the strength of the central state institutions. In his opinion, each political system needs to find an appropriate equilibrium between autonomy and institutional capacity. This, however, needs to take into account that central drivers of institutional change are political actors with specific interests that are not necessarily aligned with improving the institutional capacity.

From this perspective, reformers who are interested in increasing the power of the environmental state need to enhance their own infrastructural power over time. One part of this process is to improve the bureaucracy, which, however, is a very slow and difficult process because it is a constant struggle against vested interests that profit from the current situation. Another option reformers have used is to strengthen actors outside of the bureaucracy. This has meant, in particular, increasing the awareness of the society for environmental issues. Not only does this theoretically increase the voluntary compliance of environmental rules by the people but it also creates pressure for continuous institutional reforms. The growing environmental awareness results in stronger demands on the political system to deal with the serious environmental crisis which, in turn, strengthens reformers and weakens institutional opponents.

Civil Society

Reformers are aware that environmental governance must mean more than purely enforcement of environmental regulations. It is not sufficient to only strengthen the institutions of the state because the effective implementation of policies needs the active support from society. Effective institutionalization thus entails that the rules become deeply embedded in the society which is reflected in the development of an environmental consciousness that influences the behavior of people. For example, Vietnamese youth groups supported by two NGOs, Centre of Live and Learn for Environment and Community (Live & Learn) and the Centre for Education and Development (CED), have promoted the use of buses in order to reduce the massive pollution as a consequence of the growing number of motorbikes. Aside from taking the bus, the youngsters have also developed a map of the whole country that details the available public transport (Nguyen VN 2013). In discussions with local governments and bus companies, they actively campaigned for improvements in the bus network which would make it easier to convince people to switch. This form of voluntary activism is at the heart of civil society and becomes particularly important for the solving of complex problems, such as sustainable development.

The highly popular concept of civil society has many different definitions and no consensus in the academic literature has emerged. As a result, analyses using the term often come to very different conclusions, which can even be contradictory (Lee 2004). Most definitions of the term incorporate the idea that civil society is a sphere between state and market (Alagappa 2004). For pragmatic reasons, the analysis then concentrates on any formal social organization such as NGOs. It is, however, not easy to decide which organizations to include because many interest groups are advocates for the market while many social organizations are more close to the state than society, particularly in non-democratic countries. Moreover, most scholars usually also exclude uncivic organizations, such as those which promote violence or racism (Weiss 2008) although not all do (Carothers 1999). The term has only recently found a renaissance in discussions of the democratization in Eastern Europe. It was also adopted by scholars and advocates of the "good governance" approach, which stressed the need for the involvement of society.

One key strand of civil society is the liberal approach, which stresses the independence of the society from the state. Activists are able to organize around a certain issue and influence the government with few restrictions. This requires, of course, not only the right to form organizations but also sufficient freedom of speech and assembly to exert pressure on the government. In addition, there must be rule of law which governs the interactions and restrains the state from undue interference (Weiss 2008). By this narrow definition, civil society is closely tied to democracy and cannot exist in non-democratic regimes. However, some of the features of civil society exist in many authoritarian countries, which has led to the question whether this could be the early seeds of democracy. Buoyed by the fact that some authoritarian regimes were brought down by bottom-up mobilization, there has been an extensive literature on the connection between civil society and political change, including democratization (Alagappa 2004).

One indicator for civil society could be the number of protests which, in regard to the environment, usually happen in response to severe pollution from a factory or other source. Particularly, modernizing authoritarian regimes such as China and Vietnam have seen growing community activism that has sometimes been violently opposed to controversial environmental projects. This form of activism has, however, remained highly localized and thus has been described as not-in-my-backyard (NIMBY) protest movements which on occasion have influenced local governments (O'Rourke 2002; Van Rooij 2010). For instance, the siting and operation of landfills can draw large protests from the local communities who fear for their health. As a consequence, "siting a new landfill has now become a major challenge for large cities in Vietnam" (Tuan and Maclaren 2007: 427). Moreover, due to the serious air and water pollution, demonstrations frequently erupt during the operation as the repeated aggressive protests in Phuoc Thoi Ward of Can Tho City in 2014 demonstrate. Due to an increase in waste, the situation had worsened at the beginning of the year which drove hundreds of people onto the street to block the garbage trucks from entering the facility (Pham Tam 2014). In general, environmental activists have, however, preferred to follow strict government rules and avoid the type of contentious strategies pursued by these local activists (Johnson 2010). This demonstrates that there is a divide between formal organizations and informal and largely spontaneous local protest movements.

Despite the lack of freedom in authoritarian regimes, societal actors have gained some autonomy over the years, particularly in response to economic liberalization. Civil society, as understood in terms of an independent sphere between state and market, is thus emerging in these regimes but it still exists only in a diminished form. The degree of autonomy of these organizations is precarious and depends to some extent on the state's largesse and the ability to raise funds outside of non-state sources. Even a diminished form of civil society can have significant influence as many authoritarian regimes, including Vietnam amply demonstrate. A growing number of organizations have been formed that act more independently from the government than before. This includes a range of actors from almost fully independent organizations such as People and Nature Reconciliation (PanNature), who are only linked through registration to the government, to government organized NGOs such as the Vietnam Association for Conservation of Nature and Environment (VACNE). The latter, however, enjoys budgetary autonomy and thus can act more independently than mass organizations, which are directly controlled by the government. Instead of arguing for a binary relationship, civil society activism can thus be seen as a continuum, in which we have full independence to no independence at all. To some extent, this is reflected in the extent of voluntarism in these organizations, which sets them apart from state-run organizations which act on the orders from the government with the goal to influence society from the top.

While the term civil society is still problematic for the Communist regime, self-organized activism has not only emerged but even spawned networks which allow disparate non-governmental groups to cooperate with each other and to combine their meager resources to more effectively deal with certain issues. The networks facilitate cooperation with the government and international organizations. As such, it is important to analyze to what extent NGOs in Vietnam have developed networks and how they interact with other actors. Successful examples of networks are the Vietnamese Non-Governmental Organizations and Climate Change (VNGO&CC) or the Vietnam Rivers Network. Because networking enhances the capacity of societal actors, they can also become a threat to power holders. This is especially the case when networks become too powerful for the ruling party to control. A good example of this happened during the anti-Bauxite campaign when environmentalists found support in unexpected areas. Not only did it involve powerful government

officials but also nationalists and democracy supporters which sided with the movement. As a consequence, the movement threatened important economic interests and thus became a danger for the government, which used measures to suppress the activists.

Market-Based Governance

The failure to effectively enforce environmental rules has led reformers, with the active support from international organizations, to adopt market-based approaches to entice businesses, which tend to be opposed to substantial reforms, into compliance. The principle of market-based governance is fairly straight-forward. Instead of using only regulations, the environmental state aims to utilize the mechanisms of the market economy to its own advantage. Because companies in an ideal-typical market generally act according to the principle of profit maximization and environmental technologies only produce costs and very little benefits, they are normally the largest opponents of environmental regulations (Lemos and Agrawal 2006). To overcome this, policies are developed which seek to make companies realize that environmental protection can be in the interest of the company. For instance, the state could seek to increase the price of natural resources to create incentives to switch to cleaner sources of energy.

The ability to make use of the market is deeply embedded in the concept of sustainable development, which seeks to include a long-term perspective into company planning. While a company can gain significant profits now, if the environment is seriously degraded, it will eventually also suffer. In order to develop sustainable, natural resources should not be exploited to such an extent that it becomes depleted. In the official definition, development should meet "the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, p. 43). Essentially, companies need to become responsive corporate citizens in order to secure their own as well as the society's future.

Not surprisingly, the rapid economic reform process in Vietnam has spurred a belief in the effectiveness of market solutions. In addition,

interest in market solutions has been in part driven by the hope that they could provide a solution in face of the very weak enforcement of environmental regulations. Reformers use these approaches to overcome the weak institutional capacity. Despite being only partially economically liberalized, Vietnam has become a test bed for many of these types of mechanisms. Obviously, this attempt has raised questions about how these mechanisms work in this hybrid system and whether they are effective.

Basically, in the context of this book, it is useful to distinguish between two different types of market-based governance approaches: incentive-based and voluntary (see Table 2.3). First of all, reformers have sought to create incentives to overcome the opposition from businesses, which relies on the use of market incentives. There are a number of different ways in which this can be done, for example, the use of taxes, subsidies, and charges for natural resources. When the prices for certain products increase, companies are more likely invest more in environmentally-friendly technologies or to reduce the negative impact on the environment. For example, the Vietnamese government levies an environmental tax on gasoline. This idea was first introduced by the Vietnamese prime minister in 2004 and adopted as a separate law in the Law on Environmental Protection Tax in 2010, which came into effect in 2012. In theory, this could motivate more environmentally-friendly technologies but overall the government mandated price for fossil fuels remains relatively low.

Much attention has also been paid to the development of markets in which environmental benefits are traded. While there are many different forms, Vietnamese reformers have been particularly interested in the idea of "PES," also known as "payments for ecosystem services," which has shown success. It seeks to create incentives for landowners to refrain from

 Table 2.3
 Market-based governance approaches

Type of approach	Brief description
Incentive-based approach	Government-based; includes taxes, subsidies, and charges for resource usage;
Voluntary approach	Company-based; includes labels, agreements, and certificates

exploiting their own land. However, unlike in the other approach, the people who benefit from the conservation have to pay a certain amount which constitutes the money needed for the incentives. Clearly, the fact that it includes both the collection and distribution of money makes it the most complex approach and requires a very high degree of institutional capacity.

Secondly, reformers have sought to create conditions that can achieve voluntary environmental behavior. This includes on the one hand attempts to promote environmental protection at the company-level, for instance, as part of the CP initiative, which seeks to convince companies of the advantages of resource conservation, and on the other, it also refers to the usage of certifications and labels (Lemos and Agrawal 2006, see Chap. 6). The key of CP is to create conditions that make it beneficial for a company to be environmentally friendly. It raises the awareness among companies about possible savings from green technologies and, for instance, involves attempts to demonstrate how the reduction of waste could reduce production costs. While essentially voluntary, the analysis of company operations can prove to be a win-win situation for the company and the environment. Labels and certifications respond to growing demands among consumers for buying sustainable products in many developed countries. Two examples can help illustrate this approach in Vietnam: ISO 14001, which requires companies to establish environmental management procedures and the Forest Stewardship Council (FSC), which promotes sustainable forests. In regard to the latter, there are presently two pilot projects in Vietnam, in Vinh Tu (Quang Tri Province) and Huong Son (Ha Tinh Province) to adopt the label. Overall, the project is still in its early stages and certification is proving to be quite difficult.

In the context of Vietnam, there is the question whether the partial market economy could be a significant obstacle to introducing any kind of market mechanisms, which were developed in very different contexts. The state still retains ownership over the most important industries and the banks even though they increasingly act according to market principles. The dominating role of the state in the economy could be a threat to the operation of the market as the actors associated with the state could attempt to manipulate the market to their advantage. In regard to

environmental politics, it is necessary to probe whether the state's control over industries as well as the close linkages between the government and industries could prove to be a serious obstacle in regard to monitoring as well as enforcement of regulations.

International Organizations and Institutional Reforms

The process of institutional change is also influenced by external actors. Globalization has not only increased the problem of environmental destruction through the international supply chain, but also spurred the emergence of worldwide movements which try to deal with that fallout. A host of actors have taken up the task of contributing to the mitigation of the negative consequences of unbalanced transnational flows of trade in which developing countries have become the site to global pollution has been outsourced. There are now a wide variety of organizations including international donors, bilateral and multilateral organizations, regional organizations, international NGOs, and even multinational environmental companies which provide inputs such as financial resources, manpower and ideas to directly influence the institutional development from outside. This can potentially strengthen the reformers within the current system and create additional impetus for reform. International organizations have not only pressed for more environmental protection but have also promoted a model of good governance that has been developed at an international level. On the downside, external assistance can also supplant the lack of institutions and thus inhibit the reform process. For instance, when certain innovations depend on outside resources or even manpower, they not only are unsustainable beyond the project timeframe but also can reduce the urgency for reform.

Despite the prominence of international organizations, very little academic attention has been paid to their influence on domestic politics. This may be surprising but scholars who study these organizations generally focus on the international arena while those who study national politics only marginally consider the role of foreign organizations. The

only exception to this is the literature on the "second image reversed" which has sought to evaluate what impact international relations have on domestic institutions (Gourevitch 1978). For instance, Andonova (2008) analyzes the impact of the climate regime on Russian politics by reflecting on three different aspects: the socialization of norms, capacity building, and the redistribution of resources. The first deals with the diffusion of knowledge through epistemic communities, networks of experts, and norms which are spread with the help of advocacy organizations. The second aspect concentrates on foreign assistance to the building of institutions and thus relates directly to the public administration. Finally, the last aspect deals with the impact of foreign assistance on the distribution of resources. By providing financial assistance to some interest groups, foreign organizations can potentially shift the balance of power.

The "second image reversed" has some important insights into the role of international organizations but it does not capture the full range of potential influence. In terms of environmental governance, it is necessary to conceptionalize foreign organizations as a part of domestic politics. They are, after all, not just an external force but political actors in their own right. The wide array of groups have pursued quite different kinds of strategies in their attempt to help developing countries. In regard to environmental governance, they have shaped the institutional development, the emergence of a civil society, and the involvement of businesses through, for instance, the use of market-based approaches. From the perspective of the institutional reform process, these organizations have an impact on the change agents on the various elements of the political system such as the inputs, outputs, and political procedures.

International support has played an important role in shaping the policies and institutional arrangements of the environmental state. From the input side, it is possible to distinguish between influence on the demands as well as on the support. The former includes both voluntary commitments, such as the signing of agreements or requirements which are imposed for instance through trade conditions. The latter includes policy advice, financial support, as well as organizational support, like the provision of conferences and workshops. This demonstrates that the potential impact of international organizations on the input side is significant.

It is particularly important to understand how foreign assistance influences policies and institutional development. This can be achieved by drawing on theories of policy learning and policy transfer. According to Dolowitz and Marsh, a policy transfer is "the process by which knowledge about policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system" (Dolowitz and Marsh 2000, p. 5). Vietnam's political decision-makers have become open for solutions that have succeeded in different contexts and voluntary policy learning has ensued (Stone 1999). The idea to transfer policies stems from the fact that many countries of the world are faced with similar problems involving economic development and environmental degradation. In particular, late developing countries like Vietnam or China hope to profit from the experience of early developers to improve the development process and avoid earlier mistakes. This makes sense because the costs of developing entirely new solutions are much higher than to profit from the experience of other countries. Despite this simple logic, policy transfer is anything but easy because of the many differences between countries including culture, geographical location, size, and more complex differences such as the political system and the institutional context. The Vietnamese government has established a number of think tanks such as the ISPONRE, which closely analyzes successful cases abroad with the help of international experts and study tours.

The role of foreign organizations in this process is largely seen as passive. In fact, Evans suggested that indigenous forces should be driving the policy transfer in order to avoid "inappropriate policy transfers." This, however, is a normative prescription and may not reflect the analytical reality. For instance, the Vietnam Provincial Environmental Governance Project (VPEG) sought to enhance the environmental state at the local level in eight provinces but some of the aspects of the project were driven by foreign experts. As they were largely outsiders, they faced the problem of understanding the informal political processes. While the project made significant progress in introducing a new approach to industrial pollution management, questions about the long-term impact were raised when the project was concluded following the termination of Canadian

support. Only those aspects which were fully localized are likely to have had a deeper impact.

In addition to individual projects, policy transfer has also occurred through policy-transfer networks which have developed to facilitate the exchange between international organizations and the government. These networks generally differ in terms of membership, integration, resources, and power (Evans and McComb 2004), and the extent of influence then depends on a number of factors. First of all, the influence is shaped by the size of the network, in particular, in terms of how many organizations are involved. However, the pure number is not sufficient and it is also relevant to determine how closely the different organizations are integrated in the network. The amount of resources available reveals the extent of influence the network has. It is important to ascertain how much power it has, which is reflected in the degree of access to the decision-making process (Ibid.). Finally, it is also necessary to estimate the balance of power within the network between international organizations and domestic actors. In the context of the environmental state in Vietnam, the most powerful network exists between donors and the government. Although its primary focus is on developmental aid, the focus has recently shifted toward the promotion of green growth. Moreover, international NGOs have also become involved in many networks but the environment is only the main concern in one network which deals with the problems of climate change.

While the influence of international organizations on the input side of the political system is significant, they play an even greater role on the output side. In fact, most of the financial assistance focuses on the achievement of certain environmental goals. International organizations are active in many projects from helping the government to implement environmental policy to providing funding and/or services that directly enhance the capacity of the environmental state. The reason for this is the desire to achieve tangible results that justify the provision of external assistance. This is particularly important for NGOs whose members and supporters want to know what an organization has accomplished.

Even though providing actual benefits is always desirable, outputoriented assistance can have negative side-effects on the institutional development. As the provision of assistance involves changes to the resource distribution, international aid may reduce the urgency of political decision-makers to find indigenous solutions. In the most extreme, foreign organizations take over tasks which local governments should provide. Less direct but nonetheless problematic is when many of the developmental projects rely overwhelmingly on foreign assistance. Because foreign aid is generally linked to time limits, the sustainability of many of the institutional innovations is often threatened. This is especially the case when institutional reformers in the political system are unable to gain financial support for their continuation from other actors. This situation provides a rare opportunity for insurrectionaries to arise and undermine the institutional progress.

Finally, it is necessary to consider the influence of international organizations on the political process. This includes changes within the way the state is organized. The goal is to enhance "good governance," which in broad terms has been identified as effective, equitable, participatory, transparent, and accountable rule. Clearly, it includes a vast array of aspects that are important for the political process. Particularly, there has been an interest in reducing patrimonial aspects within the bureaucracy and moving toward more rational bureaucratic structures. The support for good governance by developmental organizations has also stirred interest in promoting democracy. This is based on the notion that a system which is more open and responsive to popular demands would increase the prominence of many social concerns including the environment. However, because the international organizations clearly do not want to appear as subversive organizations that threaten the ruling elites, which would most likely result in their immediate expulsion, they have decided to only strengthen processes generally associated with democracy.

As a consequence, a significant amount of international support has been aimed toward strengthening the role of society in the political process. There have been principally two ways in which international organizations have aimed toward increasing the involvement of societal organizations. On the one hand, they have provided funding for NGOs. On the other, international organizations have also required the participation of NGOs as implementation partners in many projects. Many donors want to provide aid directly to the population and consider

the centralized hierarchies of the government as inefficient. Grassroots organizations are generally regarded as more efficient because they are able to flexibly respond to issues. While this has contributed to the emergence of new organizations and thus changed political processes, it has also had unintended consequences. Institutional reformers have responded by allowing and even promoting the role of non-state actors. The Law on Environmental Protection promulgated in 2015 specifically devotes a chapter on Fatherland organizations, socio-political, socio-occupational, and community organizations. It is particularly noteworthy that the socio-political organizations, which is the term for NGOs, are granted the right to access information, be consulted in projects, engage in their own investigations, and submitting petitions to the government. With the availability of foreign funding, many of these organizations have gained a certain degree of autonomy. The development of the societal sphere can thus not be understood without the involvement of international actors.

Summary and Outlook

In order to make sense of the gradual institutional changes that are taking place in the environmental state, this chapter has proposed a theory of gradual institutional change situated within the political system. The trajectory of this process has generally been from purely hierarchical government to which the evolution of environmental governance which has meant improvements in local government, the involvement of the society, and introduction of market-based tools to influence businesses. This development is driven by institutional reformers, who have been able to effectively control the agenda, enhanced the institutions, and the legal framework. They are, however, confronted with strong reform opponents, who are largely powerful economic interests that wield much larger financial resources and thus dominate in the political system. Despite the existence of a dominant reform agenda, opponents of the environmental state have weakened the environmental state through various ways including diluting legislation during the reform process while refusing to accept the outcomes of the process. By doing so, they have allowed institutional drift which renders the increasingly detailed environmental law meaningless.

In order to promote environmental governance, institutional reformers have strengthened the civil society, increased the involvement of businesses and relied on support from international organizations. For example, reformers have promoted new market-based governance mechanisms to gain the support of businesses, which generally tend to oppose environmental legislation that negatively affects their profit margins. In turn, these actors have also exerted influence on the institutional reform process. The increasing number of socio-political organization have made use of advocacy to influence government decision-making. Moreover, international organizations have provided much needed support for the institutional reform process. In particular, donors have contributed significant financial resources to projects supported by reform-minded officials which has helped them enhance the environmental policies as well as the state's capacity.

The next chapter will demonstrate that the environmental state in Vietnam has developed rapidly since the early 1990s. In particular, institutional reformers have contributed to a strengthening of the environmental institutions at the central and local level. Over the years, the environmental state has increased in power, become more professional and transparent. This has been accompanied by the development of an increasingly sophisticated legal framework that seeks to solve many of the environmental problems. Institutional reformers have constantly been able to increase their power by maintaining dominance over the discourse. This is reflected in environmental strategies which provide realistic evaluations of the environmental crisis and form ambitious programs in an effort to overcome very strong institutional opponents. This progress is also reflected in regard to EIAs, which are now not only deeply embedded in the law but also conducted more professionally than ever before. Despite this progress, the implementation of the recommendations of these reports is still the most serious shortcoming, which is only a reflection of environmental politics as a whole. Unfortunately, the opponents of a strong environmental state are still much more powerful than reform proponents resulting in massive institutional drift. As Chap. 4 will demonstrate, few if any of the environmental rules are properly implemented thus constituting a major obstacle toward advancing the environmental state.

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The Vietnamese Government and Institutional Reforms

In order to analyze Vietnam's evolving environmental governance since the introduction of economic reforms in 1986, it is necessary to take a closer look at the political system and to trace the major institutional changes that have occurred along the way. This chapter will focus mainly on the organization of the environmental state because an effective government that has the capacity to develop and implement environmental regulations is essential for all aspects of environmental governance. The institutional changes that have occurred are significant in both their scope and speed over a short period of time. Institutional reformers have been able to gain control over the agenda and have continuously pressured the rest of the government to enhance the institutional capacity of the environmental state. This great achievement has been anything but easy as the Vietnamese political system requires the formation of a consensus among powerful political actors for any significant policy change.

As a consequence, there are now many environmental institutions in different ministries and at all levels of government, while at the same time, there has been an attempt to consolidate environmental concerns and natural resource management within a clear hierarchical structure under the MONRE. Meanwhile, the environmental state has gained in

power and become much more professional and transparent. Data on the environmental crisis have become much more detailed and have been analyzed by governmental think tanks tasked with providing advice to the government, conceiving of environmental strategies, and playing a key role in the law-making process. The environmental law regime has become quite detailed and wide-ranging. The Law on Environmental Protection has been revised significantly since its first introduction in 1993. Considering the changes in 2005 and 2014, the modifications have occurred roughly every ten years and have followed a thorough assessment and which has resulted in ambitious environmental strategies. Along with many other laws, Vietnam now has a very sophisticated legal framework, which unfortunately overwhelms the environmental state, particularly at the local level, because of its complexity and some overlap.

A particular case of institutional reform constitutes the development of the strategic environment assessment as well as EIA processes. There have been great strides to make improvements to the process over the years and they have now become deeply embedded within the law. For instance, in 2009, the government established the Department of Environmental Appraisal and Impact Assessment which is part of the VEA to strengthen the institutional capacity for impact assessments. The department openly publishes the names of its growing number of experts on its website. Even though the number of projects that need to be assessed still places severe strains on the experts, the trend is clearly toward gradual improvement. As such, these institutional innovations can be seen as a successful institutional adaptation to mend the mismatch between policy-making and implementation. The evaluation of the environmental assessment process, however, also reveals that the obstacles toward effective environmental governance go beyond increasing capacity and require more fundamental institutional reforms.

The Vietnamese Party-State

Although Vietnam is a formally hierarchical political system in which power is still largely monopolized by the VCP, significant changes have occurred since the introduction of economic reforms 1986 which have

provided the basis for governance reforms. The greater reliance on market principles has resulted in the internal pluralization of the Party which has given rise to significant economic competition between different factions. The Party has allowed this because as McCarty (2001) points out, it will only curtail political activism when the organization itself is threatened. Environmental politics, for instance, is not threatening to the organization of the VCP and it thus grants greater freedoms than in other areas and it does seek limits on the exploitation of the natural resources from which parts of the elite profit disproportionately. Only when environmental issues rallied a broader group of people on a national level and thus potentially threatened the one-party state has the regime resorted to repression such as during the anti-Bauxite campaign and the more recent nation-wide protests against massive fish deaths which many blame on a Taiwanese steel producer.

The VCP tries to make decisions based on a common consensus among key party members. Many state agencies and government organs are allowed to comment on the development during the law-making process in order to find common ground between the competing interests. Ironically, the leadership's generally well-meaning attempt to find consensus and avoid being seen as overly dictatorial can have the adverse effect that tough legislation and goals can get diluted or made less specific while the more controversial aspects are removed (Nguyen TPL 2012). This also poses a challenge for donor organizations which want to assist the government in the policy-making process (McCarty 2001). In recent years, however, some scholars have argued that the consensus orientation is being replaced by factionalism and deep-seated ideological disagreements regarding the speed and extent of the reform process, which is no less problematic (Abuza 2001). If this reflects the reality, the various groups are most likely competing over important resources instead of dealing with common social problems that would benefit the majority of the population. As the party, however, lacks transparency and claims to be above any interest conflict, it is generally not possible to determine with any certitude what is happening.

Major reforms have occurred because of an increasing separation between the party and the state. Formally, the supremacy of the party has never been questioned by anyone despite the introduction of economic reforms because the legitimacy of the ruling elite depends on it. Ultimate power resides with the Politburo, which runs the party most of the time. It is elected by the Central Committee of the National Party Congress, institutionally the party's highest organ, which only meets every five years. The general secretary, the president, the prime minister, and the chairman of the National Assembly are all part of the Politburo. Overall, the membership in the party is relatively small with only about 3 percent of the population in its ranks (Abuza 2001). Nevertheless, the VCP is deeply embedded in every government unit and organization, including the environmental state as well as many NGOs. Figure 3.1 seeks to illustrate the dominant role within the government as it not only towers above the administration but is also interwoven through the selection process.

The importance of the party, however, appears to be declining. As Tuong Vu (2014, p. 36) has argued, "Today the evolutionary path of Vietnam's ruling party is marked by continuing decay, even though

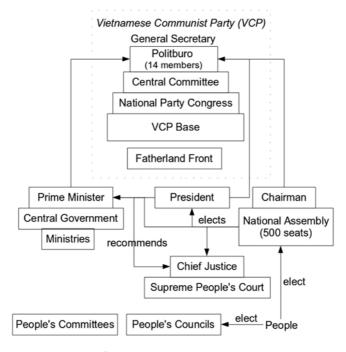


Fig. 3.1 An illustration of the Vietnamese state Source: Created by the author

decay does not mean immediate or eventual breakdown." The party believes that its existence is necessary for political stability even though it increasingly is overwhelmed by growing pressures from below. Stability has been maintained either through repression or cooptation of newly arising interest groups. Many of the conflicts in government occur between individuals or clientilistic groups which make use of informal mechanisms that are often eschewed by the formal rules. As Apter (2000) notes: "little is as it appears." This poses great obstacles for the development of a rational state administration and is particularly problematic in regard to the implementation of environmental regulations as very powerful economic interests are generally able to circumvent the state with impunity, which will be discussed in more detail in the next chapter.

While the party looms large over Vietnamese politics, the decline of Communist ideology has meant that the regime increasingly depends on performance legitimacy for its survival. This has given rise to institutional reformers who seek to improve the government's ability to enhance the state's capacity to fulfill the rising demands from the population. There has been a shift from primarily ideological decision-making to an emphasis on pragmatism and the development of a rational bureaucracy. As a consequence, the state apparatus, which is mainly responsible for the day-to-day administration has increased in prominence. This refers mainly to the currently 18 ministries, the prime minister, the deputy prime minister, the head of the office of the government, the inspector general, the governor of the State Bank, and the Committee on Ethnic Minority Affairs (see Table 3.1).

In regard to environmental politics, a number of ministries are of importance. The most important is the MONRE, which was established in 2002. As a relatively young ministry, it does not have a very high standing in the hierarchy of ministries. Institutional reformers had sought to strengthen the portfolio of the environment by separating it from the Ministry of Science, Technology, and Environment (MOSTE). The split also created the Ministry of Science and Technology (MOST), which still remains involved in environmental issues, especially from a scientific perspective. Many of the science-oriented social organizations, which are regarded as part of civil society, are registered with it (see Chap. 5). Moreover, the ministry also includes the Vietnam Atomic Energy

Table 3.1 Vietnam's ministries

	English name	Abbreviation	Vietnamese
1	Ministry of Agriculture and Rural Development	MARD	Bộ Nông nghiệp và Phát triển Nông thôn
2	Ministry of Construction	MOC	Bộ Xây dựng
3	Ministry of Culture, Sports, and Tourism	BVHTTVDL	Bộ Văn hóa, Thể thao và Du lịch
4	Ministry of Defense	MOD, BQP	Bộ Quốc phòng
5	Ministry of Education and Training	MOET	Bộ Giáo dục và Đào tạo
6	Ministry of Finance	MOF	Bộ Tài Chính
7	Ministry of Foreign Affairs	MOFA	Bộ Ngoại giao
8	Ministry of Health	MOH	Bộ Y tế
9	Ministry of Home Affairs	MOHA	Bộ Nội vụ
10	Ministry of Industry and Trade	MOIT	Bộ Công Thường
11	Ministry of Information and Communications	MIC	Bộ Thông tin và Truyền thông
12	Ministry of Justice	MOJ	Bộ Tư pháp
13	Ministry of Labour, Invalids, and Social Affairs	MOLISA	Bộ Lao động, Thường binh và Xã hội
14	Ministry of Natural Resources and Environment	MONRE	Bộ Tài nguyên và Môi trư ờ ng
15	Ministry of Planning and Investment	MPI	Bộ Kế hoạch và Đầu tử
16	Ministry of Public Security	MPS	Bộ Công an
17	Ministry of Science and Technology	MOST	Bộ Khoa học và Công nghệ
18	Ministry of Transport	MOT	Bộ Giao thông Vận tải

Agency, which assisted in the planning of nuclear energy plants. Another ministry which fulfills very important roles in environmental politics is the MARD, which was formed in 1995. It deals mainly with issues related to agriculture, husbandry, forests, and rural sanitation and it also has a Department of Science, Technology and Environment (DOSTE), which has its own website. Due to the focus on issues such as climate change, there is some overlap with the responsibilities of MONRE. The Ministry of Planning and Investment (MPI) fulfills an important function because it is responsible for major development projects and for the management of foreign aid both in the form of official development assistance (ODA) as well as financial support from NGOs. It too has a Department of Science, Education, Natural Resources, and Environment.

Moreover, similar departments have been established in the Ministry of Construction (Technology and Environment Department) and the Ministry of Industry and Trade (Science and Technology Departments).

Aside from the ministries, the National Assembly plays an increasing role in the policy-making process. The institution was elevated to the nominally highest government organ with the 1992 constitution even though its influence is still quite limited. The legislature has become involved in environmental policy-making, which is the task of the Committee of Science, Technology and Environment. The committee is supposed to assist in the development of legislation, make recommendations, and handle complaints. As the committee's responsibilities are broad, environmental issues are handled specifically by the Subcommittee Natural Science, Natural Resources and the Environment. Surprisingly, in 2014, the head of the subcommittee did not come from the environmental ministry but rather was the deputy minister of the MOST, Nghiem Vu Khai. This clearly indicates that MONRE has less influence in the legislature. In addition, the fact that a government official leads the committee demonstrates that the position of the legislature is inferior to the executive in the governmental hierarchy. While the government structure superficially suggests that these institutions are separate branches which could check each other, in reality, the executive branch usually makes most of the decisions while the National Assembly acts as a rubber stamp. Law making is a collaborative process between executive and legislative and a rejection of a decision by the latter is unlikely, though it has happened in 2010 when the National Assembly rejected a very expensive bullet train project which would have linked Hanoi and Ho Chi Minh City (Malesky et al. 2011).

Despite pressures for legal reform, Vietnam's judiciary is organized according to the socialist principle which means that the judiciary is an administrative part of the government and its only responsibility is to apply laws. It is not supposed to interpret laws, which belongs to the National Assembly (Painter 2014). In regard to environmental politics, it has so far not played any significant role as it is nearly impossible to file lawsuits. At least until the most recent revision of the law, it was necessary for a polluter to be caught red-handed in order to bring him or her to court. Even then, the polluter would rarely suffer serious consequences

and instead settle to pay a fine and possibly provide some reparations to the affected individuals or communities. Even though Vietnam has an Environmental Police, which theoretically should prosecute environmental offenders, it has so far been more active in channeling popular complaints.

The Vietnamese military, which is firmly under control of the Party, has become involved in environmental protection activities. Owing to the history of chemical warfare in the war with the USA, the military was involved in cleanup operations of seriously polluted areas many of which continued to pose serious risks to the health of the population. In 1995, the Minister of Defense established a Division of Environmental Management and in 2006 the ministry approved the Defense Strategy for Environmental Protection, which declared sustainable development to be a national interest and a strategic goal of the military. Soldiers and other employees in the military have the responsibility to keep the environment clean for which modern technology would be integrated with traditional techniques. Specific activities involve the integration of environmental concerns into military planning, the modernization of environmentally harmful military facilities, and the planting of trees on arbor day. Despite these positive aspects, the military in a 2012 assessment also acknowledged serious challenges. In particular, environmental concerns have not yet been fully included in military planning, old equipment continues to be a major hazard and commanders as well as other military personnel do not have sufficient environmental awareness (Tran 2012).

The main agency tasked with the implementation of environmental policy at the central level is the VEA which is part of MONRE. The agency was established in 1993 under the MOSTE as the National Environment Agency (NEA) with the goal to manage environmental protection activities. By 1999, NEA had 9 divisions and 79 employees (O'Rourke 2004). Today, the renamed VEA has increased significantly in size as it has an administrative office, nine central level departments, four centers for environmental data collection and analysis, a scientific institute, and a magazine. Moreover, the Department of Pollution Control also oversees three regional departments in the south and center of Vietnam. According to government sources, approximately 1000 people work for the agency.

In addition to the environmental ministry and its administrative body, the government in 2004 established the Office of Sustainable Development, generally known as the Vietnam Agenda 21 Office, under the MPI. The fact that it is under a much more powerful ministry than the MONRE gives the office a much more prominent position within the government hierarchy but the lack of a direct linkage to the relevant ministry deprives it of a substantiative institutional foundation. Its main function is to ensure the implementation of the sustainable development strategy for which it is supposed to develop programs, organize management activities, as well as coordinate with other ministries and international organizations. The office is responsible for the National Council of Sustainable Development, which is chaired by the deputy prime minister, and the minister of planning and investment acts as the standing vice chairman. The minister of MONRE is represented as one of two vice chairmen. The other is presently the minister of the Ministry of Labor, Invalids, and Social Affairs (MOLISA). Of the overall 41 members, many are deputy ministers of prominent ministries, deputy chairmen of legislative committees, societal representatives (particularly through mass organizations), industry leaders, media, and others. In spite of these structures, Lam (2012, p. 677) notes that "little action is done beyond putting it in writing." The main reason for this is insufficient funding, which makes it difficult to fulfill the broad tasks. In addition, the council rarely meets, which may be due to the large membership of high-level officials. The broad inclusive nature of the council has also led to a lack of clear leadership and members consider their participation more as a voluntary activity than an essential part of their work (Lam 2012).

At all three levels of the state, environmental protection units have been established. At the provincial levels, there are DONREs. They are, however, not below the ministry but instead responsible to provincial People's Committees (see Fig. 3.2). Similarly, Offices of Natural Protection and the Environment at district level are under the district People's Committees. At communal level, civil servants under the supervision of the provincial DONRE are tasked with managing local environmental and land issues as well as negotiating between different parties if conflicts arise (Nguyen 2012). Most provinces have, moreover, also set up an Environmental Protection Agency (EPA), which mirrors the

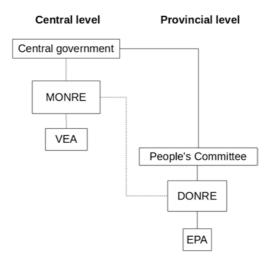


Fig. 3.2 Vietnam's environmental state Source: Created by the author

central government's VEA. Tasked with monitoring hundreds of thousands of companies, these front-line organizations only have an average of 10–15 staff.

The Growing Capacity of Environmental Institutions

While the dominant role of the Communist party has never been challenged since it reunited the country in 1976, Vietnam has experienced a number of recurrent institutional changes which include constitutional reforms, far-reaching modifications of the state apparatus, as well as fundamental policy changes. It is noteworthy that the constitution has been changed five times since it was first enacted in 1946 shortly after the victory of the Communists in the north. Following the introduction of economic reforms in 1986 with *doi moi*, the country adopted a new constitution in 1992 which, as mentioned, elevated the National Assembly to the nominally highest state organ. Moreover, the constitution also abandoned the country's claim to revolutionary ideals and instead officially enshrined the concept of developing a socialist market-oriented

society, which laid the administrative foundations for rapid economic growth while also accelerating the environmental decline. The latest version of the constitution was adopted in 2013 and took effect in 2014. It not only elevates rights and obligations of citizens but also includes a clean environment as a right that people should be able to enjoy and need to protect.

The institutions of the environmental state have been successively strengthened over the years. In 1992, the environment increased in prominence when the institution tasked to manage it was elevated to ministerial level with the MOSTE. As part of this development, the NEA was established to assist the ministry in its "unified management of environmental protection activities throughout the country" (VEA 2009). The establishment of these institutions even predated the passing of the environmental law, which came into force in 1993. This was accompanied by the establishment of environmental departments at all local levels, which were originally called DOSTEs. With the establishment of MONRE in 2002, the government recognized the importance of strengthening the responsible management of the environment. More recently, institutional reformers have contemplated whether to split the ministry again into two entities in which one would focus on natural resources and the other on the environment with the goal of strengthening the ministry's efforts in achieving environmental protection. It would, however, run counter to the general process of reducing the number of ministries (Koh et al. 2009). No decision on this issue has been made yet.

The most visible institutional change has been the growing profession-alization of the state bureaucracy (Apter 2000). At the leadership level, London observes that the rise to power of Nguyen Tan Dung as prime minister in 2006 signified a greater emphasis on policies and the selection of leaders that had higher education levels and were more attuned to market principles (London 2009). A similar trend is also reflected in the quality of government employees. While overall the bureaucracy has only grown modestly, there has been significant growth in terms of experts. First of all, while in 2005, there were 64.2 thousand people employed in professional, scientific, and technical fields in the state sector, this number increased to 71.1 thousand in 2013, which amounts to a 10 percent increase. While 2013 was also the first year this number declined from a height of 84,000 in the year before, it still indicated the growing sig-

nificance of skilled employees within the state bureaucracy (Statistical Yearbook of Vietnam 2013). In addition, the number of employees in the educational sector also increased significantly from 1 million in 2005 to almost 1.6 million in 2013. In contrast, the number of employees working for the Communist Party, socio-economic organizations, public administration, and defense as well as compulsory security has remained steady over the years and only increased from 1.56 million to an estimated 1.68 million in 2013. It is unclear what could explain the sudden rapid increase in the numbers in this most recent report. However, in total, it is clear that the trend is toward emphasizing expertise and technical skills. At the same time, there is an attempt to streamline the public administration. According to one estimate, as much as two thirds of all government staff is redundant and should be laid off (Koh et al. 2009). Reformers have tried to introduce new management principles within the administrative state.

The growing professionalization of the environmental state is also apparent in the establishment of the ISPONRE, the main advisory body for the environmental ministry, which has become an integral part of the institutional reform process. It was founded in 2006 and as of 2014 has 60 full-time staff in three different departments. The goal of the institute is to conduct policy research on environmental issues as well as to provide advice to the ministry on environmental protection and climate change. In the process, it provides support for the development of the national environmental strategy, which is the cornerstone of the government's environmental management approach. The creation of the institute changed the government's approach from merely being reactive to the environmental problems to developing long-term plans for sustainable development. For instance, the institute advocates the development of a green economy which reduces its reliance on fossil fuels. In order to find effective solutions, researchers analyze cases in other countries around the world, which includes both successful experiences in developing countries as well as advanced solutions in developed countries. Due to the eagerness to learn, the institute works closely with many international organizations including the UNDP, World Wildlife Fund (WWF), and the Hanns Seidel Foundation, to name only a few.

Not only does the environmental ministry have its own scientific think tank but the main agency tasked with implementing environmental regulations at the national level, the VEA, also has its own research organization, called the Institute of Science for Environmental Management (ISEM), which was established in 2008. According to its director, Pham Van Loi, the organization played an important role in the formulation of the environmental strategy as well as the revision of the environmental law. For the latter, an expert team of 15 people was selected to provide the scientific basis for the changes in the law. The scholars analyzed the data collected from the National Monitoring System, which flow into annual thematic environmental reports that are required by law since 2005 and have been published since 2006 (Ministry of Natural Resources and Environment 2006). The country is divided into three geographical regions, north, central, and south, which also have regional environmental research institutes that monitor a limited number of metrics. In addition, both Hanoi and Ho Chi Minh City have their own monitoring systems which measure the air and water pollution in their municipalities (Mol 2009).

The growing availability of scientific data and the ability to develop a detailed vision for the future has allowed institutional reformers to strengthen their position within the government. In part, this has been due to the ability to gain control over the public agenda and create a public consensus. The environmental reports mentioned above, for instance, provide detailed recommendations for policy change. This forces those that are opposed to strict environmental regulation to resort to more indirect means such as blatantly ignoring the new regulations, which unfortunately is still the rule rather than the exception, as I will show later. Nevertheless, the new level of awareness created by ISPONRE and other similar agencies has forced institutional opponents to allow more effective implementation of the detailed legal framework. As the Environmental Report in 2010 asserted "the failed environmental targets are a great pressure" (MONRE 2010, p. 25).

Another victory for institutional reformers has been the trend toward greater transparency. Almost all the units of the environmental state have extensive websites, which contain a range of information. This is different from China where fewer of the departments have their own presence on

the Internet. First and foremost, the organizations seek to show their legal basis as well as their organizational structure. Usually, a large part of the website is devoted to small news items. This seeks to primarily showcase the work of the ministry or department but of course is highly selective. Some organizations also provide guidance to procedures for the public but that is not necessarily the case. There is generally the option to provide feedback, which in theory could allow officials insight into public sentiments. The Internet presence of the Environmental Police primarily relies on public comments to respond to issues. The use of websites extends to lower levels of government. Local DONREs in major cities such as Hanoi, Ho Chi Minh City, or Da Nang have their own Web platforms in which they disseminate largely similar kinds of information as the central government. The Centre for Environmental Monitoring (CEM), which is a unit under the Vietnam Environment Administration (VEA), presents the most detailed amount of environmental data. On its main page, there is real-time data on air pollution in six cities (Hanoi, Kanh Hoa, Hue, Da Nang, Phu Tho, and Ha Long City) and water pollution in five locations (the pumping station of the Thai Nguyen Iron and Steel Joint Stock Corporation, the Tan Uyen hydro station in Binh Duong province, a water monitoring station in Phu Hau, Hue province; in a monitoring station in the village of Do Xa in Ha Nam province, and a water monitoring station in Vu Ninh, Bac Ninh province). The website includes additional information such as the maps of monitoring stations. However, not all the data are collected in the most seriously affected areas. Hanoi's official air quality monitoring station, for instance, is not inside the downtown area and it is thus perhaps not surprising that the extent of air pollution appears lower than that of the monitoring system of the US embassy, which is located in the central Ba Dinh District. Moreover, in spite of the great gains in regard to growing transparency, it is not easy for average Vietnamese to make use of the complex data found on many of these sites. Not many people are aware of the availability of the real-time environmental data and very few of the government's websites directly link to it. While the Internet now includes a wealth of information, efforts to bring this to a mass audience have so far been resisted. For instance, at one point, the local environmental department in Hanoi placed a digital signboard at the roadside, which was designed to show

the extent of air pollution and even had the function of a color-coded smiley. In spite of this effort, the sign never went into operation perhaps because officials became worried about rising public discontent as the display would have become a visual reminder of the massive air pollution to those passing by.

Nevertheless, it is obvious that the environmental institutions have improved significantly over time and their trajectory is toward gradual institutional adaptation. Reformers have effectively used data on the growing environmental crisis to bring the issue of a clean environment on the national agenda. As a consequence, environmental protection efforts have become a crucial part of the regime's performance legitimacy. It is thus not surprising that environmental issues have become integrated into many central as well as local government institutions. Similarly, reformers have also contributed to an increasingly sophisticated legal framework, which will be discussed in the next section.

Building a Legal Framework for Environmental Protection

Concurrent to the important reforms of the environmental institutions, there has also been significant progress in regard to the legal foundations for environmental protection despite the fact that the law-making process is generally very long, tedious, and subject to many concessions that water down the potency of the original intentions. The 1992 constitution included the greatest administrative reforms in the country. While it enshrined the country's new direction toward a socialist market-oriented society, it also enabled the government led by the prime minister to fulfill specific management functions, which included natural resources and the environment. The constitution thus stated that "(a)ny acts resulting in the depletion and destruction of the environment are strictly prohibited" (Article 29, as cited by Nguyen 2012). Article 17, moreover, gave the ownership of the resources to the people, which in theory should allow the Vietnamese people to object to any excessive exploitation of natural resources. The 2013 revision of the constitution not only requires

the state to develop an effective environmental state while encouraging environmental behavior (Article 63) but also asserts that "[e]very one has the right to live in fresh environment and has the duty to protect the environment" (Article 43).

Besides the constitution, the Vietnamese government has passed a great number of legal documents which deal with environmental issues. Based on both the socialist legal theory and the French civil law tradition, the Vietnamese legal system has a large number of different types of legal documents. The main law dealing with environmental protection is the Law on Environmental Protection, first introduced in 1993 and revised twice since with 2014 being the most recent. The law emerged from the growing international emphasis on sustainable development, which was made popular in the Brundtland Report of 1987. The government had invited international organizations into the country to help write a national action plan for environmental protection. This process created awareness for the need to develop a legal and institutional framework to realize the goals set during the Natural Resources and Environment Research Program, which had been initiated in 1981 and had involved 200 scientists (Kelly et al. 2001).

In addition to the Law on Environmental Protection, there are also other laws that relate to specific issues in this field such as the Law on Forest Protection and Development (1991, 2004), the Law on Land (2005), the Law on Dykes and Embankment Systems (2006), the Law on Biodiversity (2008), the Law on Minerals (1996, 2010), the Law on Environmental Protection Tax (2010), or the Law on Water Resources (1999, 2012) (see Table 3.2). Another important document is the ordinance, which fulfills the function of a law but differs in the way it is enacted. It is passed by the Standing Committee of the National Assembly when the whole legislature is not in session. Due to this fact, an ordinance ranks below a law but it may become one at a later stage, although this is not guaranteed. Relevant ordinances in the field of environmental politics include the Dykes Protection Ordinance (1989); the Ordinance of Resources Taxes (1989); the Ordinance of Aquatic Resource Protection (1989), the Ordinance of Radiation Safety and Control (1996), and the Ordinance of Vegetation Protection and Quarantine (1993).

Table 3.2	Major	environmental	legislation
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Year	Law
1991, 2004	Law on Forest Protection and Development
1993	Law on Land
1993, 2000	Law on Oil and Petrol
1993, 2005, 2014	Law on Environmental Protection
1996, 2012	Law on Minerals
1998, 2012	Law on Water Resources
2003	Law on Fisheries
2006	Law on Dykes and Embankment Systems
2007	Law on Chemicals
2008	Law on Biodiversity
2010	Law on Energy Efficiency and Conservation
2010	Law on Environmental Protection Tax

In order to help in the implementation of laws and ordinances, the Vietnamese legal system furthermore includes decrees and regulations as well as orders, decisions, and circulars. Decrees, regulations, and decisions provide details about how legislation should be implemented. Examples for environmental decrees are the decrees on environmental fines (such as the 1996 Decree 26, the 2003 Decree 67, or the 2013 Decree 179) or the Decree on Grassroots Democracy (1998 Decree 29). They are passed by the prime minister and thus take precedence in conflicts over circulars, which are passed by individual ministries to provide details about how to implement specific laws. This Byzantine network of different forms of legislation can be daunting for any outsider but even for those within the system it can be extremely complex. It is perhaps not surprising that it has the unintended consequence of creating overlaps and inconsistencies that make it difficult for enforcement. In addition to these problems, there are also still many loopholes and other shortcomings such as overly low fines which reduce the incentives for compliance (Fabres 2011).

The revisions of the Law on Environmental Protection can illustrate the progress of the legal development and show the ability of reformers to make regular modifications to the law in light of shortcomings in the existing law and also in light of newly arising issues. The law was first passed in 1993 and subsequently revised in 2005 for the first time, and in 2014 for the second. In the process, the law grew in length and detail in an attempt to cover all important aspects of environmental pro-

tection. From a mere 7 chapters and 55 articles at the beginning, the legislation has become a behemoth of 170 articles in 20 chapters, while the length of most articles has increased as well. There have been significant structural and substantive changes between different versions. The 2005 law required the use of environmental standards, which had been an innovation at the time. Moreover, it had introduced the idea that polluters should pay compensation for violations (Tarras-Wahlberg and Nguyen 2008).

The 2014 revision of the law again made a number of important innovations. First of all, it included more highly detailed guidelines for the involvement of NGOs and other societal players. Second, there is now a chapter devoted entirely to climate change, which recognizes the growing awareness of this extremely important issue for Vietnam, which is one of the countries most severely affected by the rise of the sea level as a consequence of higher global temperatures. Finally, the most important improvement relates to the specification of how responsibilities for environmental protection are defined. The MONRE will be the principal authority of the law and other ministries will only be allowed to implement parts of it. This is in accordance with the attempt to provide more effective guidelines for implementation thus improving the ministry's ability to hold companies legally accountable for violations.

Besides the genesis of an environmental legal framework, the development of environmental strategies is another important element in the policy-making process because they provide both an assessment of previous successes and failures as well as sketch out the goals for the future. For an overview of strategies, see Table 3.3. The first general environmental strategy was the National Plan for Environment and Sustainable Development 1991–2000: A Framework for Action, which was approved in 1990 and built on the more narrow National Conservation Strategy that had been passed in 1985 (Kelly et al. 2001). Since then, the general strategy was revised once in a decade, although the exact release was sometimes delayed. Akin to the legal development, the content of the strategy document has improved significantly over the years. The reason for this can be found in the process of drafting the document. The strategy is first written by a team of scholars as mentioned above, which submits it to the ministry for possible revision. Then it will be discussed

Table 3.3 Major environmental plans and strategies

Year	Name
1985	National Conservation Strategy
1992	National Plan for Environment and Sustainable Development
1998	National Conservation Strategy
1998	Water Resources Development Plan to the year 2000 and Tentative Development Plan to the year 2010
1998	Strengthening Environmental protection in the period of National Industrialization and modernization
1999	National Strategy for Environmental Protection 2001–2010 started
2000	Strategy for Rural Agriculture Development in the Industrialization and Modernization Period to the year 2010
2000	Agriculture and Rural Development Plan
2003	National Strategy for Environmental Protection until 2010 and vision toward 2020
2003	National Action Plan for Cleaner Production
2004	Strategic Orientation for Sustainable Development in Vietnam (Vietnam Agenda 21)
2007	Viet Nam Forestry Development Strategy 2006–2020
2011	Viet Nam Sustainable Development Strategy, 2011–2020
2011	National Strategy on Climate Change
2012	National Strategy for Environmental Protection until 2020 and Vision toward 2030
2012	National Green Growth Strategy for the period 2011–2020 with a vision to 2050

with all other relevant government actors as well as in consultation with all the local DONREs in Vietnam's 63 provinces. The document goes through two official drafts, which are discussed at a number of workshops to invite the opinions of experts from international organizations and research institutes. Overall, there is an attempt to consult the relevant parties and gain a consensus among all the participants. The consultative process is not only very slow and has led to delays in the formulation of the strategy but it also allows institutional opponents the ability to moderate the assessment of the current situation as well as the future goals. Despite this, proponents of institutional reform have been able to push through an increasingly realistic assessment as well as progressively more ambitious goals. As such, the environmental strategy has to be seen as a tool of reform proponents to further their own goal of more effective policy-making and implementation. By influencing the agenda and

gaining discursive dominance, inaction in regard to environmental law enforcement becomes increasingly difficult. This can be demonstrated in a comparison of the two most recent documents published in 2003 and 2012 respectively.

The most striking change between the different strategy documents over the years is the growing scientific grounding that has led to a much more advanced document, which is due to the establishment of the think tanks mentioned earlier. The older strategy document was still very broad and rather superficial in its approach. It states that environmental protection is "the task of the whole society" which is achieved under the "leadership of the Party" and the "management of the State" (MONRE 2003, p. 10). This shows that environmental protection still had to be framed as an ideological issue. This has changed in the most recent strategy document which does not make a single reference to the role of the party. Clearly, environmental management has become primarily the task of the administrative state.

Second, the level of detail in describing the environmental problems as well as the state's response has increased significantly. For example, although both strategies find fault with the environmental institutions, the older document describes this problem in a very superficial manner. It states that the system of environmental management institutions is still neither vertically nor horizontally completed and that there are overlaps and gaps in the responsibilities and laws as well as problems of coordination between central and local levels. In contrast, the 2012 strategy describes the problem in more than twice as many words. Aside from the institutional problems mentioned ten years earlier, the document provides examples of shortcomings in wastewater and solid waste treatment. Finally, the document highlights the important problem of lack of sufficient funding:

Investments in environmental protection by other stakeholders in society remain lower, leaving a substantial gap when compared to demand, the level of environmental investments channelled from the State budget through environmental infrastructure development projects has not been proportional to the requirements for environmental protection. (p. 66)

The text continues by suggesting to enhance the public-private partnership model as well as to mobilize resources from the society and

international organizations. This not only constitutes a significant step in the strategic orientation of environmental politics but also officially endorses the institutional development of the governance mechanisms which will be discussed in more detail in the following chapters.

In addition, the document's presentation has become much more professional. Instead of the simple, black and white layout of the 2003 strategy, the 2012 document was printed on glossy paper with colorful images in solid book format. Although most of the pictures illustrate a clean and beautiful environment, there are a few that seek to draw attention to the pollution. Two disturbing pictures which show waste next to squatter homes and black smoke billowing out in a residential area respectively are used to highlight that "(E)nvironmental pollution continues to increase at an alarming rate" (p. 64). A picture of a dried out lake with two children collecting water was selected to illustrate the problem of resource depletion. Perhaps the most haunting picture is a black and white photograph of a river lined by dead trees in which a lone man rows on a traditional Vietnamese boat. None of the pictures are dated or annotated but they are accompanied with a description of the country's enormous challenges. This seeks to primarily increase awareness for the problem, although the overall bias toward beautiful pictures tends to minimize the scale of the problem. The book includes both a Vietnamese and English version which are identical in terms of layout. This is helpful for the many international organizations that are active in Vietnam. The international cooperation extended to the development of the document from the support of international experts who provided advice to the eventual printing of the document, which was facilitated by the Hanns Seidel Foundation.

Environmental strategies are promulgated to state the goals of the government and thus have to be seen as a guideline for policy-making and implementation. In general, environmental strategies are extremely ambitious documents which set the bar for achievement very high. In fact, the expectations raised in the document are very likely to be disappointed when the next assessment is due. As a consequence, strategies always start with the acknowledgment that the goals have not been met. For instance, Nguyen Minh Quang, the minister for Natural Resources and Environment, stated in his foreword to the 2012 strategy that despite

the development of a "comprehensive legal system for environmental protection and the system of State environmental management agencies," "overall environmental pollution tends to be on the rise in many areas" (MONRE 2012, p. 47). While there have been calls to make the strategy more realistic, the goals have remained very ambitious. This is particularly apparent in the appendix which provides an implementation road map until 2015 and 2020. For instance, the rate for solid waste reuse, recycling, or energy recovery should increase from 20–30 percent at the time to 55 percent by 2015 and 85 percent by 2020. Not only has it been pointed out that statistics on recycling and reuse are very difficult to determine (Thai 2014), but also the rate of increase is very unrealistic and not based on any reliable data. In fact, it even contradicts the many challenges in regard to the management of solid waste (Ibid.).

The ambitiousness of the environmental strategy bears resemblance to the increasingly sophisticated legal framework to the extent that both are virtually impossible to implement. They are more bold policy-statements than actually enforceable legal documents, which is a common feature of the Vietnamese system in which laws generally indicate more intent than anything else. The main goal thus appears to be the attempt by institutional reformers to use laws and strategies to exert pressure on reform opponents. This is aided by the fact that the institutional development is based on scientific data which are even partially released to the public. The need to improve the environment has become a dominant discourse which is hard to oppose. In fact, it now constitutes part of the regime's performance legitimacy. As the relevance of environmental issues has grown significantly, resisting the budding environmental state becomes increasingly precarious. It is thus perhaps not surprising that, at a rhetorical level, it is virtually impossible to identify any direct reform opponents who would undermine political reforms meant to achieve so-called sustainable development, a term which reformers increasingly use in their quest to convince the powerful economic interests that environmental protection efforts are not necessarily against their interests.

The changes to the environmental law as well as the growing assertiveness in the environmental strategy are meant to tackle the virtual lack of implementation, which is the most serious problem of environmental politics. On paper, the innovations suggest significant progress.

Institutional reformers have been particularly active in revising the EIA process which will be discussed in the next section.

Case Study: Environmental Impact Assessments

One of the most significant institutional innovations in Vietnam has been the introduction of strategic environmental assessments (SEA) as well as EIA. Both approaches aim to assess the potential impact of any policy, program, or project on the environment. Vietnam has been described as a front-runner among developing countries in creating a framework for environmental assessments (Slunge and Tran 2014). The situation as well as the institutional changes has received much attention in the academic literature over the years (e.g. Obbard et al. 2002; Doberstein 2003; Hostovsky et al. 2010; Clausen et al. 2011).

In Vietnam, the adoption of this process has a relatively long history as it dates back to a time when environmental concerns did not even have their own governmental institution. The first steps were already taken before country's economic opening with a 1984 introductory course on the topic during the Natural Resources and Environmental Research Program, which brought modern environmental politics to the country (Doberstein 2003). After a case study involving the Hoa Binh Reservoir in 1986, Hanoi University started to teach it as a compulsory course in their postgraduate program on Environmental Management (Nakagami 1999). As the idea became entrenched, the government eventually passed it into law as part of the Law on Environmental Protection in 1993 after a three-year consultative process (O'Rourke 2004).

Despite the progressive intentions in the 1993 law, there were still many shortcomings with the actual administration of the assessment process. Scholars have identified a long litany of shortcomings, particularly in the implementation, which nearly made the policy innovation meaningless at the time. For instance, Phuong writing in 1996 found that there was still very little enforcement of the regulations as the political system remained highly centralized. The involvement of other stakeholders,

which is a requirement of EIAs, was not done sincerely, which curtailed the impact of the reports. While the process failed to include public participation, it also lacked in transparency which would have allowed outsiders to evaluate it. O'Rourke (2004) also added that the reports failed to cover the full scope of the issues and neglected baseline data. More importantly, the structures to monitor the process of the EIA as well as its eventual implementation were lacking. The problems were on the one hand technical in that important skills and technologies were lacking and on the other hand political as there was little effort to comply with the requirements of the assessment reports.

Due to the many weaknesses and pressure from international donor organizations such as the Asian Development Bank and the World Bank, Vietnamese reformers have constantly sought to improve the EIA process and implementation. A milestone was the 2005 Law on Environmental Protection which had a number of significant improvements, including for the first time the formalization of public participation mechanisms, enhanced clarity on the government's role as well as a method for screening as well as scoping the documents of the EIA. Not only were the roles of government agencies enhanced and clarified but local officials were also granted greater responsibility in the approval process. Finally, the law also specified which smaller projects did not require a full impact assessment before they could be approved (Clausen et al. 2011).

The most recent changes to EIAs were made with the 2014 version of the environmental law, which provides an even greater amount of detail about how EIAs should be implemented. The law, which incorporates elements from a 2011 decree on environmental assessments, reinforces both the time frame and conditions of the need for evaluating the potential consequences of any developmental projects with the exception of those which are considered "state secrets." In the present version, the assessment process was elevated to Chap. 2 from Chap. 3 in the previous law. Following requirements for general environmental planning and making strategic assessments, the law details the procedures for EIAs of major developmental projects, which includes those that require approval from the central government, are planned for nature reserves, or those which could "cause bad effects for the environment." The latter is vague, and in reality, this means that only projects of the former two are most

likely to conduct EIAs. Article 19 details the procedures of carrying out an EIA and Article 20 stipulates when the process needs to be repeated. Article 21 explains the need for consultation but also makes an exception for those projects which are in "concentrated manufacturing, trading, and service provision areas" as well as "secret projects." The main contents are listed in Article 22. The rest of the articles deal with who is responsible for verifying the EIAs, the process of verification, the approval of the report as well as the responsibilities of the project owner after receiving the approval prior to the project and the responsibilities of the approving agency.

Institutional reformers have furthermore been able to institutionalize the management of environmental assessments, which was accomplished with the establishment of the Department of Environmental Appraisal and Impact Assessments within the VEA in 2009. It has three main divisions which deal with SEAs, EIAs and the review and appraisal of environmental treatment facilities respectively. Overall, there has been an increase in manpower over the years. Currently, the department has a staff of 36 including management and support staff. Among them are 23 experts who are responsible for all of the different types of environmental assessments which are conducted at the national level (Nguyen C. 2014). This constitutes an improvement over 2008, when there were only 12 experts (Clausen et al. 2011). As a consequence, the number of assessments per expert has decreased from an average of 14 in 2008 to 11 in 2014.

Despite these improvements, the assessment process still suffers from a number of serious shortcomings which have reduced the meaningfulness of the process. First of all, despite the increase in the number of staff, the workload is still heavy and it is very difficult to properly conduct and implement all of the EIAs that are necessary at a very early stage of a project. Overall, there are currently 23 experts who in 2014 were responsible for 254 EIAs and 17 strategic assessments in addition to appraising 17 environmental protection projects and contributing to 200 planning reports (Nguyen C. 2014). The massive number of assessments makes it difficult to conduct EIAs at an early stage in the project (Clausen et al. 2011). This can give rise of conflicts of interest which can skew the reports in favor of economic development.

In addition, the process focuses much attention on conducting assessments prior to a project but not on monitoring the adherence of the conditions during the implementation of projects. Again, the main reason for this is that there is also not enough staff nor sufficient financial resources to oversee the large number of projects. MONRE's Deputy Minister Nguyen Thai Lai admitted:

In reality, our current appraisal procedures face many obstacles because investors only send their project documents to MONRE for appraisal after they were already approved by MOIT. Even though many investors had their EIA [Environmental Impact Assessment], they never seriously followed the approved EIA. (qt. in: Van Nam 2010).

The problems with expertise and overlapping interests are even exacerbated at the local level where knowledge about EIA procedures is often lacking and subordinate agencies are commonly tasked with writing the reports.

While the new regulations have made progress about public participation, the mechanisms are also still limited. The government is not required to hold public consultation meetings. There is even no requirement when the public can take part in the process and it thus often occurs only after the EIA has already been approved. The people will then be notified of the outcome of the decision and can use letters and meetings with local authorities such as the People's Communes or the Fatherland Front. Considering that the process already starts at a very late stage of the project, it is unlikely that public objections can have a major impact on any of the projects.

The latest environmental law reveals another serious omission, which unfortunately continues to allow reform opponents to weaken the process. The law does not mention any detailed provisions for monitoring a project at the stage of implementation. This is surprising considering the fact that there had already been more clarity about this is in the 2011 decree on impact assessments. This should not be taken lightly because the real problem with the EIA process so far has not only been the formulation of the assessments but the eventual adherence to the conditions in the reports. As many studies have shown, the EIA process fails to have

a significant impact because many of the conditions are ignored in practice. The monitoring of the compliance often fails because of the lack of adequate financial and personnel resources. The law furthermore does not actually require any inspections or any other form of monitoring during the implementation of the project. In a study on the construction of paper-making plants, Nguyen MD (2011) found that only 10 percent of companies conducted an EIA and even they did not follow its guidelines. For instance, even though a required water treatment plant had been built, it was not in operation. This study reveals the uncomfortable reality that non-compliance is the norm rather than the exception in the Vietnamese environmental state. The actual impact of policy innovations such as the EIA process has therefore remained minimal, which as the next chapter demonstrates, reveals the existence of powerful opponents that have successfully contributed to institutional drift by preventing any meaningful changes.

Conclusions

This chapter demonstrates that there has been significant institutional change of the environmental state in Vietnam since the introduction of economic reforms in 1986. It is possible to identify a number of major trends. First of all, while the VCP is still the most important political force, administrative and pragmatic decisions have come to play a much more important role than ideology. The reason is that the regime's legitimacy is nowadays based primarily on performance. Second, the government has also invested in strengthening its various institutions, which have a greater budget and thus can rely on more highly trained staff and increasingly sophisticated monitoring equipment. This was accompanied by the growing importance of scientific data, which have become more transparent over the years. Within the administrative hierarchy, the power of the environmental sector in the government has increased to the extent that it can significantly influence the development strategy, which now stresses the need for sustainability. Finally, there has been significant improvement in the legal framework. The Law on Environmental Protection has been revised twice since its first introduction. Each time.

the law has become more sophisticated and detailed. Overall, these changes clearly mark a discursive victory for institutional reformers who have been able to bring environmental protection as a central concern onto the national agenda.

With the help of a systems perspective, it is possible to understand how the various organizations of the environmental state have evolved over time. The constant feedback mechanism in the system has motivated policy-makers to make changes and constantly modify their approach. Both the growing environmental crisis as well as the failures in the approach has allowed proponents of reform to enhance the existing institutional structures through an incremental approach. This interdependent process reveals that organizational reforms and policymaking are intricately linked with each other. In particular, reformers have been able to enhance the capacity of the institutions of the environmental state. This is reflected in a growing professionalization of the environmental state which was accompanied by an increasing emphasis on scientific data and enhanced transparency. Together, these aspects have enhanced the power of the reformers who now have the means to pressure for greater institutional reforms. As the government relies on performance for its legitimacy, the use of data and greater transparency can be effectively used as leverage. In light of the growing environmental crisis, it becomes increasingly difficult for institutional opponents to resist.

The process of institutional reform is reflected in the constant adaptation of the legal framework for environmental protection. Revisions in the law responded to the failures of the environmental state to adequately deal with the growing environmental problems. Lawmakers were particularly concerned with the fact that the environmental situation worsened despite increasingly sophisticated law. In addition to the law, reformers also made use of environmental strategies to both make sober assessments as well as to create an ambitious vision for the future. Both the law and environmental strategies are, however, not well linked to the realities of the environmental state. Many of the aspects in the law are simply unenforcible because they are too sophisticated for local officials. Moreover, the environmental strategy is unrealistic and raises its goals too high to be achieved.

Finally, this chapter discussed Vietnam's great progress in regard to EIAs and SEAs. There have been significant improvements in terms of qualified staff and resources while the legal framework has been enhanced significantly. Nowadays, environmental assessments make up a significant part of environmental legislation, which provides details about how it should be implemented. However, the discussion also revealed a fundamental problem which underlies the institutional transformation process. It is not sufficient for laws to become more advanced or for governmental organizations to gain capacity. Instead, active support of reform opponents needs to be sought. As the dominant discourse has stressed sustainable development, they have not sought to undermine this. Instead, they have instead pursued a strategy of avoidance and outright rejection of any new environmental rules. In terms of the theoretical understanding of institutional change, this could be described as a form of drift. Unfortunately, in the Vietnamese context, there is generally a disconnect between the law making and its implementation. The next chapter will delve more into the reasons for the failures of the environmental state. This will demonstrate how opponents of stronger environmental institutions have been able to circumvent them with impunity and why solving the current impasse will require more than merely improving environmental law and strengthening the existing institutions.

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4

The Failure to Implement Environmental Policies

Despite significant progress in terms of developing a legal framework and environmental institutions, there is still significant resistance to these new institutions from strong veto players, which have indirectly obstructed the development of an effective environmental state. Environmental laws have had very little direct effect on the worsening environmental crisis as the laws are only sporadically and rarely effectively implemented. The main opponents to strong regulatory institutions and enforcement mechanisms are powerful economic interest groups which play a dominant role within the Communist party and which are seen as crucial for the legitimacy of the oneparty state. Collectively, they form a powerful opposition against any strong environmental state and are indirectly undermining the institution building by limiting the resources for effective enforcement while simultaneously failing to abide by the environmental laws and regulations. Seen from the perspective of institutional change, the strong economic interests coupled with a high level of discretion leads to drift which undermines the effectiveness of the new institutions. This chapter will show that the development of an effective environmental

state will require more than just enhancing the capacity of local officials; it will require fundamental institutional reforms that will make the regulatory state more independent of the agents that need to be monitored.

The unfortunate reality is that few if any of the wide-ranging environmental laws mentioned in the previous chapter are properly implemented. Vietnam's environmental police has failed to punish a significant number of companies for violations under the updated Law of Environmental Protection that was enacted in 2005. Of the 5000-6000 cases of law violations that are uncovered annually, only 100 have so far been criminally prosecuted (Thien 2014). Vu (2012) even asserts: "It is not uncommon that local governments interpret central policies any way they like, ignore central policy with impunity, or comply only when subsidies are provided" (p. 32). Similarly, the MONRE in its national strategy in 2012 severely criticized the capacity of the environmental state institutions. It stated that "the implementation of policies and laws on environmental protection is ineffective and has not achieved expected results. Many policies and legal norms have not been implemented or have only been implemented for form's sake; many cases have not been handled or have not been handled thoroughly; deterrent administrative and criminal sanctions have not been applied properly and strictly; and inspection, and enforcement of compliance in many areas have not achieved satisfactory results" (MONRE 2012: p. 59).

In the following, I will first introduce the powerful economic interest groups which are the main opponents to institutional reform. Then, I will turn to the conflicts within the government, which have enabled reform opponents to significantly weaken the environmental state. In addition, the lack of adequate funding has deprived reformers of important resources to make their institutional transformation meaningful. Instead, the environmental state continues to suffer from a lack of capacity. The implementation of environmental policy, moreover, suffers from a weak legal system and prevalent systemic corruption. It is thus not surprising that reform opponents have successfully allowed institutional drift to occur.

The Powerful Economic Interest Groups

Despite the ability of institutional reformers to strengthen the environmental discourse and push sustainable development to the fore, strong economic interest groups have gained control of the government and dominate in the developmental context. The success of this powerful opposition is reflected in the major complaint of environmental reformers, who lament that the overall state in Vietnam continues to prioritize economic growth in nearly all political decisions. For most policy-makers in Vietnam, growth has thus remained the most important goal of the country, which is reflected in the writing of all of the main strategic documents and laws. Tan (2012) found that economic goals always superseded social goals in the country's main socio-economic development strategy, which similar to the environmental strategy mentioned in the previous chapter is a ten-year document that lays out the vision for the country. In it, there is a strong emphasis on industrialization, which is equated with modernization. Moreover, due to the small number of references to environmental concerns, Tan concludes that "references to sustainable development could be considered lip service" (p. 21).

Instead of blocking any institutional reforms of the environmental reform process, the powerful economic interest groups, which profit from the massive destruction of the environment, have instead adopted a strategy of disregarding and contravening the evolving environmental regime. This approach has been much more effective than attempts to weaken, dilute, or even block environmental legislation or planning. The high degree of local autonomy has been especially problematic for the government's environmental management because the lack of central control has allowed local governments to weaken the implementation of strict environmental regulations, particularly those which could affect economic growth and, as promotions depend on economic performance, also career prospects of local officials. Moreover, as local DONREs are not accountable to the central government, they are subject to the capture of local interest groups which are opposed to strict implementation of environmental regulations. Not surprisingly, they have remained de-facto toothless because of a lack of sufficient adequately trained staff as well as the necessary environmental technologies. As a consequence, environmental officials at the central level frequently voice their frustration at the lack of progress at the local level.

The power of the economic interest groups is, in part, based on the fact that rapid economic growth constitutes the main source of legitimacy for the one-party state. First of all, the one-party state depends on achieving material benefits for the majority of the population. As long as people can enjoy improvements to their quality of life, which is generally expressed in material terms, the Communist Party does not need to worry about the emergence of a major oppositional force. Unfortunately, the consumerism and materialism that depoliticize the population contribute significantly to the rise of pollution as well as the mountain of waste. A second dimension of regime legitimacy is the need to maintain support between different interest groups within the small ruling elite. This is primarily accomplished by providing financial benefits to these groups, which depend on the regime's ability to provide economic growth. As Apter (2000, p. 273) points out "(t)he political consequences of growth in turn generate more problems of control. Hence, how to pay off, to whom, and under what circumstances becomes the art of governing in a managerial socialist state."

The economic growth preference is maintained by the reward system under which officials get promoted to higher offices. In order to achieve high rates of growth, economic growth has been closely linked to the promotion of officials, a practice which is also common in China. This is exacerbated in Vietnam because, unlike in China, officials are much more closely linked to their province of birth as there is less rotation and they thus need to emphasize growth even more (Malesky and London 2014). While these links to the local state are more conducive toward long-term strategies, unfortunately it has still led to an emphasis on quick economic successes over long-term sustainability (Tan 2012). In addition, the ability to select officials for higher offices has strengthened patronage networks, which vie for prestigious offices in the Central Committee (Vu 2012).

Moreover, economic development has become important for maintaining social peace at the local level (Jandl 2014). In some cases, environmental officials will receive orders from higher ranking officials not to punish

companies, especially when the primary objective is to meet economic goals (Nguyen NH et al. 2015). The possibility of losing an important employer and thus creating unemployment can also motivate local officials to overlook environmental violations. However, it should be noted that the need to maintain social harmony provides an opening for environmental activists, who use public protests against massive pollution. These NIMBY movements can be powerful under certain circumstances (O'Rourke 2004). However, they do not succeed in every case, which shows that they do not contribute to any lasting changes in environmental governance and thus should not be called "community-based regulation" (Ibid.). This will be discussed in more detail in the next chapter.

As the central government relies on funds from the local level, economically successful provinces have been able to bend the rules. The violation of the government's regulations, including the experimenting with new economic approaches, has been called "fence-breaking" in the Vietnamese context (Vasavakul 2003). As a consequence, the bargaining power of successful localities has increased significantly (Jandl 2012). Local officials may even blatantly ignore policies from the central government, especially when no additional funding is provided (Vu 2012). The power has become stacked against the central government, which relies to a large extent on a small number of provinces for funding and the ability to redistribute money to poorer provinces (Jandl 2012). While this strengthens the regime, it is problematic in regard to the effective implementation of environmental policy, especially when the rules incur significant costs.

In addition to the link between the incentive structures of the government and the legitimacy of the regime, government and businesses are closely interlinked, which is characteristic of this form of political economy. Unlike in most liberal democracies, the Vietnamese system is marked by significant state ownership in key economic sectors, which means the primary decision-making occurs in favor of business interests and not the society (Beresford 2008). State-owned enterprises enjoy special privileges and can manipulate the state apparatus to their own benefit. It is extremely difficult for the environmental state to monitor these companies effectively. Institutional reformers within the state find it extremely difficult to enforce regulations if the offender is part of the

state. This has become clear in the case of illegal environmental pollution case involving the state-owned Sodanezi Corporation when environmental officials were unable to prosecute the company or its head, who still holds a leading role in politics, despite blatantly violating environmental regulations. The case will be described in more detail in Chap. 6.

Moreover, private enterprises are part of far-reaching social networks that involve government officials. The state has made sure that large private enterprises are tied to the state so that they do not become a political force themselves. While this helps maintain power for the political elite, it has also empowered these interests to allow institutional drift. Government officials gain the support of companies in exchange for leniency in less-important policy areas. As a consequence, the formal legal framework loses in relevance, especially if it contradicts overriding local interests. Effectively, there is then not a clear line between the private and public sphere (Beresford 2008). As the state's primary goal is to achieve economic development, it seeks to provide support to companies in their operation. For instance, the government shields businesses from the full consequences of cost variations from external resources such as electricity or water. The banking system in Vietnam is also fully controlled by the government and thus allows for manipulation.

Intra-governmental Conflicts

Reform opponents profit from the fact that the formal institutions of the Vietnamese state, like many large organizations, are not a monolith but instead a very complex network which is internally divided between various competing institutions. The lack of clear structures, overlapping responsibility and the absence of conflict resolution mechanisms is counterproductive to the effective implementation of policies. As such, this poses a particular challenge to institutional reformers, who not only want to build a framework of institutions but also seek to influence the outputs. To some extent, institutional reformers are themselves deeply divided, which significantly weakens their ability to make the institutions effective. At the same time, this system also makes it easier for institutional opponents to resist the budding environmental state. As some

companies have complained, the structure of the environmental state is a major complaint among industries. There are conflicts both at the horizontal level between various ministries due to overlapping responsibilities and the vertical level between the central and local governments. This is exacerbated by the lack of coordination between different ministries and other central government institutions as well as between different levels of government.

The first arena of conflict exists between different institutions at the same level of government. First of all, officials tasked with environmental concerns are faced with extremely powerful actors who emphasize economic development as the primary goal. These include the MPI as well the Ministry of Finance, which are primarily tasked with development of a strategy for economic growth, even if they are now supposed to lead the country's initiative toward green growth. As mentioned above, many of these institutions generally only pay lip service to issues of sustainability. These ministries have a significant influence on the policy-making process as they are consulted in the policy-making process and a consensus needs to be found. Their role is also important in the budget process in which more powerful ministries are able to get a larger share. Unfortunately, environmental issues receive only a tiny amount of the whole budget, which has created significant barriers for effective implementation.

Moreover, conflicts not only arise between ministries with different primary objectives but also between governmental organizations that have similar goals. As shown in the previous chapter, there are a plethora of organizations which are tasked with issues related to the environment. While MONRE has become increasingly the lead organizations, other ministries including the MARD are responsible for major aspects of environmental politics. As the responsibilities, which are published on their websites demonstrates, they are very broad and thus leave significant room for interpretation. This can, for instance, allow the emergence of overlaps and also creates conflicts between different ministries and departments. For instance, the Science, Technology and Environment Department under MARD is responsible "for the state management of environmental protection, biodiversity, biosafety and climate change under its management as prescribed by law" (Decision No. 623/QA-BNN-TCCB). At least in terms of language, there is significant potential for overlap with other departments. For instance,

within MONRE, there is the Department of Hydrology Meteorology and Climate Change (DHMCC), which, as the name implies, is also responsible for important aspects of climate change. Similar problems exist also between different departments within a single ministry. While there have been attempts to clarify the responsibilities, this has not always been made explicit in the description of each department's mandates.

The complex network of responsibilities creates significant needs for coordination. In climate change policy, both MARD and MONRE play leading roles. The former was, for instance, tasked as the lead agency in developing the local REDD+ program. MONRE on the other hand was made responsible for establishing an intersectoral climate change negotiation delegation and a plan on climate change mitigation. Each of these aspects is supposed to occur in cooperation with MARD, which was also tasked with coordination. MARD's preeminent role in climate change, however, only exists in regard to forests. In the general climate change strategy, MONRE has been named as the lead agency, while MARD is not mentioned at all. As the emphasis of climate change has shifted toward reductions in greenhouse gas emissions, issues such as more sustainable energy sources and CP mechanisms have come to the fore. However, it is surprising that MARD is left out of the strategy as it includes sections on forests and agriculture. These documents clearly highlight underlying unresolved conflicts that have arisen from the overlapping responsibilities.

The division of responsibilities in the field of climate change policy between two ministries has made it more difficult to create synergies that could be advantageous. When in 2014 the government produced a market readiness proposal for a carbon market, it claimed: "Vietnam has comparatively little experience with MBIs in environmental policy and more specifically within climate policy" (Socialist Republic of Vietnam 2014, p. 9). There is no doubt that market-based mechanisms are still in its initial stage, as will be discussed in Chap. 6. However, the introduction of the market-based approach called PES to reduce the need for illegal logging suggests that Vietnam already has significant experience in a field that is related to climate change (McElwee 2012). It is thus surprising that the challenges and opportunities during the introduction of this approach are not mentioned in the carbon market proposal.

Conflicts also frequently arise between the central government and local authorities. There are strong traditions of centralism which run counter to the growing decentralization of the three tiers of local governments. While local government departments often mirror the central structure, there is little direct control. For instance, the provincial DONREs are under the respective People's Committees and not under the ministry. As the power of local governments, particularly those that are economically successful, has increased, it has become more difficult to manage policy issues in a top-down fashion. This administrative structure has been called "organisational network decentralisation," which has entailed the development of deliberately ambiguous legislation in order to maintain the appearance of the unitary structure (Fritzen 2005). As a consequence, center-local relationships are defined by constant negotiations and power struggles. For institutional reformers, this means that they need to develop strategies to elicit support from local governments, which can be particularly difficult because there are not enough financial resources to create the necessary incentives. As local officials generally consider economic development as more important than environmental protection, reformers are faced with strong opposition that threatens the effectiveness of the budding environmental state.

The most serious conflict arises out of the fact that local governments often fail to implement central policies. Despite the belief of central authorities in top-down solutions, local governments actually have a very high degree of autonomy. This has a very long history in Vietnam, which is reflected in an ancient proverb that states that the emperor's influence ends at the village entrance (Abuza 2001). As long as local officials accept the dominance of the central government in case of conflicts, they can act with significant discretion under normal circumstances. As a consequence of this institutional separation, there is generally a lack of policy coordination between central and local authorities. Nonetheless, central government officials still express the expectation that lower levels will follow their mandates, which in reality is only the case when interests between the different levels of government converge. There is thus a clear contradiction between the perception of central power and the actual situation (see also: Painter 2005).

Due to the need to maintain appearance of the centralized structure, the conflicts are rarely openly expressed. Frustration is generally expressed in the media, which often reports that nothing or very little has been done in regard to a particular environmental problem at the local level. News stories are replete with examples of people complaining about an incident of pollution, which receives either inadequate or no reaction at all from local authorities. A *Viet Nam News* article, for instance, accused local officials of failing to clear the urban canals as promised in 2014. There are also articles which describe the consequence of the failures of local People's Committees or local environmental departments such as either serious health issues or even environmental protest activity. While the reports occasionally find fault with certain laws, the central government is portrayed as proactive in trying to solve the problems. Overall, the main problem is errant local governments which are resisting the mandates of the central government.

Moreover, the unclear and overlapping distribution of responsibilities can be a source of conflict between local and central authorities. This can be seen, for instance, in the inspection and imposition of penalties on violators. Sanctions may be imposed by MONRE and the Ministry of Police from the central government and also by the People's Committees and the respective DONREs at the local level. There is little coordination between the different organizations. This not only creates administrative problems but is also confusing for the companies which are monitored. A similar problem also exist in regard to the licensing of wastewater discharging, which is done by a range of actors including MONRE, provincial People's Congresses and local DONREs (Nguyen N.H. et al. 2015). Despite the best efforts of institutional reformers to create clear responsibilities and consolidated ministries, there is still a system of fragmented institutions with significant overlap as well as inconsistencies between the different ministries and local governments. According to Painter (2005, p. 267) "Vietnam is governed through a highly decentralised, fragmented and sometimes incoherent set of state institutions." This has made it difficult to implement central level policies.

Conflicts not only exist in regard to overlapping responsibilities but also due to the diverging interests between central and local officials. A recent case regarding the local problems that can come with hydropower

plants shows that the demands for renewable energy clashed with the needs for sufficient drinking water for the public, agriculture, and businesses. Due to hydropower dams such as the Dak Mi 4 Hydropower Plant, the Vu Gia River now faces serious water shortages affecting about 1.7 million people. In 2014, local officials in Da Nang even threatened to sue the MONRE because the proposed draft regulations could result in a water shortage of up to 700 million cubic meters during the dry season. At the same time, the local authorities also felt the need to raise the price of tap water by ten percent, and in the summer of 2014, tap water became unstable for the first time in ten years. While local officials demanded the release of more water from the reservoir, the operators of the power plants were reluctant because it would reduce their generation capacity. While the lawsuit was averted in the end, the case demonstrates that conflicts can and will continue to arise between different levels of government.

Insufficient Financial Resources

As economic growth is the main overriding interest for the government, it is not surprising that environmental protection often remains neglected. Since strict enforcement of environmental regulations is against the powerful economic interests, there has been a tendency to underfund and thus undercut the environmental state. The collection of revenues through taxes and fees is managed through environmental funds at the central level and in some localities. The money comes from both budget allocations and the fees and fines the local government collects. Its linkage to the polluter-pays principle paradoxically means that the ability to extract fines from companies is more important than to close down offending factories.

First and foremost, within the annual budget, the amount of funding designated for environmental issues is insufficient. It receives a very low amount compared to other policy areas. In 2015, Vietnam spent only one percent of its annual budget on environmental protection, which was only half of what was proposed under the environmental strategy and is much below that of other countries in Asia (VNS October 1, 2015). The

same low amount is allocated by local governments. The share has grown somewhat over the years and there are constant promises that that it will grow further. While it was expanded three times between 2004 and 2010 (Nguyen TT 2011), it did not reach the 2 percent that officials of the environmental ministry had demanded in 2011. This reluctance to grant the funds necessary to increase the environment state's capacity can only be attributed to the weakness of the institutional reformers within the government.

Secondly, the state's financial resources often fail to be properly allocated. The vast majority of the money, namely 75 percent, is used to investigate environmental issues, improve the basic infrastructure, and general environmental protection efforts. Only the remaining 25 percent is actually used for the development of environmental monitoring and provide analysis of the data for central and local governments (Oanh and Mori 2014). Most of the funding at the local level is used for wastewater and solid waste management (Ibid.). Despite this emphasis, funding for waste disposal is insufficient and is heavily subsidized by foreign donors (Thanh and Matsui 2011). This also means that only a very small amount is used for monitoring and enforcement. For instance, in Bac Ninh province, in 2007, only 20 percent of the overall VND1.5 billion (US\$90,000) was available for monitoring and education, which meant that only 1 craft village and about 20 companies could be inspected (Nguyen M.D. 2011). As a consequence of the lack of financial resources, there are only very few inspectors (in Bac Ninh only 20) who often do not have the necessary qualifications and work for low salaries. Their situation is exacerbated further by the lack of adequate monitoring technologies. It is thus not surprising that they lack motivation and often augment their meager salaries with additional jobs (Ibid.).

While some of the money for environmental protection is supposed to come from the collection of environmental penalties for violators and fees for environmental services, it is often difficult, expensive, and time consuming for the government to collect all the fines and fees. In particular, it is impossible to collect money from the large number of small household companies because they tend to be too poor to pay the fines (Nguyen NH et al. 2015). Moreover, the fines are often too low both to

motivate a change in behavior and to pay for the enforcement. In 2011, for instance, the highest possible fine for environmental violations was a mere VND500 million (US\$23,000) which paled in comparison to the profits the companies earned. As a consequence, the fines were doubled at the end of 2013 to VND1 billion (US\$47,000) for individuals and VND2 billion (US\$94,000) for repeat offenders as well as organizations but the amount proved to be still inadequate. The General Department of Environment announced that it had fined a total of 184 out of 245 violators a total of VND37 billion (US\$1.7 million) within one year after the fines were increased (*VietNamNet Bridge* December 29, 2014).

Even with the available funding, local officials are often at loss of how to adequately allocate the money to improve the environment. It is important for local officials to adequately plan and manage the budget resources. This involves prioritizing the appropriate measures and to check whether the actions constitute an effective use of the funds, which can be enhanced if the various stakeholders are properly included in the process and sufficient transparency is maintained. Reformers have thus sought to reform the financial processes at the local level. With the help of the Canadian government, the VPEG sought to enhance the financial management of local governments. For instance, it created competition between different provinces to provide incentives for innovation.

Finally, the state does not provide enough financial incentives to industries. Even though the government has tried to entice companies to switch to environmentally-friendly technologies, there is great concern over the lack of financial support for environmental technologies. As many companies cannot afford to upgrade their technologies, they rely on grants or cheap loans which are supposed to be subsidized by the government. Even though there are attempts to introduce these possibilities, companies often lack awareness and are faced with extremely difficult bureaucratic structures. Instead, similar to other countries, the government is still indirectly subsidizing fossil fuels through energy price controls and thus reduces the incentives for companies to switch to greener technologies. In the period between 2007 and 2012, this amounted to US\$1.2 billion to US\$4.49 billion every year according to the UNDP (UNDP 2014).

The Low Level of Institutional Capacity

The lack of sufficient funding undermines the capacity of environmental institutions. It has resulted in insufficient qualified personnel and made it dependent on the support of the networks of economic interest groups. Although it is already difficult to increase the number of highly qualified staff at the central level, this situation is much worse at the local level. As salaries are even lower and working conditions not very good, working for the environmental state is not very attractive. In addition, in order to become employed and to advance in a government career, it can be necessary to build personal connections and the need to pay off superiors. Instead, highly qualified staff often decide to work for international organizations which recruit based on merit, provide higher pay and more flexibility, as well as enjoy flatter hierarchies. The resulting brain drain is a serious problem that inhibits the ability to increase the state's technical capacities.

While insufficient manpower is a serious concern, the problem of low capacity is exacerbated by the resistance of the economic interest groups to strengthen the legal and institutional framework as well as to grant environmental officials at all levels of government more power for implementation. Although environmental laws have been significantly improved, the legal documents mentioned in the previous chapter still lack clarity or are incomplete. For instance, there are few details about the implementation of impact assessments. These kinds of loopholes naturally make it difficult to effectively translate the law into outcome and allow economic interest groups to avoid making fundamental changes to their operation.

Secondly, the reformers also face the downsides of the current hierarchical governance approach that discourages bottom-up initiatives. The ability to implement policies through coercion and control has failed because of the complexity of the myriad environmental challenges, the high costs of monitoring, and the pluralization of interests (Yip and Tran 2008). Coupled with the lack of sufficient resources mentioned earlier, this makes it very difficult for reformers in developing effective solutions. In order to overcome this problem, officials have tried to experiment with less hierarchical forms of governance mechanisms including developing

environmental funds, providing incentives for green technologies, fostering collaboration with local governments, enabling public participation, as well as fostering environmental journalism. These will be discussed later in the book.

The need to defend any potential threats to the power of the party has made it harder to solve administrative problems at the local level. For instance, there has been a rise in protests related to the environment. Local officials often fail to deal adequately with public concerns related to pollution. Nguyen Trung Thang from the ISPONRE argued: "Conflict settlement is mostly an administrative measure of public administration which does not have a function to solve environment conflict" (VNS Sep. 14, 2013). While the official blamed the problem on the lack of legal documents and guiding procedures in how to deal with protests, the emphasis on economic growth impedes the effective resolution of conflicts. This is reflected in the handling of protests against massive fish deaths, which was initially blamed on Formosa, a Taiwanese steel producer, although the government later claimed that there was no evidence. While at first tolerated, the government decided to crack down on the protests most likely when leaders became worried about the political consequences of the growing activism in major Vietnamese cities. In addition, news about the protests was censored and social media was blocked for a short period of time (Perez 2016).

Thirdly, reform opponents profit from the coercive nature of the system which curtails the amount of available information. This not only poses an obstacle on environmental journalists but also creates problems within the government as the lack of transparency increases the value of information. As a consequence, officials are sometimes unwilling to share important information freely while existing data are difficult to understand. This unwillingness toward knowledge exchange exists not only between different ministries but even within the same government department. There are many potential problems as a result. For instance, it impairs the ability of reform proponents to do research and find effective solutions, which can be used as input into the political process.

Finally, the top-down processes neglect the diverging interests of local governments thus reducing the capacity of the environmental state. As mentioned above, while administrative units are traditionally governed

under central guidelines and local imperatives at the same time, the latter often dominate because local governments are financially self-sufficient (Painter 2005). As long as there are no or few subsidies from the central government, local officials are unlikely to fully implement policies, especially those which involve significant costs. In addition, as Mahanty and Dang (2015) argue, policy implementation suffers from the fact that central government officials often ignore the expertise of local officials in how policy goals could be achieved. Unfortunately, the attempts at consensus formation only focus on policy-making and rarely consider the realization of policies. As mentioned in the previous chapter, local government support is essential due to the administrative decentralization that places the environmental institutions under local government rather than under the central state. This issue is highlighted by Nguyen et al. (2015) who point out: "the great efforts by the central government and the community to protect the environment are in vain if local authorities determine that local economic development has the top priority" (p. 103).

The Weak Legal System

Institutional reformers have faced the problem that the weak legal system is of only limited use to deal with cases of environmental violations. Most of the cases are solved through administrative means, particularly through paying fines, while it is difficult for victims of pollution to gain compensation. In the process of making a case for environmental courts, it was acknowledged that "the initiation of lawsuits into court to claim for environmental damages is very difficult due to lack of legal basis" (Minh 2014). In many cases of serious environmental pollution, the poor and uneducated are affected the most. They are generally unaware of their rights and have no money to hire a lawyer. While there are provisions to provide legal aid, the number of environmental cases has remained extremely low. In 2012, Dr. Ta Thi Minh Ly, the former director of the Department of Legal Aid of the Ministry of Justice and the chairperson of Viet Nam Legal Aid Association for the Poor, noted that not a single of those cases had been successful. Moreover, there are serious inadequacies in the criminal procedures, which create high burdens for the prosecution.

The first obstacle is to file a lawsuit against any offender. Until recently, the Environmental Police has not been able to sue any offender because the 2005 Environmental Law had been "too vague" (VietNamNet Bridge 2011). Unfortunately, the lack of clarity of laws in Vietnam is due in part to the consultative process, which allows the various ministries to influence the law-making process and thus introduce inconsistencies. This is in addition to the fact that the many legal documents mentioned in the previous chapter can best be described as a "jungle of regulations, which is both inconsistent and fragmented" (Lien 2011, p. 326). In addition, prosecutors could not prosecute a company for any form of environmental violation but had to find an individual personally responsible. It is, however, difficult to prove the responsibility of any individual as even the management can claim ignorance. Finally, there is not enough understanding about the law in the population because it is very complex and lacks clarity. This also applies to officials who are supposed to implement the law. It is thus not surprising that very few cases have actually gone to court.

Even if a case ends up in the justice system, there are significant problems for proper adjudication. First of all, it is not easy to provide the relevant evidence. The equipment needed to test for pollutants is very expensive and getting results can be time consuming. Judges are not sufficiently trained to deal with the complexity of court cases, which is a particular concern in environmental law. According to a 2004 UNDP survey, less than a third of judges have graduated with a Bachelor of Law degree, while 64 percent had received in-house training. Besides the lack of sufficient legal training, judges often did not feel certain about applying the law (Nicholson 2010). As there are no clear guidelines for the interpretation of laws, decisions may be subject to the discretion of local courts. In complex cases, judges will ask for guidance from high-level government or party officials (Lien 2011). This raises serious problems when court cases run against state interests. According to Heng (2001), judges therefore generally lack credibility. "They make arbitrary decisions and negotiate when challenged, thus further eroding the already little respect they command from the public" (p. 225). In many cases, judges are more interested in resolving the problem rather than providing the adequate legal reasoning (Lien 2011). It is thus perhaps not surprising that there are no official publications of court decisions (Nicholson 2010).

In recent years, the government has tried to increase the penalties significantly and has also aimed to improve the use of the courts to punish violators. There are a growing number of cases, which demonstrate that offenders can be punished if there is sufficient political will. In 2008, Vedan, a Taiwanese company was found guilty of discharging polluted water into a river which runs through Ho Chi Minh City. Despite the court victory, it took another two years until the company paid compensation to the hundreds of thousand farmers who had been affected. However, the company could not be hold criminally accountable (the case will be discussed in more detail in Chap. 6). Another company, Hao Duong Leather Tanning Company, was forced to shut down temporarily until it found a way to deal with the toxic water that the company had repeatedly discharged untreated into the river. In early 2015, the company had still not been able to pay the fines and asked the court to resume operations. Despite failing to pay the fines, the government allowed the company to reopen for a 90-day trial in May.

The problem is not merely the amount of punishment but that the legal system is not well developed. Due to the lack of judicial independence, courts are only part of the administrative arm of the government (Nicholson 2010). Political interference in the law is the norm rather than the exception, which means that powerful interest groups can gain control over the judicial process. The use of sanctions against violators then constitutes the rule by law, which means that any punishment occurs because of an existing law. It does, however, not mean that everyone is treated equally. The concept of "rule of law" would suggest that all actors, including the government, are subject to the same rules. In the Vietnamese context, however, networks and relationships often take precedence. For instance, it is not uncommon for violators to try to negotiate with the government rather than to follow the law. This has happened in many of the widely publicized pollution cases including Sonadezi, Vedan, and Hao Duong. Whether and how a company will be punished depends, in part, on its bargaining power. In some cases, the media can be used to overcome the obstacles because denying severe punishments could threaten the legitimacy of the government. For this reason, the role of the press has become an important actor, which can be used by central authorities to overcome powerful local networks.

Perhaps the most important innovation in recent years could be the reinforcement of the role of the courts, which so far have played only a very limited role. In December 2014, Truong Hoa Binh, the chief justice of the Supreme People's Court, announced that the courts were trying to improve their knowledge to judge over environmental cases, which would become more prominent in light of the new legal environment. To achieve this, the court had formed a group of judges, who would specialize in environmental cases. Moreover, from July 2016, it will finally be possible to hold corporations accountable.

While these reforms demonstrate significant progress, it should be noted that the judiciary remains a tool of the Communist Party, which is part of the socialist legal tradition based on the Soviet system. The key problem is the lack of checks on the arbitrary use of power. Many of the justices are members of the party. This lack of independence continues to pose a serious conflict of interest especially in regard to state-owned enterprises, which still dominate many sectors. At present, however, there are signs of progress following the most recent legal developments which introduced Western concepts as part of a so-called law-based state. The new changes incorporate the concept of rights into the Vietnamese legal system, which provides hope that environmental lawsuits could become an important tool for reformers to strengthen the environmental state.

The Problem of Corruption

The greatest problem for the most well-meaning institutional reformer is the problem that modifying formal institutions is not nearly sufficient. In particular, it cannot deal effectively with the reform opponent's strategy of pursuing institutional drift that leads to very little policy implementation. The most serious underlying problem is the widespread corruption which pervades both the public and private sectors. Generally, there is a consensus that corruption, defined as the appropriation of public property for personal gain, is a very serious problem in Vietnam (Kerkvliet 2001). Gainsborough et al. (2009) have concluded that "Corruption and many of the associated problems of weak public administration are systemic in nature. That is, they should be seen less as aberrations of

the system but more as the normal workings of the system, which has its own distinctive logic which is self-perpetuating" (p. 22). According to Gainsborough, the situation has become much worse with the introduction of economic reforms in 1986 (Gainsborough 2010). Rules are undermined by the informal clientelistic structures, which enable polluters to use political connections or bribery to circumvent government regulations. The monopolization of political power in a single party moreover exacerbates the societal inequality, while it also promotes the continued unsustainable resource allocation. Overall, the system is driven by actors trying to capture rents without concern for the long-term sustainability (Fabres 2011). These networks generally work against environmental movements (Jackson and Bhathal 2013). Even political offices in environmental agencies are often up for sale (Vu 2012).

Both expert and public surveys show that corruption is widespread in Vietnam. First of all, the annual Transparency International Corruption Perceptions Index, which is based mainly on a survey of experts, consistently places Vietnam near the bottom. In 2014, Vietnam ranked 119th out of 175 countries. The assessment also stated that there was virtually no transparency over the national budget. Similarly, the World Bank Governance Indicators, which draws data from 14 different expert and public opinion surveys, consistently assessed the country poorly for the control of corruption, with only minor fluctuation over the years. In 2003, the country received 37.1 (out of 100, which is the highest possible value) and in 2013, it was 36.8, with a significant decrease in between. In both measures, Vietnam's result is markedly worse than China. Moreover, these results are mirrored in various surveys conducted in the country and with support of the Communist Party (Fritzen 2005; Martini 2012; TT Nguyen and van Dijk 2012). It is something many Vietnamese readily admit when asked. A systematic survey administered by the VCP and funded by the Swedish development organization showed that more than half of all respondents admitted to paying extra money to police officers when they were faced with a traffic violation. In addition, almost half of all civil servants acknowledged that they would accept a bribe. Finally, corruption has frequently been in the news with a number of widely publicized scandals such as the appointment of a 24-year-old daughter of a senior Politburo official to lead a state-owned construction firm in 2012 (Fuller 2012). At the same time, however, the Vietnamese are least likely to expose corruption in Southeast Asia (An 2013). This shows that corrupt behavior has a very high extent of social acceptance in the country (Fritzen 2005).

Despite the high level of acceptance, corruption is regarded as a serious problem in official government statements. In 2016, newly elected Prime Minister Nguyen Xuan Phuc declared the fight against corruption as one of his most important goals (Tuoi Tre News April 8, 2016). The government is aware of the seriousness of the problem. Nguyen Phu Trong, the general secretary of the Communist Party, admitted in 2014 that "Corruption is still a challenge and is one of the most pressing issues in society" (cited in: Boudreau and Pham 2014). This followed the arrest of four high-ranking officials at Vietnam Railways. In 2013, there were a total of 278 corruption trials (Ibid.). Despite arrests and other anti-corruption measures such as the Independent Audit Law of 2011 and the Anti-Corruption Law of 2005, the government has been largely ineffective in dealing with the problem. While there has been a willingness to severely punish violators even by executing the most serious violators, the problem has not been significantly reduced (Dixon and Kilgour 2002). Reform-minded officials have openly discussed the problem in the media and official publications. For instance, in 2013, the Deputy Chair of the National Assembly Legal Committee, Nguyen Dinh Quyen, told the media that "the existing measures have created several loopholes and overlaps that impede our efforts in the fight against corruption, particularly the measure called xin and cho (ask and give)" (VNS July 23, 2013). While he proposed the need to create "transparency and accountability" at all levels of government, he acknowledged that the government acts very slowly. In fact, the relatively high frequency of large-scale corruption trials can also be interpreted as attempts by central government officials to reassert power over local governments and, in particular, renegade officials (Gainsborough 2010). Unfortunately, the institutions tasked with fighting corruption are as complex and confusing as the rest of the state apparatus (Painter 2014).

Corruption affects many aspects of daily life of the Vietnamese. Police officers may harass people on the street and force them to pay bribes for alleged offenses. A very serious problem is the corruption in the health care sector where it is essential to pay additional money for the access to services. In the business field, bribes are used for licensing and gain-

ing permissions. As the normal bureaucratic procedures are cumbersome and slow, payments and other forms of bribes can significantly speed up the process and also circumvent certain regulations. Within the public service, since the economic reforms, job positions, and promotions often require special payments or relationships. This "purchase of office" allows less qualified individuals advance to higher positions (Vu 2012). Public resources have also flown into the hands of individual officials. This includes the theft of land, which is facilitated by the ambiguous land ownership rights. Even though the land theoretically belongs to the people and is administered by the state according to socialist principles, land has become a commodity following the Land Law of 1993, which provided the legal foundation for the ability to sell, inherit, lease, and mortgage land as well as the need for compensation in case the land is expropriated by the government (Nguyen and Kammeier 2002). The rights were detailed even further in the Land Laws of 1998 and 2003 and land has become de-facto privatized (Zhu 2012). As land becomes profitable but is still technically under state control, it has become subject to serious forms of corruption. The land issue plays a particularly important role in regard to forest management, where corruption contributes to the illegal deforestation of naturally grown forests.

Corruption is of particular concern at the local level where the higher decree of discretion has given local officials significant room for illicit deals. This is exacerbated by the fact that as mentioned local officials generally receive very low salaries, which increases the motivation to find additional sources of income (Mattner 2004). Over the years, the Vietnamese government has granted provinces more autonomy over finances and administrative decisions (Fritzen 2005). In regard to the implementation of environmental policies, corruption has undermined the effective monitoring and enforcement (Morse 2006). According to Nguyen NH et al. (2015), many companies rather pay off inspectors than accept punishment for violations. As investment in new environmental technology can be quite expensive, it is much cheaper to simply resort to monetary payments and other extralegal methods to avoid stringent environmental protection efforts.

At the local level, the government has sought to introduce additional institutional mechanisms to reduce corruption such as the Grassroots

Democracy Decree, which seeks to increase transparency and allow citizens greater influence over local decisions. As Ha An (2011) argues competition would minimize corruption because it would reduce the power of the authorities which grant approvals. In reality, however, these limited reforms have made little difference. Instead, complaints about corruption entails significant risks (O'Rourke 2004) and in the worst case scenario, anger over corruption can escalate into serious social conflict. The most problematic situation in this regard occurred in 1997 when corruption led to massive unrest in Thai Binh province. The central government eventually punished close to 1500 local officials for their role in the incident (Mattner 2004). While there has been a willingness to punish offending officials, the government has rejected more fundamental institutional reforms to effectively deal with the problem. The greatest obstacle remains the need of the Communist Party to maintain its extralegal position in the political system, which places constraints on the ability to establish an independent regulatory institution to effectively monitor corruption.

Conclusion

This chapter demonstrates that creating environmental institutions and laws alone is not sufficient. Environmental policy needs to be implemented. In fact, from an institutional perspective, only successful policy implementation would actually indicate the effective institutionalization of environmental politics. Unfortunately, for institutional reformers, Vietnam is still very far from this goal. Instead of countering the growing legal apparatus, opponents to a strong environmental state have made use of the numerous weaknesses in the institutional structures to severely reduce the meaningfulness of the institutions.

The most powerful opponents of the budding environmental institutions are strong economic interest groups which only pay lip service to sustainable development and often violate the new regulations with impunity. Despite threats, not a single company has been permanently shut down for serious environmental violations. At most, administrators have temporarily closed companies and forced them to pay relatively modest fines. Despite the attempt to enforce environmental regulations,

many companies have simply failed to pay the environmental fees or fines. The government has been unable to enforce its own law due to the lack of funds, limited institutional capacity, a weak legal system, and the prevalence of corruption. On the upside, many environmental officials acknowledge these problems and are working hard to minimize the short-comings in the existing institutions. Their greatest asset is their ability to influence the dominant discourse which emphasizes environmental protection and sustainable development. The failures of the state to achieve its objectives create significant pressure to make additional changes. However, as the Vietnamese political system has always been marked by a disjuncture between central government policies and directives and actual policy implementation, it remains to be seen whether reformers can eventually achieve the required institutional transformation.

The following chapter will highlight the development of grassroots activism which promotes environmental protection. I will discuss whether Vietnam is developing an environmental civil society capable of moving Vietnam to a more balanced development that does not only prioritize economic growth. After that, the attention will turn to the business sector, which has benefited greatly from the environmental destruction. However, this does not have to be always the case. Environmental technologies have proven to be increasingly profitable. On the one hand, there is a growing world demand for greener technologies which needs to be exploited. On the other, their use can make production more efficient and thus entail higher profits. If more can be produced with less raw materials, this can only be beneficial. Vietnam has tried many approaches and I will discuss both the attempts and the outcomes in Chap. 5. The key challenges that emerge both with the societal and the private sector approaches are that the current political system is a fundamental obstacle which, if unreformed, will not bode well for any significant transformation in the future.

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5

The Society

Institutional reformers are seeking to enhance the role of society in environmental politics. This is not only a strategic decision to enhance their influence in the reform process but also premised on the belief that social responsibility is necessary for solving increasingly complex problems including the many environmental challenges that an industrializing country faces. The idea of governance suggests that societal organizations should be able to act as equal partners in both policy-making and implementation. While this appears reasonable, the society is neither easy to define nor is it a homogeneous actor. In fact, it consists of many diverging interests which need to be consolidated to find a solution that is acceptable to the majority. As we have seen in the previous chapter, there are strong economic interest groups which face a relatively weak environmental movement.

Besides this general problem, Vietnam is also still an authoritarian one-party state which is hierarchically organized and thus largely hostile toward independent activism. While the ruling Communist Party has stressed the need for grassroots democracy and local participation, the Leninist structures have made it extremely difficult for bottom-up initiatives to have a significant impact even within the narrow confines of the

state. Moreover, the Confucian traditions, which are a legacy of about 1000 years of control by the Chinese empire, have left a depoliticized population that defers decision-making to the government (Hostovsky et al. 2010). Not surprisingly, a majority of the population considers the government solely responsible for environmental protection (Phung 2007).

Nevertheless, more and more people are playing an important role in environmental politics in Vietnam. Protest movements can, for instance, play a crucial role in forcing the implementation of environmental law. Following pressure from affected communities, government officials have in some cases reacted positively by forcing companies to comply with strict regulations (O'Rourke 2002). In addition to this rising pressure, international donors, International Non-Governmental Organization (INGOs), and other internationally acting organizations have stressed the need to involve societal actors in development projects. This has been greatly supported by the development community which aims to improve the country's governance and is based on the belief that aid is more likely to reach its target if it is dispersed by local grassroots organizations. In contrast to working only with the government, trusted NGOs are seen as more flexible, less-corrupt, and more efficient partners. This has contributed to the emergence of many new organizations and even raised the hope that a civil society may be emerging. This chapter will consider the variety of societal actors with different degrees of government control from the mass organizations to the relatively autonomous NGOs that seek new space. Many of the newly emerging NGOs are very small and lack sufficient funding and thus have joined networks to combine resources and gain strength. Societal activism, moreover, includes environmental journalists who also seek to actively influence the governance process. Finally, it is also necessary to consider the limits of environmental activism in an authoritarian regime. The anti-Bauxite mining movement in 2009 revealed the limits of bottomup pressures even when activists were able to rally significant support from within the government. Environmental activists can face great obstacles when they are confronted with strong developmental interest groups which pursue economic growth at all costs.

The Emergence of Civil Society?

Since the introduction of economic reforms under doi moi, state and society are increasingly moving apart. The economic development has created new interests beyond the party state that vie for greater influence. For NGOs, the availability of external resources by donors has weakened its links to the unitary state. The number of private enterprises, domestic and international NGOs have grown while the media have become more free and assertive, sometimes challenging government interests. The state's functions have also become increasingly separated from the party, with the former dealing mostly with policy-making while the latter is largely guiding the former. Moreover, protests have become a common occurrence even if they have largely remained illegal. Many of these protests have been over land appropriation and compensation. As the land officially belongs to the "people" and de facto to the government, people who were forced off their land often had no other choice but to make their concerns known. Similarly, the inaction against the growing pollution has also led to numerous protests such as blocking access to offending factories or landfills. Overall, there has thus been a pluralization of society, which has raised the question whether a civil society in the liberal sense is emerging in Vietnam.

The question of whether a "civil society" exists or is developing depends on how the concept is defined. Although definitions regard it as the intermediary between state and family, there are many different interpretations when it comes to the role of the state. Liberal definitions, which are promoted by most international organizations, consider the separation of civil society and the state/government as an essential criterion of the term. This would make it difficult to find any civil society in authoritarian regimes such as Vietnam because any NGO needs to be registered with a governmental entity that acts as its sponsor. In this vein, a 2005 CIVICUS study defined the concept as "the broad range of organised groupings which occupy the public space between the state and the individual citizen" (Sabharwal and Than 2005) without stressing the need for independence. A number of scholars have moreover argued that civil society should be defined not in terms of a domain separate from

the state but instead as a form of action (Hannah 2007; Wischermann 2010). This viewpoint stresses, in particular, the growing civic awareness of existing organizations. It does not, however, include the existence of contentious politics. Using a Gramscian perspective of civil society, Bui (2013) analyzes how civil society can influence environmental policy-making and implementation. He believes that these new processes can solve some of the problems of governance as long as it stays within the tight limits of what he calls the "corporatist mode of governance" and deals with the ill-defined relationship between party and state institutions. McCarty (2001) argues that Vietnam's pyramid structure with the VCP at the top and different umbrella organizations below fits well with the World Bank's consensus governance vision even though many people continue to lack representation. Finally, Wells-Dang suggests that new political space has evolved where the implementation of government policy does not meet the expectations created by the law (Wells-Dang 2010).

While the concept of civil society has attracted significant attention both from international scholars and international organizations, it has been met with caution by Vietnamese academics and government officials. While the term civil society has been translated into Vietnamese as xã hôi dân sư, which is a literal translation based on the same word in Chinese (gongmin shehui), few Vietnamese understand what is meant by the term. There is hardly any reference about it either in the media or in government publications. It is not mentioned in official VCP documents, which use terms such as "social organizations" or "people's organizations" (Wells-Dang 2012). However, there is growing interest in associational life as the number of groups has increased significantly. This includes the government which hopes to involve these groups in society building and reduction of corruption (Norlund 2007 b). The Communist government is worried that truly independent groups may pose a challenge to the hegemonic power of the ruling party. This is similar to China, where the government has placed many legal restrictions on NGOs such as the requirement to be registered only in one location.

While the Vietnamese government has long discussed the usefulness of civil society, legislation that could have facilitated the development of private associations has not been enacted and was eventually abandoned despite writing 11 drafts (Vuving 2010). Disagreements include whether

such a law would apply to mass organizations and whether state-affiliated groups should enjoy special privileges. Moreover, some government officials demand provisions against potential "opposition organisations to sabotage the Party and State, which would violate political security, social order and safety" (cited in VNS, September 9, 2015). Vietnamese scholars, who have worked on the topic, have to be careful because the term remains highly sensitive. Dr. Nguyen Manh Cuong, the rector of the Institute for Social Studies (ISS), has written about the topic as well as discussed the issue with top leaders behind closed doors. His institute, which stated that it promotes the civil society development in Vietnam, remains rather elusive as it moved from one campus to another and finding it is not easy. The same applies to the website which changed its domain and frequently becomes impossible to locate. Together with the Asia Foundation, Dr. Nguyen has published a booklet in 2008 titled: A Theoretical Framework and Principles for the Establishment and Management of Civil Society in Vietnam, which was translated into English. It notes that "CSOs are generally independent and unbiased from a political standpoint. They represent society and, as a result, they play an important role in criticizing and monitoring policies in particular, and the entire political system in general" (p. 21). While the concept remained vague in Vietnam, he argued that the country was "moving towards a trend that is acknowledged by most democratic countries worldwide" (Ibid., p. 41). The ambivalent feeling toward civil society, especially among conservative party members who see in it a form of subversion, has however resulted in complex rules, which has made setting up an organization a very onerous procedure, especially for membership organizations. For instance, it presently takes at least 60 days to complete all the procedures necessary for establishing an association, while companies only require three days (VUSTA, September 4, 2015).

Despite the challenges of finding an appropriate definition, a number of scholars have devised different classifications of civil society organizations (CSOs). Norlund (2007a, b) distinguishes between mass organizations, umbrella organizations (both under the Fatherland Front), professional organizations (registered with an umbrella organization), VNGOs (linked to Vietnam Union of Science and Technology Associations [VUSTA], line ministries, or local provincial/district People's Committees), and last

but not least community-based organizations (either indirectly affiliated to other organizations/Civic Code or not registered at all, which applies to many). Nguyen (2008) in addition includes religious groups and international NGOs. All of these groups share state control as an important feature. This applies even to unofficial groups, such as microcredit groups or groups which deal with agricultural activities, festivals, local activities such as dancing, sports, and so on. However, there is significant financial autonomy. A survey by Wischermann (2003) found that none of the issue-oriented organization in his study received more than 15 percent of funding from the government, while more than half of the organizations claimed that they can act independently. At the same time, the supremacy of the party state is maintained through the legal framework and there is a clear hierarchy with the government-linked mass organizations at the top (Wischermann 2013).

Following the economic reforms, the government has allowed civil society actors more space to participate in the political process. These relatively autonomous actors have become part of the service provision and have also been able to contribute to policy-making. Even though no Law on Associations was enacted despite numerous attempts, a number of changes were enshrined in the legal framework which paved the way for the emergence of a civil society. The government passed Decree 29 which regulates democracy in communes and Decree 79 which is called the grassroots democracy decree (Decree 79/2003/ ND-CP) and is supposed to give local residents greater influence in the decision-making process. For instance, the regulation in regard to Decree 29 states: "Democracy is the nature of our regime and State. Our Party and State always respect and bring into full play the people's mastery, creating an enormous strength and making a decisive contribution to the success of our revolution." Various decrees were passed that established the legal framework for the registration as well as operation of social and humanitarian funds as well as associations. These regulations provide guidelines for the roles and functions of the organizations as well as what rights and responsibilities they would have. In 2001, the government promulgated a decision that enhanced the ability of local organizations to receive funding from international organizations (Nguyen 2008).

In regard to the environmental state, institutional reformers have sought to increase the role of civil society in both policy-making and implementation. In the past, there were few Vietnamese organizations which pursued environmental concerns but as the issue is perceived to be less threatening to the state than others coupled with growing international concern, the number of environmental organizations has increased in the twenty-first century (Norlund et al. 2006). In recent years, even government officials have promoted the development of NGOs. This is evident in the increasing prominence of the need for the involvement of societal players in the Law on Environmental Protection. The most recent revision, which became effective in January 2015, dedicates significant attention to their role. The new law legitimates the involvement of the many non-governmental as well as community-based organizations, which have become active in this policy field. The latest revision of the law devotes a whole chapter to the "Responsibilities of Vietnam Fatherland Front, socio-political organizations, socio-occupational organizations and residential community for environmental protection" (Chapter 15). Two things are worth highlighting. First, the section on the Fatherland Front is very short (Article 144 only has two sections) while so-called socio-political and socio-occupational groups have three sections with multiple subsections. It is also noteworthy that there are far more rights than obligations for these organizations. On the side of responsibilities, the law lists compliance with the Law on Environmental Protection and engaging in environmental protection activities. As environmental activists, this cannot be considered a responsibility because it is part of their mission. It is, therefore, far more interesting to consider the five enumerated rights, which are access to information, the right to be consulted both in terms of projects and by government agencies, the ability to investigate environmental problems, and submitting petitions to the government. Lastly and perhaps most importantly, government agencies are also told to create favorable conditions for these groups. As such, the law at least gives NGOs the legitimacy to directly question the government in regard to environmental issues. Of course, it is also necessary to acknowledge that this is not an endorsement of liberal civil society as the terms used for these organizations still reflect the Vietnam government's emphasis on hierarchical government control.

Mass Organizations

Traditionally, the Communist state has relied on mass organizations for social mobilization. They were established between 1931 and 1945 by the Communist Party, which at the time only controlled the northern part of the country. These organizations, which are the Women's Union, the trade unions, the Ho Chi Minh Communist Youth Federation, the Farmers' Union, and the Association of Veterans, continue to play a dominant role in the social organization of communities (Taylor et al. 2012). All of them are grouped under the Fatherland Front as the key umbrella organization, which is under the control of the Communist Party (see Table 5.1). As such, it is difficult to consider them as part of a grassroots civil society. Not only are they closely tied to the state, but their strong hierarchical organization also obstructs the organizational flexibility and innovation of CSOs. However, they have served the government as a tool to reach certain parts of society, and for certain aspects, they allow its members a forum in which to raise concerns about local issues. For instance, the Farmers' Union allows members to raise concern about fair prices, pollution, or the timing of irrigation gates (Wallace 2016). The mobilization of these organizations to address community issues has resulted in significant social engagement (Dalton et al. 2002). It is not surprising that they have thus also attracted the attention of donors as agents of social change.

International organizations, including the United Nations, have often directed attention toward these mass organizations because of their large organizational potential, especially at the community level. For instance,

Table 5.1 List of mass organizations

English name	Vietnamese name
Vietnamese Fatherland Front	Mặt trận Tổ quốc Việt Nam
Vietnam General Confederation of Labour	Tổng Liên đoàn Lao động Việt Nam
Vietnam Farmer's Union	Hội Nông dân Việt Nam
Vietnam Women's Union	Hội liên hiệp Phụ nữ
Ho Chi Minh Communist Youth Union	Đoàn Thanh niên Cộng sản Hồ Chí Minh
Veterans Association of Vietnam	Hội Cựu chiến binh Việt Nam

the Women's Union, which boasts almost 14 million members across the country, has an official section dedicated to "science, technology and environment" that deals mainly with climate change and cleanup efforts. In 2012, for a period of 9 months, the Union's Thanh Hoa section mobilized nearly 31,000 members to participate in improving the sanitation and collecting garbage. The cleaning of villages and 1600 km of road resulted in over 18 trillion tons of waste to be collected and thousands of trees planted (Minh 2012b). In regard to climate change adaptation, the organization became involved in a project that sought to empower women to cope with the consequences of climate change, which involved the training of 5251 people of which 80 percent were women. Tens of thousands of posters and fliers were also produced in the process, which increased awareness of the problem. These kinds of activities demonstrate that mass organizations can be useful for mass campaigns which seek to increase awareness or clean up the environment.

This interest in social organizations by international donors has only drawn little attention in the academic literature. In a study on urban environmental rehabilitation, Parenteau and Nguyen (2005) have found that the state-affiliated mass organizations (traditional and well-recognized unions), which were the only ones taking part in the environmental cleanup effort, were weak and unsustainable. The success of the urban environmental management project depended mainly on foreign aid. Large parts of the civil society were not included in the projects such as the informal sector, small merchants, small private companies, religious groups, and groupings of young people. Moreover, the groups that did participate were hierarchically organized and only exerted some influence over small aspects. The Unions, which had been mainly active, served more as transmission lines for the Communist Party than as representative organizations. However, in regard to the small projects, the unions and groups participating in the rehabilitation program were able to act in relative autonomy (Parenteau and Nguyen 2005).

These organizations form a symbiotic relationship with the state and are thus deeply entrenched with existing interest groups. This can be shown in the case of the VUSTA, which acts as the governmental umbrella organization for many of the non-governmental technical organizations described later in the chapter. It became embroiled in a serious scandal

in 2010 which revealed its close links to corporations. In June of that year, VUSTA awarded the prestigious "Sustainable Green Brand" prize to Luks Group, a Hong Kong based cement company, even though the company had been in the news for serious environmental violations (Thu 2011). In fact, reports had shown that since at least 2005, the company had been responsible for massive air and water pollution, which had resulted in protests including one where nearly 100 people had tried to block the company entrance in 2010 (Linh 2010). Questions were raised about the fact that local officials had not been consulted before awarding the prize, which demonstrated that there was no thorough review of the winning company. In response to the reports, Luks was consequently stripped off its award (Thu 2011). Although it is not clear why the polluting corporation had received the prize, the media attention inflicted significant damage to the reputation of the mass organization as a supposedly objective actor.

Community Movements

If we analyze civil society as an activity instead of a realm, then it is necessary to consider the actions more than the actors. The repertoire of activists can range from moderate forms of contention to aggressive methods such as street occupations or even violence. Even though protests are still technically illegal, the government tolerates many of them, especially in regard to environmental problems. The reason for the tolerance of the localized protests is in part the government's claim to act in the interest of the people. While NGOs, which I will discuss later, usually resort to very moderate tactics such as cooperating with the government and in rare cases advocating change, community-based movements have emerged which have been willing to aggressively oppose economic interest groups. These movements have arisen in response to growing environmental problems, mostly stemming from increasingly heavy pollution. Most of the cases concern air, water, and noise pollution affecting parts of a local community. These phenomena have often been described as NIMBY activism because they are only concerned with localized issues and not the broader environmental movement. While in some countries, these localized protests become embedded in larger environmental movements and often attract NGOs, this is not the case in Vietnam because there exists neither a broad-based environmental movement nor any large environmental organizations. Moreover, there is not even any organization which is willing to associate with what are essentially illegal activities even if they are occasionally tolerated by the state. Once protests reach a wider audience, repression can be the result which happened during nationwide protests in 2016 against the massive fish deaths widely blamed on Taiwanese steel producer Formosa when at least two activists were arrested (Gia Minh 2016). Localized protests, however, do not pose any threat to the power structure and instead help government officials determine and solve problems. This paternalist approach fits well with the leaders' understanding of democracy, officially enshrined in the Grassroots Democracy Decree mentioned above, which allows people to openly voice their grievances.

Communities in Vietnam have been able to successfully campaign against polluting companies. Protests usually occur when the environmental situation has deteriorated to such an extent that it causes serious illnesses or threatens the livelihoods of the residents. Residents in an affected area will first try to complain to the local government, which will then engage in negotiations with the company to find a mutually acceptable solution. While the violations may involve fines, it is very uncommon to prosecute the violators. The local residents make demands about compensation for health problems as well as losses to their livelihood. This is tricky for the local People's Committees because the costs of pollution can be high and assigning blame can be difficult. Moreover, while they are supposed to represent the demands of people, the local economy is much more important not only because it provides taxes and jobs but because the opportunities for promotion depend on reaching economic targets.

In some cases, companies refuse to make any changes and the serious pollution persists for a very long time. There are even instances in which air as well as water pollution continued for many years. Eventually, the situation became unbearable for the residents, who increasingly suffered from prolonged exposure to pollution as well as life-threatening diseases. For instance, in May 2012, an article in the *Tuoi Tre* newspaper reported

that villagers exposed to a polluting titanium slag plant were faced with billowing black smoke which came with a burning stench that led to difficulties in breathing, itching, and horrible headaches (Trung 2012).

Community members might then decide to resort to more drastic tactics such as protesting on the streets with banners and blocking the road or the entrance to a polluting company. This form of protest is by far the most common and there are many news articles that report about such incidents. Although there are no statistics available, Table 5.2 demonstrates that there is a wide variety of protests. This selection only includes a few of those reported in the media in the years between 2010 and 2016. In general, usually around a dozen up to a few hundred people participate in these illegal but tolerated protests. In a few instances, even more people join. According to a report in *Thanh Nien*, the newspaper of the Communist Youth Federation, thousands of people poured onto a highway to protest against a coal plant that had emitted an extremely large amount of dust for about 30 hours in April 2015 (Binh Thuan 2015). Also almost 1000 people protested against polluting sugar mills in 2014 because the emissions resulted in serious smell as well as the death of many fishes, which are important for the livelihoods of villagers (Thai Binh 2014). In both instances, the massive turnout triggered a response from the authorities, which immediately started to engage in negotiations with the polluters. The threat of social unrest can thus be an important motivating factor for change. Under particularly dire circumstances, desperate residents might even try to block exhaust pipes as well as illegally entering factories. These riots can then lead to the destruction of company property and violent attacks against employees.

While the cases demonstrate that protests can be an effective method to achieve change, including promises for a reduction in pollution, compensation payments for residents who have become sick or whose land has been impacted, or even relocation of the company, not every community effort is successful, even if there are media reports. In fact, in some instances, protest movements lasted for many years but still failed in the end. According to O'Rourke (2004), the process and outcome of community activism depends mainly on three factors: the community's cohesion, its linkages to outside actors especially the government, and which strategies are used for mobilization. To this should be added the nature

 Table 5.2 Examples of environmental protests

Date	Description	Number of participants
April 2010	Protest against landfill construction in Ngoc Ha Village, Ha Tinh Province	Hundreds
June 2010	Blocking of pig farms in Dai Son, Nga An Province	1000+
September 2011	People barricade the front of Lam Thach Cement Plant in Uong Bi City, Quang Ninh Province	Hundreds
October 2011	People barricade the Trang Kenh Chemical and Calcium Carbide Company in Thuy Nguyen District, Hai Phong	Hundreds
October 2011	Protest in front of yeast producing plant of AB Mauri in La Nga Commune, Dong Nai Province	400
March 2012	Protest in front of two polluting steel mills in Lien Chieu District of Da Nang	300+
May 2012	Protest in front of a titanium slag company in Quy Nhon City, Binh Dinh Province	Almost 100
July 2012	Protest against mineral processing plant in Duong Kinh district, Hai Phong	Hundreds
August 2012	Protest against textile company in Thanh Tri District, Hanoi	Hundreds
September 2013	Protest against pesticide producer Thanh Thai Nicotex Company in Cam Thuy District, Thanh Hoa Province	Hundreds
September 2013	Protest in front of government authorities of Nghia An commune in Tu Nghia District, Quang Ngai Province against the sand dredging of a company	Hundreds
April 2014	Protest against pig farm in Yen Dinh district, Thanh Hoa Province	Hundreds
April 2015	Occupation of Highway 1 to protest against coal power plant in Vinh Tan Commune, Binh Thuan Province	Thousands
August 2015	People protest against Hong Kong based Luks Cement Company Ltd. in Huong Tra District, Thua Thien-Hue Province	Unclear
October 2016	Protest in front of the Formosa steel plant in Ky Anh township, Ha Tinh Province	3000

Sources: Quang Cuong and Tri Thuc (2010), Nguyen Duy and Quang Anh (2010), Quoc Do and Anh The (2011), Quoc Do and Anh The (2011), Tran My Dung (2011), Ngi Anh (2013), Truong Dang (2012), Vu Thi Hai and Nguyen Dai (2012), Sy Hao (2012), T. Minh (2013), VietNamNet (September 26, 2013), Tai et al. (2016)

of the environmental problem. Saliency and magnitude of impact of the problem are key contributing factors that can explain both the emergence of the movement and whether it is effective. Environmental protests usually occur in response to massive noticeable signs such as a serious odor, high levels of dust, or clearly visible changes in the water. These factors help foster community cohesion and also allow outside observers, including the media, to perceive the problem. This then increases the pressure on local officials to enforce environmental regulations. At the same time, however, if the pollution occurs only intermittently or is less visible to the naked eye, community members face more serious challenges in mobilizing support from both inside their community and especially from outside. In these cases, the community's relationship with the government becomes more important, as those with better connections are more likely to be heard by government officials.

While community activism has created pressure on local governments to enforce environmental laws in these cases, it did not lead to fundamental institutional reform because the implementation of the law occurred only selectively. Even though there were attempts to involve the people more at the local level, the number of environmental protests has increased which reveals that the formal institutions incorporating the local communities are still very weak. Although O'Rourke (2004) has called the government's responsiveness to environmental protests "community-driven regulation," communities still cannot act as watchdogs over violating companies. Instead, a better term would be "community-driven compliance" to highlight the informal process in which companies are sometimes forced to react to societal pressure.

Non-Governmental Organizations

Institutional reformers allowed so-called VNGOs to emerge following the major economic reforms in 1986. In 1992, the government passed a decree on non-profit science and technology associations (Decree 35/HDBT), which allowed Vietnamese citizens the right to register scientific organizations under the VUSTA, a professional organization which comes directly under the Fatherland Front, or one of its member organization.

nizations. Since then, there has been a growing number of officially recognized NGOs. Presently, there are 134 members, including 74 at the national and 60 at the local level, as well as 342 subordinate science and technology organizations. In addition, 197 media organizations are also linked to VUSTA. More than 70 percent of the organizations were established after 1998 and are thus relatively young (Le and Khuat 2008). At the time of Dara O'Rourke's book on Vietnam's environmental politics, there were more than 150 environmental research centers, institutes, and organizations registered (O'Rourke 2004). Most of these environmental NGOs have very few members and many are unsurprisingly dominated by the organization's founder.

Not all of the NGOs are scientific research centers. According to Norlund (2007a, b), there are research NGOs, charities, consultancy NGOs, educational NGOs, and health NGOs. Most of those active in the environmental sector are, however, research NGOs. While donors have actively promoted the development of NGOs, the Vietnamese government and, in particular, local authorities have been cautious in accepting their role. The Vietnamese term tổ chức phi chính phủ is often interpreted to mean outside of the control of the government, which is worrisome to an authoritarian government. Because of the potentially subversive nature, NGOs in Vietnam thus emphasize their professional and non-political nature and often prefer to call themselves "social organizations," or tổ chức xã hội, a term which is also found in the 2015 Law on Environmental Protection. A list of prominent NGOs can be found in Table 5.3.

Not surprisingly, NGOs in Vietnam are significantly different from their Western counterparts (Sidel 1995). As all of the environmental NGOs are under the control of the state, most tend to avoid directly criticizing government or official policies. This is, in part, done to avoid greater government interference in their activities. Instead, most organizations act more like consultation firms rather than any kind of political advocacy group (O'Rourke 2004). As most of the organizations that are particularly active in the environmental sector can be considered as science and technology organizations, they are clearly limited to their technical role and only have very limited ability to review policy or conduct policy advocacy (Taylor et al. 2012). However, many of these groups are

Table 5.3 Selected prominent Vietnamese non-governmental organization
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Fralish name	Vietnemen	Year of
English name	Vietnamese name	foundation
Centre for Environment and Community Assets Development (CECAD)	Trung tâm Môi trường và Phát triển Nguồn lực Cộng đồng	2004
Centre for Marinelife Conservation and Community Development (MCD)	Trung tâm Bảo tồn Sinh vật biển và Phát triển Cộng đồng	2003
Centre for Water Resources Conservation and Development (WARECOD)	Trung Tâm Bảo Tồn Và Phát Triển Tài Nguyên Nước	2005
ECO Vietnam Group (EVG)	ECO Vietnam Group	2009
Education for Nature (ENV)	Trung tâm Giáo dục Thiên nhiên	2000
Green Innovation and Development Centre (GreenID)	Trung Tâm Phát Triển Sáng Tạo Xanh	2011
Institute for Environmental Science and Development (VESDEC)	Viện Khoa học Môi trường và Phát triển	2002
People and Nature Reconciliation (PanNature)	Trung tâm Con người và Thiên nhiên	2006
Save Vietnam's Wildlife (SVW)	Save Vietnam's Wildlife	2014
Sustainable Rural Development (SRD)	Trung tâm Phát triển Nông thôn bền vững	2006
Vietnam Association for Conservation of Nature and Environment (VACNE)	Hội Bảo Vệ Thiên Nhiễn & Môi Trường Việt Nam	1988
Vietnam Institute of Development Studies (VIDS)	Viện Những Vấn đề Phát Triển	2004

seeking some space from the government to pursue their interests (Sidel 1995). They do enjoy autonomy over individual projects. Moreover, in recent times, the use of the Internet, which is more difficult to control, has facilitated the activities of many groups (Gainsborough 2010; Wells-Dang 2010).

In a survey conducted by Bui (2005), more than half of the organizations asserted that their relationship with the government has been difficult at times. This is not really surprising as the government generally does not regard NGOs as partners. The role of NGOs is inferior to the government while they are seen merely as implementers of policy, if they have any role. While their relationship with the government is thus not

ideal, they nevertheless depend on it. In order to be effective, local NGOs need to maintain close personal relationships with government officials and corporations which can be a double-edged sword because they not only grant access to decision-makers but also create potential conflicts of interest that can inhibit the organizations' main goals.

An exploratory survey of 20 NGOs in urban areas in Vietnam conducted by Wells-Dang (2010), however, revealed that all of these groups believed that the political space had expanded. This stood in stark contrast to China where a similar survey had identified only two out of ten groups which responded similarly. Another study by the Asia Foundation in 2012 found that most of those interviewed were optimistic about their future perspectives. The interviewees were marked by a high sense of devotion to their cause which made them adaptable in a challenging environment (Taylor et al. 2012). These perceptions indicate some political change. They do, however, not provide reasons either for why this has occurred or to what extent this is the case. In particular, if a very restrictive environment has opened up, organizations would perceive this as an opening while an already partially opened environment may not have changed and thus the sentiments are different. Nevertheless, the blossoming of NGOs and their belief in the ability to play a greater role is fundamentally altering the Vietnamese state.

Despite the establishment of many new groups, most of the NGOs have remained very small, poorly funded, and relatively isolated. The 2012 study by the Asia Foundation also found that most of what they call CSOs¹ suffer from "funding crises" and are in many cases dependent on foreign money through donors or international NGOs (Taylor et al. 2012). Very few organizations receive donations from the public. It is therefore very difficult for them to survive without any external support (Aschhoff 2008). The lack of sufficient funds makes it more difficult to employ the qualified staff which would be necessary for their activities. Many potential NGO employees instead choose to work for international organizations which pay significantly higher salaries. It was thus perhaps not surprising that almost half of all the organizations in the Asia Foundation survey existed for less than six years. In addition, donor money significantly influences the agenda of many of these organizations. The negative angle is that this restricts their freedom to act

independently while the positive side is their ability to learn new and innovative approaches. This is especially relevant in the rapidly changing and highly complex field of environmental protection.

While many NGOs were established by activists, some of the most prominent organizations with long histories were initiated by the government or with strong support from the government and are headed by retired government officials. In the Chinese context, this kind of organization has been called GONGO. Wu (2003) argues that this was a strategic decision in the clientelistic system to represent collective interests and provide important services, such as the need to mitigate social tensions. At the same time, the state grants these organizations with a certain degree of autonomy, which allows them to become important political players. In particular, their expertise and personal relationships gives them an advantage over other organizations. Both in China and Vietnam, the initial reason for the emergence of this type of organization is the internationalization of environmental politics and, in particular, the demands by donors for NGOs. While GONGOs are created and maintained by the government, they can become more autonomous, particularly when they cooperate with international organizations or other local NGOs. With foreign support, they can independently implement their own projects, find innovative solutions, and even externally influence government policies.

The most prominent example of an environmental GONGO is the VACNE, which was established under Decision No. 299/CT on November 23, 1988, and thus is the oldest of its kind. The current president, Dr. Nguyen Ngoc Sinh, who has led the organization for more than a decade, also worked for the government for about 40 years. Similar to other socio-political organizations, it is also a member of the VUSTA. The organization acts as an umbrella organization for many other NGOs, research centers, media organizations, and businesses. According to the website, there are 134 of these organizations, of which businesses make up the largest number with 39. The GONGO has around 10,000 private members, which are entitled to participate in conferences and in internal elections. Moreover, members can get support from VACNE in the form of access to information and documents, facilities, participation in projects, as well as training programs.

Despite its large number of members, VACNE only has a very small office in Hanoi with only about ten staff and a second office in Ho Chi Minh City, with another six to seven employees. While the organization appears similar to a mass organization, its funding primarily comes from membership dues, service provision, and assistance from foreign as well as domestic organizations and individuals (VACNE 2003). In particular, VACNE has projects with international organizations such as the Swedish International Development Cooperation (SIDA) or the Danish International Development Agency (DANIDA). As the bulk of funding does not come from the Vietnamese government, VACNE can act relatively autonomously.

There are, however, also problems with VACNE. Most of its leading members are retired officials, and it thus tends to only coordinate projects. An environmental trade fair with Korean companies in 2013 drew only very few customers. Much more serious questions have also been raised about the organization's handling of a highly questionable hydropower project in Cat Tien National Park. At first, VACNE showed its opposition to the construction of two additional dams. The existing reservoirs in the park had already led to a sharp reduction in the quantity and quality of fish along the Dong Nai River and some fish species had even vanished (My 2011). Many people had also been resettled and would have to be resettled again. On June 30, Associate Professor Dr. Nguyen Dinh Hoe from VACNE told journalists that a vast area of forest land would have to be destroyed. However, less than half a year later, on September 30, he changed his mind and asserted that the two dams would not cause any serious environmental harm. According to reporter Tran Minh Quan, the sudden change of mind raised questions about the "objectivity of the project evaluation task" within the public (Tran 2011). While the government eventually abandoned the project following the release of the EIA report, VACNE's credibility had suffered a serious blow.

In regard to bottom-up non-governmental activism, one of the most prominent nature conservation organizations is PanNature which was established in 2005. The history of the organization shows some of the challenges and opportunities. Getting started was very difficult as the organization first relied solely on volunteers. It first needed to raise

enough funds to hire staff. However, it could not receive any funding from international donor organizations because this requires registration. In addition, the founding members also needed to discuss the necessary by-laws, the organizational strategy, the mission, as well as to find an adequate name for the organization. Through perseverance and hard work, the organization eventually achieved its goal of registration but even today securing sufficient funding is a very important part of its tasks. To keep the spirit of volunteering alive, the organization employs about two to three volunteers at any given time. In addition, it has set up a foundation to support volunteers in non-profit organizations. At the same time, PanNature seeks to maintain its independence. For instance, it does not want to be part of VUSTA and in contrast to GONGOs like VACNE, it does not receive a significant amount of funding from the government. In order to receive financial support from VUSTA, it is necessary to follow many bureaucratic procedures. Moreover, as a consequence of commissions, around 15-20 percent of the funding is lost. There is only about two percent for research. Despite its financial autonomy, PanNature seeks to closely engage with the government. It has connections with MONRE, MARD, and the National Assembly. In order to influence policy, it conducts research and presents its findings to government officials in workshops. There are five policy experts, which work together in teams of two to three people. Overall, the organization considers the central government receptive to its work. It has even been involved in a project related to the latest revision of the environmental law, which came into effect in 2015.

Overall, NGOs have become an important actor in the process of institutional change. In various ways, they are exerting influence on both policy-making and policy implementation. Although most of these organizations remain small and fragmented, they allow institutional reformers to establish new governance mechanisms which seek to weaken entrenched economic interest groups. This potential has increased with the formation of networks. However, despite this progress, it is also clear that the enormous obstacles faced by these organizations inhibit the development of an effective social movement. Unless the many governmental restrictions are lifted, NGOs are very unlikely to have the same

transformative character as similar organizations have had in more open societies.

The Development of Societal Networks

While there has been a rapid increase in the number of CSOs, they have largely remained very small. In order to overcome this obstacle, a number of organizations have decided to join either informal or formal coalitions despite obstacles from the government, which worries about the emergence of potentially strong oppositional interest groups. There are a number of advantages for collaboration such as improved strength against potential opponents because of greater numbers and the ability to learn from each other. Formal networks may also create a forum for sharing knowledge and cooperating in projects, improve access to power holders, provide better access to external funding, and connect the many small organizations to the National Assembly, government, donors, and international NGOs. Networks thus potentially have a much greater impact on the institutional reform process, which depends on the degree of pressure that non-governmental actors can exert.

Informal networks of cooperation between activists and other individuals with shared goals have emerged to confront acute problems in a particular locality. As the cases of community activism above amply demonstrate, the lack of formal organization is not a necessary hindrance for environmental activism. In particular, if activists can build strong links to government officials, the chances of success will improve. The severity of the environmental problem similarly impacts the success of the informal association of activists. If activists can even make reference to historical events or national pride, the impact of the movement can improve. However, the coalition's degree of power vis-à-vis the opponents has to be taken into consideration. If, as in the case of the movement to save Thong Nhat Park (literally Reunification Park) in Hanoi, there is strong support for environmental protection while support for development is relatively weak, a movement can succeed (Wells-Dang 2012). However, if strong power holders such as the prime minister use their influence, as

was the case in the anti-bauxite coalition, environmental activists can face an insurmountable enemy.

Overall, these informal networks have not resulted in formal organizations. This was not even the case in the campaign to save the park in Hanoi even though there had already been discussions (Wells-Dang 2012). Nevertheless, a number of formal coalitions between NGOs have been established with the strong backing of international organizations. With the help of international donors, the earliest attempt at forming a formal network was the VNGO Network for Community Development which was set up in 2001. Its initial goal was to collectively reduce poverty in rural communities, sustainable community development and help grassroots democracy develop. It had 44 member groups in 2005 (Capable Partners Program 2005).

The topic of climate change became the focus of a spin-off network which was started in 2008 and originally brought together 15 Hanoi-based NGOs and currently boasts approximately 300 member organizations. At the time, the network was called Vietnam Network for Civil Society and Climate Change but the name soon proved to be too controversial and so it was renamed VNGO&CC in 2010 (Zink 2013). Founding members of the network were prominent Vietnamese NGOs such as the Centre for Sustainable Rural Development (SRD), the Centre for Marinelife Conservation and Community Development (MCD), the Center for Environment Research, Education and Development (CERED), and the Institute for Social Studies (ISS). The goal of the network is to provide advocacy as well as feedback on the implementation of climate change efforts at the grassroots as well as government level. This involves projects of capacity building, enhancing communications, and training workshops.

Although predominantly foreign NGOs had formed their own network called the Climate Change Working Group (CCWG; as will be discussed in Chap. 7), the Vietnamese network sought to provide a Vietnamese perspective to the issue of climate change which, according to climate scientist Nguyen Huu Ninh, would be linked with "the traditions, the habitation" of Vietnam. Moreover, he argued that the Vietnamese organizations "can share and help, possibly more than foreign NGOs" (cited in: Clark 2008). In 2011, the two climate change

networks signed a memorandum of understanding (MoU) with the Department of Meteorology, Hydrology and Climate Change of the MONRE. This enhanced the cooperation of NGOs with the government in various projects as well as improved communication. Moreover, it has enabled the sharing of information about successes and failures, which has strengthened the institutional learning process. However, while the government has become more receptive to non-governmental input, it has not done this pro-actively. In fact, cooperation depends to a large extent on the willingness of financial support from NGOs. In addition, there is often a lack of transparency as well as a protraction in any follow-up activities (Ha 2014).

Another prominent example for a formal NGO alliance is the VRN, which was brought to life in November 2005 to improve the protection of the country's waterways. The collaboration is meant to provide an open forum for the discussion and exchange of information between various organizations including NGOs, researchers, government officials, and anyone else who is interested. The network has around 300 members nationwide, provides a bi-monthly newsletter, offers training for its members to enhance the capacity in monitoring of water quality, presents scientific studies to government officials, cooperates with scientists, contributes recommendations to impact assessment reports, and provides societal feedback to law making. By combining efforts, the VRN was able to tackle controversial issues such as the displacement of people as a consequence of dam construction. As such the network could highlight the negative impacts of the construction of dams and thus counter the strong economic interests within the government coalition, which had stressed the economic benefits (Nga Dao 2011). The network is funded by two international organizations, the Interchurch Organization for Development Cooperation (ICCO) based in the Netherlands and the McKnight Foundation based in the United States. One of the strategies of the network has been the involvement of media through various activities including field trips, workshops, conferences, seminars, distribution of research publications, as well as writing articles either on blogs or for publication. The network's ability to draw media attention to the devastating effects of two controversial hydroelectric projects along the Dong Nai River, in which, as mentioned earlier, VACNE had abruptly and fundamentally changed its stance, contributed to the government's decision to terminate them following the release of the EIA report in 2013 (Ha 2014).

Vietnam's growing involvement in the global market continues to create the need for greater collaboration between NGOs. For this reason, SRD again initiated a network in January 2012, which focuses on the protection of forests. It was created in response to Vietnam's negotiations with the EU on signing a voluntary partnership agreement called Forest Law Enforcement, Governance, and Trade (FLEGT) which was developed in response to illegal logging in developing countries. It officially went into effect on November 25, 2011. As FLEGT requires the involvement of local NGOs and local communities for improved access to the European market, an economic incentive was created to strengthen local civil society.

Support for NGO networks has not only focused on professional organizations. Similarly, youth environmental organizations have also been linked through a network. This has occurred with the support of international organizations. Under the guidance of Live & Learn, a network of small NGOs organized by youth around Vietnam was founded. The Vietnam Green Generation Network boasts many renowned partners on its website which include famous international donors, NGOs, and the Vietnamese government in the form of the VEA. The goal of this network is to enable youth groups in promoting awareness and action for environmental conservation in more than 20 provinces. The network helps youths mainly by providing education and helping them to connect with each other. The activities are organized under various different themes such as climate change, energy usage, sustainable production, and consumption. The main mission is to promote a green lifestyle among the youth, which are believed to be more receptive to the behavioral change. Many of the organizations are thus active on university campuses and promote their activities through Facebook. Due to its youth focus, the survival and strength of the organizations depends on the changing leadership, which has a high turnover in comparison to other organizations. Moreover, while this form of network potentially provides the basis for greater civic organization in the future, its main focus on youth activities and awareness creation poses limits on the effectiveness of the network.

Overall, there is thus a degree of collaboration in networks to share ideas, distribute funding opportunities, and cooperate in different projects. At least 90 percent of all NGOs in Hanoi and Ho Chi Minh City participate in meetings together with similar organizations in order make connections. However, not all NGOs are content with networks. The prominent environmental organization PanNature, which is well connected, does not see particular use in networks because it creates conflicts due to the competition over funding. About 25 percent of NGOs do not actively take part in a network. They regard the work in such a network as a waste of their time and effort (Wells-Dang 2012). NGOs also complain about discrimination of younger members and lack of contribution of some members (Taylor et al. 2012). Finally, Wells-Dang (2012) also demonstrates that density within the network is more important than the size because closer ties between members enhance the community.

The Role of the Media

An important part of societal activism is the growing importance of environmental journalism, which aims not only to inform the people about environmental issues but also actively pursue campaigns against intransigent government officials and corporations that prioritize economic interests at the expense of environmental concerns. At the forefront of this movement is the Vietnam Forum of Environmental Journalists (VFEJ), which has more than 100 members. Founded in 1998, the socioprofessional organization, which comes under the VACNE, has been active in providing support to environmental journalists and cooperating with journalists from other countries. The VFEJ considers itself to be the freest association of journalists in Vietnam according to its head Ngyuen Bac Son. These reporters work for some of the approximately 600 newspapers and journals as well as about 60 television channels across the country (London 2009). While all media are owned and controlled by the government, the introduction of market factors has made reporting to some extent more critical in recent years, even providing investigative journalism of corruption cases (Kerkvliet 2001) and the environment as long as the legitimacy of the Communist Party is not questioned (Cain

2014). The Internet, in particular, provides a platform for many different discussions as well as the publication of information that cannot be found in the traditional media (Wells-Dang 2010).

Environmental journalism has been at the forefront of this trend as it has become much more professional and reports on environmental problems have become very common in the media. Interest in environmental issues has grown rapidly, while in 2007, a survey reported that only 20 percent of journalists wanted to write on environmental topics and the environmental forum only had 50 members, two years later, this number had doubled (Bass et al. 2010). The journalists see their role in terms of providing important information and thus creating awareness both in the general public and with politicians, which are often biased in favor of economic development. There are reports on many issues including serious incidents of environmental pollution, environmental protests, and even local government negligence. Moreover, journalists believe that they can fulfill the role of public opinion, which is otherwise limited. This is legitimized through the government's emphasis on democracy, which encourages at least in principle a variety of voices.

In addition to creating awareness, the VFEJ's official mission is deeply embedded in environmental governance. The organization should "agitate" journalists and ordinary people to comply with environmental regulation, thus acting as a partner of the government. Besides helping government to implement the environmental regulations, the organization is also supposed to provide consultancy services to the government. The organization is, however, not only linked to the government but should also provide similar services to other Vietnamese associations and organizations as well as businesses. Finally, the forum partners with Vietnamese expatriates, individuals, and organizations from other countries as well as international organizations. This latter aspect makes it clear that external knowledge is seen as an advantage rather than as a threat. The VFEJ thus participates in the mutual exchange of journalists across Southeast Asia.

The media plays a crucial role during environmental protests because reports draw attention to the complaints and increases pressure on local governments as well as companies. A journalist reporting on the pollution of a carbide factory, for instance, stated that "In the area around

the factory, [the pollution] can be observed with the naked eye and the surrounding residential areas are still dusty" (Thuy Duong 2012). Along with the article, there are pictures that show the massive black smoke that is released from the company's chimneys. Similarly graphic images are often included with other articles that discuss environmental protests.

Despite the growing influence of journalists, it is not possible to see the media as a fourth estate (Bass et al. 2010). The dominance of the ruling VCP has created significant obstacles for the role as watchdog and has circumscribed regime accountability (Abuza 2001). In fact, the media may even be regarded as a tool of central authorities to control lower-level officials, which has become increasingly difficult under the administrative decentralization. Moreover, the media's struggle for more political space occurs in the narrow confines of the one-party state (Heng 2001). The decision-making in regard to staffing and close guidance of the media restrict its influence and have created a hybrid system between the closed model of media as only a mouthpiece of the government and the Western understanding of a watchdog function. This has been somewhat mitigated by the growing importance of the Internet, which, however, is largely restricted to urban intellectuals and their organizations (Mol 2009). While reporting on government failings and corruption is greatly curtailed and may bear risks for journalists and editors, environmental reporting may also in some circumstances face barriers. This was apparent during the 2016 environmental crisis following massive fish deaths when the media ignored the protests but also during the campaign against Bauxite mining, which will be discussed in the next section.

The Limits of Societal Influence: The Anti-Bauxite Campaign

In 2009, a government plan to mine some of the rich reserves of bauxite, which is an ingredient of aluminum, drew a strong reaction from environmental activists and others who feared for one of Vietnam's most verdant regions. As the metal is retrieved through surface strip-mining or open-cast mining, the existing landscape would be destroyed. Moreover,

side effects such as "red dust" and "red earth" threaten human health and environment unless tight environmental controls are in place. Possible risks from the mining, therefore, ranged from losing potential eco-tourism to negative impacts on farming. Moreover, the mining could lead to the displacement of ethnic-minority groups who inhabit the Central Highlands. Vietnam holds what is believed to be the third largest reserves of bauxite in the world (5.4–8.3 billion tons). The master plan of the government estimated around US\$15 billion of investments in the mining project by 2025.

Then Prime Minister Nguyen Tan Dung left no doubt about the strategic importance of the project when he asserted that the planned mining was "a major policy of the party and the state" (qt in Hoang 2009). At the time, there was rare public dissent within the government controlled society including scientists, the state media, and soldiers. In addition, a number of residents and bloggers also openly voiced their opposition to the project. Even the only living founding father of the socialist republic, General Vo Nguyen Giap, asked the prime minister in a letter, which was leaked to the press on January 10, 2009, to suspend the mining plans (Vuving 2010). Morris-Jung (2011) called it "one of the most significant expressions of public dissent against the single-party state since the end of the Vietnam War (1959–1975)." However, according to Duy Hoang (2009), there appeared to be very little coordination in the opposition to the mining project. This is not surprising because there still is generally a lack of organizational capacity within the society.

The anti-bauxite campaign demonstrated exceptional openness for both environmental and pro-democracy activists, which agitated for the same goal. Activists used the state-sanctioned use of nature protection and the institutions that had been developed to contest the regime (Morris-Jung 2011). According to Thayer (2009), the bauxite mining controversy challenged the government's performance legitimacy because a large-scale development project was challenged. Vuving (2010, p. 379), moreover, argues that "what is new and significant about the activities of civil society in 2009 is the rise of mainstream elite dissent motivated by intertwined national and human security concerns." To some extent, this was similar to the role of environmental activism played in Eastern Europe when nature activists joined hands with nationalists and democ-

racy activists to press for democratization. As such, this may have raised concerns among Vietnam's Communist Party leadership, which prioritizes the overarching importance of one-party rule.

Aside from being the most important environmental movement in Vietnam's history, the anti-bauxite campaign also proved to be a combination of historical, cultural, and political issues. The most important concern was the role of the People's Republic of China. In 2008, the Vietnamese Communist Party leader Nong Duc Manh and his Chinese counterpart Hu Jintao had issued a joined statement that had mentioned the Chinese cooperation in the mining project. The Vietnamese government signed a contract with a subsidiary of Chinalco, a Chinese stateowned mining company. Activists, who had started a petition against the project, referred to China's reputation as an environmental polluter to highlight their worries about the project. Moreover, there were worries the Chinese projects would bring in Chinese laborers instead of employing Vietnamese workers (Womack 2009). Finally, at least in one bauxite mine at the Vietnam-Laos border in Truong Son (Long Mountain), activists raised the concern that the Chinese workers were, in fact, soldiers which led to violent conflicts between Vietnamese and Chinese workers (Hoa and Turner 2010). Environmental concerns thus no longer remained only a "technical" problem that could be solved by the government but became politicized as it involved serious concerns about national security. As in other cases such as the water management of the Mekong, the transnational nature of the movement raised the stakes for the government which no longer regarded it only as an environmental issue but a foreign policy concern (Wallace 2016).

The movement did have an effect as the prime minister ordered a major review of the bauxite plans on April 30 (Thayer 2009). The Catholic Church showed its opposition in a Pastoral Letter by the archbishop of Saigon on May 31 and a lawyer and son of the famous poet Cu Huy Can, Dr. Cu Huy Ha Vu, filed a lawsuit against the prime minister in the Hanoi People's Court. A petition against the mining project was signed by 135 reputable scholars and intellectuals. Professor Nguyen Hue Chi and Professor Nguyen The Hung, who had been leaders in the petition, also set up a website with the title "Bauxite Vietnam," which attracted a record number of visitors in only a short period of time. The government,

however, proceeded with its plans while, in order to soothe the nationalist fervor, it fined six Chinese companies for failing to obtain permits for Chinese miners at various mines.

At the same time, the government also responded to this new activism with repression. Already in May of 2009, leading pro-democracy activists were arrested for spreading anti-state propaganda. The lawyer who had tried to sue the Prime Minister Dr. Cu Huy Ha Vu was also arrested in November 2010 and currently serves jail time for "propaganda against the state" and "plotting to overthrow the communist government of Vietnam." In a move to curtail the openness of dissent from within the elite, the government passed Decision No. 97, which disallowed the recently granted right to critical feedback on policy issues even if based on scientific research. Now that feedback must again be sent directly to the relevant authorities without ever being publicized (Vuving 2010). In particular, the Vietnamese government is worried about anti-Chinese sentiment in Vietnam. After reports about territorial conflicts between Vietnam and China in the Vietnamese newspaper *Du Lich* (Tourism), the bi-weekly publication was banned for three months (*The Economist*, April 23, 2009).

Criticism of the bauxite mining returned after toxic red sludge from a Hungarian aluminum factory spilled into the Danube River on October 4, 2010. Scott Roberton, the Vietnam-based representative for the American NGO Wildlife Conservation Society, claimed that the renewed public debate which occurred in newspapers, blogs, and the National Assembly was the result of the slowly growing environmental movement in Vietnam. He said: "People are speaking out publicly, decision-makers are being lobbied and there seems to be far more public debate than before. It's in the early days, but the signs are very promising" (cited in Clark 2011). Their hopes were raised further as Vietnam's 11th Party Congress started in early January 2011. The government has decided to overview an EIA for the mines and a group of government delegates visited Hungary to study the reasons for the disaster. Thayer, however, believed that the issue of the bauxite mining would be largely ignored by the party congress (Clark 2011). In 2012, investors in the bauxite mining industry urged the government to speed up the projects as they had fallen behind schedule and become much more expensive than previously expected. The high costs included a high export tax, high environmental charges,

and high transportation charges from the mines to the exit ports (Huong 2012a). The Lam Dong bauxite mining project, which is one of the first two projects, was completed in 2013. Upon completion, the director of the Hong River Delta Project Management Unit Dr. Nguyen Thanh Son admitted that the mines were unlikely to make a profit because they used outdated technologies. Moreover, he asserted that industrial trees would provide much more jobs (*Troi Tre News*, May 13, 2013).

Repression was also used against the media. Activists who set up websites to publicize the issue of the bauxite mining faced both censorship and hacking attacks. In March 2010, Google asserted that spyware had been installed on many Vietnamese computers in order to target the antibauxite movement. It was attached to software used to type Vietnamese characters (BBC News, March 31, 2010). The software installed a botnet, which targeted anti-bauxite websites and blogs through distributed denial of service attacks (Krazit 2010). These attacks lasted well into 2012. The website operators installed a firewall which prohibited access to Vietnamese users and thus potential hackers of the site. In order to access the website, users had to install software that allows them to circumvent the firewall, which is relatively easy for anyone with knowledge of Internet technologies. The anti-bauxite websites meanwhile have become political forums which rarely discuss environmental issues and instead focus on topics such as democracy and national security. The use of repression eventually divided the movement into those willing to continue challenging the regime with all the associated risks and those who want to focus on the issue of environmental protection.

Conclusion

This chapter has demonstrated that institutional reformers have allowed and sometimes even promoted the development of societal actors. At the community level, movements have been tolerated because they allow the central government to deal with emerging environmental problems. While this has sometimes resulted in positive change, it also reveals massive problems in multilevel governance. Reformers have sought to use these shortcomings in their attempt to adapt the institutional framework.

Aside from the rise in community activism, reformers have also promoted the development of a relatively autonomous civil society that can assist the government in enforcing legislation and also cooperate with international organizations, which demand partners for environmental projects. Despite the willingness to promote societal actors, the government has sought to contain their influence for fear the new activism could become a powerful political force. NGOs lack independence from the government, are very small, and often lack resources. Many have formed networks to overcome some of these barriers, which have had some success but still suffer from many of the same problems that beset the NGO sector. The media has also played an important role by drawing attention to environmental issues and even reporting on protests. The greatest obstacle to the role of society is that activism will only be tolerated as long as it does not challenge the dominance of the one-party state. When activism became too powerful and forged alliances across the country and between different interest groups such as during the Bauxite mining debate or the massive fish crisis of 2016, the government will not hesitate to use repression. Activists have been arrested and the media censored. In other words, institutional reforms are currently tightly circumscribed by the institutional barriers of the one-party state.

In the next chapter, the analysis will turn to the business sector, which has been firmly opposed to the reforms of the environmental state. Rather than obstructing the law making, however, many companies have chosen to simply ignore the law and allow it to drift. For reformers, gaining some support from this sector is crucial especially when top-down regulation is largely inefficient. For this reason, there have been attempts to introduce various market-based governance mechanisms such as the polluter-pays principle or the introduction of voluntary certifications. This has been driven by international organizations but has faced the challenge of Vietnam's only partially liberalized economy.

Note

 The term includes both VNGOs and community-based organizations but excludes mass organizations as well as umbrella and professional organizations.

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6

The Role of Businesses

The greatest obstacle for institutional reformers seeking to enhance Vietnam's environmental governance is the country's priority on economic development in which businesses play a central role. This is a serious challenge because the legitimacy of the regime depends on the rapid development of the economy. As a consequence, as previous chapters have shown, the government has been unable to halt the environmental deterioration despite devising extensive laws and regulations, setting ambitious targets and improving the capacity of environmental institutions. These reforms and the growing societal involvement have thus far only raised limited awareness among some companies that environmental protection is important but not led to any significant change in regard to the still rising level of pollution (Le 2009). To get a feeling of the demand for environmental technologies, I visited the fifth EnTech international trade fair in 2013, which exhibited the latest environmental and energy technology for potential customers in the country. The fair, which started in 2009, is held annually in Hanoi and is supported by the Vietnamese government, foreign donors, as well as NGOs. I went on the second day and already faced a virtually empty conference hall. There were many companies, half of the event featured Korean technologies, but only halfway into the

three-day trade fair and there were virtually no customers. A few of the Vietnamese booths had even closed down, while the staff of other booths was busy removing their exhibits. I went around and started chatting with some of the remaining company representatives. One of the exhibitors drew my attention because they had put up big signs prohibiting photography. The staff told me that this had been placed there because they had just been in China, where someone had taken detailed pictures of their entire machinery. Despite having a very sophisticated product, they became worried about intellectual property theft. This was not an issue in Vietnam, as there were no customers who showed any interest. This was confirmed by other companies, which did not really know who their customers could be. It seemed more like a fishing expedition than a professional trade fair. Nevertheless, the trade fair continues to be held every year with the hope that eventually environmental technologies will become more popular in Vietnam.

Environmental technologies would already be in high demand if businesses followed the strict environmental rules and regulations. However, the key problem has been the weakness of implementation as many polluters have blatantly ignored the rules, which in essence demonstrates a failure in the top-down administration. In order to counter this problem, reformers have sought to develop incentives for businesses to comply with environmental regulations. Without the support of enterprises, both small and large, environmental policies are doomed to fail. As they pose the most powerful veto agent in the reform process, it is necessary to overcome their opposition to the reform process. However, gaining the support of the business sector, even if reluctant, is extremely challenging in a developing country in which political and economic interests are deeply interwoven not just through shared interests but also ownership. The state owns many important companies and thus includes actors that heavily profit from the environmental exploitation. Even reform-minded civil servants cannot counter these special interests if they come from within the same organization. Monitoring can only be effective if the institution has enough leverage over those actors that it needs to monitor.

In addition, efforts often entail immediate costs for companies and few returns. Developing countries such as Vietnam rely to some extent on attracting foreign companies based on low costs. Stringent implementation of the existing environmental legislation, however, would increase the financial burden and thus potentially deter some investments. Instead, the actual costs incurred by pollution and other environmental destruction are externalized to the society as a whole. In many cases, the poor, which are forced to live close to factories or depend on the land for their survival, are likely to suffer the most. At the same time, their survival is often closely tied to the environmental destruction. Some are employees in the companies that pollute while others need to contribute to the pollution in order to survive, either as owners of household companies or as farmers. Others are guilty of illegal deforestation either because wood is an important source of income or farmland can achieve higher yields than forests. While the short-term survival of individuals is affected, the long-term consequences are ignored. Despite these contradictions, there are a number of possibilities to reduce the negative impact on the environment within the emerging governance structures. After reviewing the business sector in Vietnam, this chapter will discuss a number of marketbased approaches that have been applied to mitigate the environmental crisis. Although they are insufficient, they demonstrate that change is occurring and hope remains for a more sustainable future.

The Business Sector in Vietnam

The Vietnamese business sector poses particular challenges to institutional reformers as a consequence of the ongoing reform process of the socialist regime, which maintains significant influence over enterprises in an attempt to follow the Chinese version of a developmentalist regime. The Communist Party in 1986 announced the introduction of a "socialist market economy under state guidance," which opened the door for market-principles to spread. This, however, did not mean that the state was prepared to give up its tight control which it maintains either directly or indirectly. One of the key characteristics is the state-dominated banking system which provides the main source of funding for businesses. Of course, this raises the threat of lending patterns that are based primarily on connections rather than the profitability or any other concerns of companies. In addition, the Vietnamese state also was determined to

maintain state-owned enterprises in key sectors because they are closely linked to the power of the Communist Party. Nevertheless, the ability of the state to coordinate the economic development remains weak and business interests have increasingly been able to dominate in politics (Beresford 2008).

Ownership is an important determinant of the environmental behavior of corporations in Vietnam. This is because the degree of government collusion influences the motivation of companies to comply with rules and regulations. There are varying levels of pressure on companies to change their behavior, which influences both the economic and the political incentives for switching to cleaner technologies (Li and Chan 2015). Despite the initiation of economic reforms referred to as *doi moi* in 1986, the dominant economic forces remain strongly under control of the government. For this reason, scholars have variously described Vietnam as "political socialism' with capitalist characteristics" (Apter 2000) or "market-Leninism" (London 2009). In fact, Vietnam's approach has so far been similar to that of China, which has also maintained control over key industries and the financial sector. Privatization has focused mainly on those industries which are small and lack performance (Painter 2003). In Vietnam, this process has often been called equitization. However, even in these smaller companies, the government has maintained the controlling ownership in shares, and thus has not effectively tackled the problem of lack of efficiency (Sjöholm 2006). A second type of private firm has been joint ventures with foreign companies. Most of the newly registered private enterprises have been small- and medium-sized companies, which are regarded by the state as the "private sector." These companies have remained small as they have received very little support to grow in size (Hakkala and Koko 2007).

The following discussion will show that state-owned enterprises have become infamous for their pollution, while the private sector with its large number of very small household enterprises is not performing much better. Upgrading outdated technologies and installing pollution management systems are expensive and skirting new environmental regulations is much easier than complying with them. The greatest success can be found in joint ventures with foreign companies and other firms with close ties to international corporations. Nevertheless, there have been

a number of high-profile pollution scandals such as Vedan, the Luks Group, or Formosa, which demonstrate that in some cases, the relatively weaker regulatory environment is abused by some foreign companies.

State-Owned Enterprises

Despite attempts to privatize, the boundaries between state and the market are still much less clear than in Western countries. This applies not only to those enterprises which are officially state-owned enterprises, which since the 2014 Law on Enterprises are only those companies with 100 percent government ownership. Instead, the discussion here applies to any corporation in which the government has a significant stake. The government has, for instance, encouraged the development of enterprise groups in which the government's role is reduced to that of a parent company with greater independence from line ministries. However, state control was maintained to a large extent through the preferential treatment from state banks (Ishida 2013).

According to The Economist, as of 2014, state-owned companies account for about one third of the country's GDP and operate in a wide range of fields including finance, fabrics, dairy products, and shipbuilding. While there has been a process of privatizing, or "equitizing" as it is known in Vietnam, many state-owned enterprises have resisted the process because managers fear the potentially averse impact of marketorientation (Sjöholm 2006). The lack of transparency in these companies has resulted in massive corruption and mismanagement. The most prominent example in this regard is the massive scandal involving the country's major shipbuilder, Vietnam Shipbuilding Industry Group (Vinashin), which led to its bankruptcy in 2010. The company was criticized for making decisions based on political connections and relationships and ignoring whether the business would be profitable. In addition to shipbuilding, the company had been rapidly expanding into other fields unrelated to its core business. Perhaps the most troubling aspect was that the company had owned its own bank and could thus self-finance many of its follies (Malesky et al. 2011). state-owned enterprises (SOE)s generally tend to have high amounts of bad debt. Financial problems are thus

an extremely serious problem of inefficient and opaque state businesses. However, their links to state-owned banks mitigates this problem because debts can either be eliminated or ignored. This contributes to the perception that state firms are privileged within the market and thus threaten or even destroy competing private enterprises (Nguyen and van Dijk 2012).

From an environmental perspective, state-owned enterprises have blatantly violated environmental regulations and are thus often the most egregious polluters in the country (Ramstetter 2011). This is the case even though these companies increasingly have employed environmental staff and are adopting environmental standards. There are a number of reasons for this situation. First of all, the mere existence of state-owned corporations makes it more difficult for effective enforcement of environmental regulations because the polluter and regulator are essentially from within the same organizational structure. When in 1995, the NEA blacklisted companies owned by the state, none of them were closed down even though their pollution was considered to be extremely severe (O'Rourke 2002). Second, the growing need for competitiveness coupled with the problem that many are loss-making enterprises means that managers are unwilling to invest in costly new technologies, especially for environmental protection, and the prevention of pollution has remained a low priority (US Department of Commerce 2001; Nguyen N.H. et al. 2015). They generally have very old and outdated machines or secondhand imports.

Moreover, state-owned or government-linked corporations are intertwined with the administrative state which gives them a high degree of bargaining power to negotiate lower punishments in case of violations (Wang and Jin 2007). In other words, the environmental state will not be able to deal with them as harshly as it should. It is extremely unlikely that the most serious violators could be closed down, something environmental officials are aiming for. The lack of any serious consequences for violations reduces the incentives for investing into environmental technologies. Unsurprisingly, environmental concerns do not have a very high priority within the management, which instead is increasingly forced to reduce costs to remain competitive. This process has resulted in extremely powerful economic elites which have become a formidable opponent for any ambitious reformer.

Table 6.1 Timeline of the Sonadezi pollution case

2006	Pollution starts at the Long Thanh Industrial Park where the wastewater treatment plant is operated by Sonadezi Corporation
2009	Sonadezi was found to discharge wastewater 2–3 times over the limit and fined VND17 million twice following 2 inspections
2010	Sonadezi is fined VND31 million for environmental violations, including the discharge of polluted wastewater 2–5 times over the standard
2011	Sonadezi is fined VND75 million for wastewater discharge exceeding the permitted standards
August 3–4, 2011	The police catch Sonadezi illegally discharging 9300 m³ of wastewater through a secret pipeline
August 5, 2011	Police reveal the case to the public; Sonadezi chief executive officer (CEO) Do Thi Thu. Hang and member of the National Assembly denies any wrongdoing
August 15, 2011	Sonadezi CEO accepts an investigation and promises to make any changes if necessary
May 17, 2012	Dong Nai propaganda department tells media not to mention Do Thi Thu. Hang's name and not to release "false information to incite the masses"
2012–2015	Protracted struggle over the extent and amount of compensation with Sonadezi seeking to minimize the amount to be paid and residents becoming increasingly upset
May 8, 2014	Do Thi Thu Hang officially accepts responsibility in first meeting with affected residents
April 7, 2015	Do is elected as deputy party secretary of Sonadezi Corporation
May 12, 2015	According to a local government inquiry, Sonadezi has to pay VND15.5 billion in damages
February 23, 2016	Sonadezi reports VND91.4 billion in profit before taxes, Do Thi Thu. Hang was elected as Chairwoman of the Board

Sources: Saigon Times (2011), Nguyen et al. (2011), Diep Van Son (2012), Xuan Hoang (2014), Le Quynh (2014), Minh Hang (2014), Phuong Hang (2015), Vietstock (February 23, 2016)

How state-owned enterprises can violate environmental rules with impunity can be illustrated with a number of prominent cases that have been featured extensively in the Vietnamese press. Despite concerted efforts from environmental officials, the media, and citizen activists, the consequences for the unlawful pollution have been insignificant. Particularly disturbing is the case of Sonadezi Corporation, which in 2011 illegally released 9300 m³ of polluted wastewater and was caught in the act by the police (see Table 6.1 for an overview). The company man-

aged the wastewater treatment plant for Sonadezi Long Thanh Industrial Park, which included 42 companies and was located in Dong Nai province or 45 km from Ho Chi Minh City. It started operation in 2003 and covered an area of 488 hectares. Residents began complaining about pollution in 2006 and the company was fined VND17 million in 2009, VND31 million in 2010, and VND75 million in early 2011 for releasing two to five times the amount of polluted water into the environment. In August of 2011, the police detected a malicious release of pollution through a secret pipeline that diverted the water for 600 meters (*Saigon Times*, August 12, 2011). Whenever there was a high tide, heavily polluted water spilled into the gardens and killed fruit trees (Nguyen et al. 2011). In the fateful night from August 3 to 4, the company had been caught dumping poorly treated water with a very strong foul odor into a canal, which was the main water source for approximately 500 hectares of agricultural land (ibid.).

In spite of the physical evidence, the company reacted with denials and sought to avoid compensating affected residents. Even after the police officially released the damning evidence on August 5, 2011, the company's chief executive, Do Thi Thu Hang, vehemently rejected the accusation. Despite the company's record of environmental violations, she declared that: "Sonadezi has always acted in accordance with the law" (cited in Nguyen et al. 2011). She was in a very good position because she was also a deputy in the general assembly, Vietnam's parliament, which gave her a high degree of political authority and influence. Despite growing pressure from local residents and the media, she initially failed to meet with any of those affected nor did she apologize for the pollution.

Faced with growing pressure, the company tried to keep the amount of compensation at a minimum. Frustrated residents filed two complaints against the company and its CEO (Le Quynh 2014). Finally in May 2014, Do met for the first time with affected residents and admitted responsibility but neither the police nor she went into details about the extent of the environmental pollution (Xuan Hoang 2014). In another case involving Sonadezi, the pollution's devastating effect on the Dong Nai River and the 20 million people who depend on it motivated the provincial government to relocate the Bien Hoa industrial zone 1 in late

2014 at an estimated cost of VND11 trillion (\$523.8 million) (Minh Hang 2014). Although this may mitigate the impact for some people along the river, it remains to be seen whether the company will change its environmental behavior at the new location. Cynics moreover suggested the planned relocation only happened because the land price at the old site had increased due to its proximity to Ho Chi Minh City (Quang Chung 2011).

Despite the seriousness of the scandal, the company's chief manager not only retained her position in the company and legislature but was eventually also elected as deputy party secretary of the company in April 2015 (Phuong Hang 2015). This demonstrated that those holding a powerful position and being well-connected may not face any consequences for their behavior. This was reinforced when at one point, the Dong Nai provincial propaganda department had asked the media to stop mentioning her name because it was more important to focus on the social progress of the Communist Party (Diep Van Son 2012). This, however, appears to have been rejected by the central government because the article criticizing the local government can still be found on the website of the Environmental Police.

Pollution cases of state-owned enterprises have remained in the news. Massive pollution from the Vinh Tan 2 coal-fired power plant, which had started operation in 2014, led to massive protests in April 2015, following months of severe pollution. Triggered by a big cloud of black dust, thousands of people had streamed onto the streets to block traffic in order to stop the pollution, which billowed out of the smokestacks of the twounit plant that is operated by the state-owned VietNam Electricity Group (EVN) and was built in cooperation with the Shanghai Electric Group. The protest lasted for 30 h and led to massive traffic jams. The peaceful protests eventually turned violent with some protesters throwing petrol bombs and stones while police officials responded with smoke grenades and tear gas (BBC Vietnamese, June 11, 2015). As a consequence, seven protesters were arrested. The plant, which had been built in 2010, was emitting 1500 metric tons of slag every day and had been fined VND1.5 billion (US\$69,510) in the past. In response, the deputy prime minister Hoang Trung Hai publicly ordered the factory to reduce the pollution in the short and long term (Thanh Nien, April 23, 2015). However, as of January 2016, local officials still reported that air pollution remained a serious problem and the vice chairman of Binh Thuan province, Nguyen Duc Hoa, even asserted that the plant had "failed to take effective measures to reduce pollution" (cited in Que Ha 2016).

The two cases demonstrate how difficult it is to deal with state-owned enterprises. While the case of Sonadezi Corporation demonstrates that senior leaders are unlikely to be held accountable, the Vinh Than case shows that many government officials are helpless when it comes to powerful polluters. Despite fines, protests, media attention, and strong statements by government officials, the pollution continues unabated. Even in response to the admonition by the central government, the company did not change its practices. Unfortunately, the lack of transparency makes it difficult to ascertain the precise circumstances behind the flagrant behavior of state-owned enterprises, in particular, which powerful actors resist state regulation, but it is clear that even with high-level government awareness of a problem, companies can violate environmental regulations with impunity for a very long time.

Small- and Medium-Sized Enterprises

Another major problem for the implementation of environmental regulations is the large number of very small companies. Following, the economic reforms in 1986, the government formally allowed the establishment of small companies with 10–30 employees. These restrictions were further relaxed in 1988 and the number of private firms grew (Porter 1993). According to the government's definition, this sector is divided into micro-enterprises (10 or fewer employees), small enterprises (between 10 and 200 employees and less than VND20 billion in capital) and medium enterprises (between 200 and 1000 employees and between VND20 billion and VND100 billion in capital) (Decree No: 56/2009/ND-CP). Ownership, however, is not a criterion in this definition. Although, exact statistics are unavailable, UNU-WIDER estimates that a staggering 95 percent of the total number of companies in Vietnam accounts as small- and medium-sized enterprises. Overall, they employ more than 50 percent of the workforce even though their share of the

GDP is only 31 percent (Nguyen N.H. et al. 2014). As they are generally extremely hierarchical and family centered, expansion is not easy. The family managers of these companies generally lack important skills, which would be important for company development. Instead of innovating, many of the companies tend to favor following general trends in order to minimize risks. Moreover, they lack sufficient access to vital resources, even if the Unified Enterprise Law of 2006 removed the last formal restrictions (Edwards and Phan 2013). Nonetheless, small and medium enterprises are still regarded as the engine of growth (Nguyen N.H. et al. 2014).

Smaller companies have often neglected environmental regulations because of the lack of sufficient financial resources. In a study of textile companies by Nguyen N.H. et al. (2015), companies felt that the environmental regulations were too strict for a developing country such as Vietnam, particularly for small- and medium-sized enterprises which need to keep prices low. There was also a sense of unfairness because larger state-owned enterprises were treated differently and thus could avoid environmental regulations more easily. Instead of complying, companies thus rather paid fines or used corruption to get around the law. Not a single company had any rules or procedures to enable the company to comply with official environmental regulations. It is not surprising that most companies also did not have any staff responsible for environmental issues, (Nguyen N.H. et al. 2015). In addition, the overlapping responsibilities within the government are also a source of confusion for many small companies. The implementation of regulations tends to be more effective in relatively larger companies which have independent production systems (Mahanty and Dang 2013).

A significant share among very small companies is, moreover, tiny household companies which are run by single families often inside the house in which they live. This kind of industry has a long tradition in Vietnam and even survived Communist rule. In the past, they flour-ished particularly in the south of the country, where the government was never able to control the small-scale capitalist activity, which was very productive at the time. The people involved in these companies were generally able to improve their living standards. Their productivity eventually convinced the government that state-owned enterprises needed to

be reformed in order to improve the country's economic performance (Vijverberg 1998).

Nowadays, these micro-enterprises are located predominantly in more than 3000 craft villages, most of which are in the north. Overall, these villages employ a staggering 11–12 million people, a third of Vietnam's rural population (*Viet Nam News* October 15, 2012). According to Hanoi's Department of Industry and Trade, the city includes 1350 craft villages of which 286 are registered (*VietNamNet Bridge* July 16, 2014). As they provide an important source of employment for many rural people, they have contributed significantly to the reduction of poverty, which tends to be much higher in areas in which agriculture dominates. Despite their tiny size, household enterprises contribute significantly to the country's export. For example, just the export of fine arts items, for which many crafts villages are famous, generated US\$1.6 billion in export revenue in 2014 (Quynh 2015). Many new villages have emerged as farmers needed to find additional resources to supplement their income.

While household enterprises have played an important role in the economic transformation, they have also become an important source of industrial pollution. Using technologies from the 1950s to 1960s, they produce a large spectrum of products, some of which involve substances that are bad for the health of the workers and extremely polluting when released to the environment. Ninety percent of the villages have pollution levels that exceed the limits set by Vietnam's environmental protection law (Mahanty et al. 2012). The environmental management of enterprises in craft villages is relatively poor. The government has struggled to deal with this problem because of the difficulty of monitoring and punishing violators. Violations of environmental law are rarely severely punished because state officials are aware of the financial restrictions of the household companies. They also pay much less for wastewater discharge than normal companies because unlike larger corporations, they are not subject to the enterprise law (Nguyen MD 2011). Because of this, larger factories have sometimes disguised themselves as craft villages to evade government regulations (VietNamNet Bridge July 16, 2014).

The greatest problem of these villages is the lack of sufficient financial resources to invest in modern machinery. Most are unable to update their technology to be more efficient and less polluting. This is exacerbated

by the fact that they have great difficulty in getting loans and the need to remain viable in an increasingly competitive environment. Naturally, securing the livelihood of the family takes precedence over any environmental concerns (Mahanty and Dang 2013). In addition, the working conditions in these crowded factories are extremely poor (Konstadakopulos 2008). Finally, the workers are also generally low skilled and thus lack the knowledge to improve their working environment.

In addition, the division of the tasks between the different microenterprises creates a sense of unfairness when villagers have an unequal responsibility to pay fees (WARECOD 2010). Often villagers know the main polluters but the mutual interdependence between different enterprises as well as the need to maintain good relations usually takes precedence over environmental protection (Mahanty et al. 2012). In general, the income of people in craft villages is extremely low. An environmental official for the Hanoi DONRE even claimed that their income is less than the costs which government officials are forced to spend on environmental problems. In effect, by not requiring these villages to pay the fees and fines, the state subsidizes the existence of craft villages and cheap labor. As a consequence, environmental pollution remains unchecked. Mahanty and Dang (2013) thus argue that "the current regulations could not be less suited to the predominantly unregistered, small-scale, economically marginal and interdependent craft business" (p. 726).

In addition to the fact that household companies have a very small profit margin, many are also lacking official recognition. According to estimates, less than half of the craft villages have been recognized by the government. The *Vietnam Economic News*, which describes itself as the mouthpiece of the Ministry of Industry and Trade, estimates that there are about 3200 unrecognized craft villages of about 5400 overall.² In addition to unrecognized craft villages, the informal sector, which operates in the shadows, also makes up a great part of the overall economy. According to estimates, informal economic activity makes up 50 percent of the overall economy (Painter 2005). However, from an environmental perspective, the lack of government registration is deeply problematic because it makes it nearly impossible to effectively monitor and regulate these companies and their impact on the environment.

To exemplify some of the problems of craft villages, it is helpful to turn to the 100–150 brick kilns which seriously polluted the air in the Ninh Xuan Commune and Ninh Hoa Town of Khanh Hoa province for many decades (Tan Quynh 2014). Quite a few are still in operation as of 2016. Neighboring residents reported black and white smoke which made breathing difficult. Planting vegetables became impossible, while people fell sick with respiratory and skin diseases. Students in a local school were unable to concentrate on their studies due to the pollution. The technology was seriously outdated which required 20 to 30 days to produce one batch of bricks. The burning in the earthen kilns naturally occurred without any filters or chimneys and thus led to the release of toxic gases into the environment. To deal with the problem, the government decided to relocate the polluting industry away from residential areas and to shut down those with outdated technology by 2018 (Mai Thanh 2015).

However, despite the government's best efforts, there have been many difficulties in the implementation. The local authorities have been unable to close all of the kilns. Owners, who had invested large parts of their own money into the operation, demanded higher amounts of compensation than the officials were willing to pay. For owners of the kilns, the business was more lucrative than farming and they had become used to their trade. In addition, the kilns had accounted for more than 70 percent of Vietnam's market share, which raised their economic significance (Mai Thanh 2015). Finally, officials lacked precise guidelines for how to implement central policies. In particular, officials did not know what they should be doing with recalcitrant kiln operators who simply refuse to close down their businesses (*VietNamNet Bridge*, June 6, 2014). The problem of illegal kilns, however, highlights that a crackdown alone is not sufficient but that the government needs to provide support mechanisms for local businesses to upgrade their technologies (Mai Thanh 2015).

Institutional reformers have sought to devise new strategies to deal with the massive pollution in craft villages. The idea is to move away from a focus solely on top-down implementation and instead provide financial incentives and rely on the cooperation with the local communities. For instance, with the help of funding by the MARD and the Vietnam Academy for Water Resources (VAWR), a wastewater treatment

plant was built by two craft villages in Bac Ninh province, Tien Trong, and Tien Ngoai, that is managed collectively. A self-selected group of villagers are responsible for collecting fees for its operation from other villagers. This enables the local community to fairly distribute the responsibilities and frees up the provincial environmental officials, who are normally overwhelmed by the sheer volume of companies. Unfortunately, this approach has still not been adopted across the country because of the complexity in implementing such mechanisms. Even in this project, progress was slow and had to overcome a number of obstacles. At one point, the project stalled because the responsibilities within the project were not properly distributed. There was an apparent lack of communication between the local commune's People's Committee and the project organizer at VAWR while local residents were also not informed of the progress (WARECOD 2010).

Foreign-Owned Enterprises and Joint Ventures

Vietnam has become increasingly attractive to foreign investors from around the world and the influx has been a driving factor of economic growth. In terms of industrial output, it has even become the main source with over 44 percent by 2008 (Edwards and Phan 2013). Foreign investment is drawn to the country because multinational corporations want to maximize their profits which benefits from the growing pool of highly educated people while at the same time salaries are still very low in international comparison. At the same time, the country does not have any major political conflicts, which could threaten investments. Instead, the government has tried to improve the investment climate to attract more companies. Finally, Vietnam has relatively low-operational standards, which reduce the costs of production but also potentially threaten the environment. International corporations are then faced with the decision whether to make use of this lack of regulation or to follow environmental standards in their home countries or something in between. Nguyen and Amin (2002) have argued that foreign direct investment has resulted in environmental destruction, although the effects cannot be separated from the economic development as a whole.

A number of high-profile cases have drawn attention to the possibility that foreign companies could abuse the lax regulatory situation in Vietnam. In 2010, it was revealed that the Hong Kong owned Luks Group, a cement company, had released serious air and water pollution since it started operation in 1996. The case caused significant media interest because protesters had tried to stop the operation of the company by blocking workers from entering the factory. This was not an isolated incident. In the same year in October, people also protested against serious air environmental pollution from another cement factory, Chinfon, a joint venture between the Taiwanese Chinfon and Haiphong People's Committee as well as Vietnam Cement Industry Corporation, which had turned the neighboring residential area into a cancer village (Ngoc Linh 2011). Hundreds of people blocked the entrance to the factory for two days, and after negotiations, it was agreed that the company would only discharge the thick smoke and dust at night and early in the morning. Moreover, the company promised to build high walls and plant vines on its premises to mitigate the impact (Manh Thang 2010).

Another high-profile incident involves Vedan International (Holdings), a Taiwanese producer of amino acid products including monosodium glutamate (MSG). The authorities in September of 2008 detected that the company had illegally released polluted water into the Thi Vai River for 14 years despite propagating a socially responsible image in its home country, where it promises to contribute to the community. Similar to the Luks Group, Vedan had received prestigious prices in Vietnam including the 2009 Product Safety for the Community's Health Award. As a consequence of the company's decision to pollute, Nguyen and Pham (2012) thus argue that "The motive behind Vedan's decision to discharge untreated wastewater into the Thi Vai river is increased shareholder value through lower operational costs and higher profits" (p. 81). Farmers along the river, including those who depend on aquaculture, had lost their livelihoods while ships were forced to divert away from a local port and drinking water had become seriously contaminated (Lien 2008). The company was forced to pay VND267.5 million (US\$12,000) in fines while it shut down four of its plants. For a protracted period of time, Vedan had sought to minimize the amount of damages based on various different reasons including the fact that other companies along the river

Table 6.2 Timeline of the Vedan pollution case

1994 September 8, 2008	Vedan, a Taiwanese producer of MSG, starts operation in Vietnam Police catch Vedan illegally discharging untreated wastewater into the Thi Vai River
October 8, 2008	Vedan is fined VND267.5 million (US\$16,000) and VND127 billion (US\$7.8 million) in backdated pollution fees. The company must suspend its operations, dismantle the illegal drainage system within one month, and clean the environment within 6 months. However, the case is not deemed serious enough for criminal prosecution
April 21, 2009	Farmers and local officials reject offer of VND25 billion in compensation as inadequate, Vedan argues it can only afford this amount
December 11, 2009	Faced with scientific evidence, Vedan admits to polluting an 11 km section of the river
March 19, 2010	Vedan makes another offer which is again rejected as too low
May 19, 2010	Vedan argues it is responsible for less destruction than previously assumed, reduces the amount it is willing to pay to VND2.1 billion instead of the previously agreed-upon VND53 billion
July 2010	Farmers in all three provinces decide to sue Vedan
August 2010	Vedan accepts full responsibility and agrees to pay VND218.3 billion (which is considered to be 100 percent of damages). The amount is divided into Ba Ria—Vung Tau (VND53.6 billion), Ho Chi Minh City (VDN45.7 billion), and Dong Nai province (VND119 billion)
January 2011	Vedan begins paying compensation to farmers. Farmers drop their lawsuits
April 9, 2015	Vedan is again suspected of dumping 50 metric tons of solid waste in Dong Nai province

Sources: SGGP (2009), Thanh Nien News (2010), Kien Cuong (2010), Thai Linh (2015)

should also be held accountable for their pollution (see Table 6.2 for an overview). In August 2010, the company finally accepted responsibility and agreed to pay a combined VND218 billion (US\$11.5 million) for the damages farmers suffered as a consequence of the pollution, which the government declared to be 100 percent compensation (Hill 2010; Kien Cuong 2010). However, researchers at the Institute of Environment and Natural Resources in Ho Chi Minh City had estimated the costs at VND1.4 trillion (US\$75 million) (*Thanh Nien News* March 22, 2010).

In spite of the number of well-documented environmental scandals, studies have shown that foreign-owned companies are overall more

environmentally-friendly than their Vietnamese counterparts. Some of these companies take on the role of environmental vanguard while quite a few have driven innovation in this field. As foreign companies are under pressure from their home countries to adhere at least to minimum standards of environmental protection, which have been codified in international standards, they tend to import new approaches to environmental production from which Vietnamese companies could theoretically learn. In particular, they have been the most transparent in reporting emission levels (Ramstetter 2011). Also they were the first to introduce environmental management certification standards such the ISO 14001 (Pham QA 2012; Nguyen and Hens 2015), which will be discussed later in the chapter. This corresponds to findings from China which suggest that multinational corporations and those with international ties are more likely to voluntarily improve their environmental performance (Christmann and Taylor 2001).

Market-Based Approaches Under Market-Leninism

Despite the hybrid nature inherent in the market-Leninist business sector, institutional reformers have pushed for the introduction of a number of market-based governance approaches. In the following, I will analyze the attempts of institutional reformers to implement specific market-based governance mechanisms. First, I will analyze the government's efforts to adopt the polluter-pays principle which has found great interest in Vietnam because of the failures of legal enforcement. Second, I will discuss the idea of Payment for Ecosystems Services, which is a more complex adaptation of the polluter-pays principle and incorporates the establishment of a market which includes those responsible for environmental pollution and those who benefit from its protection. The legal framework was established and the approach has already gone beyond the initial trial stage as it has, despite many shortcomings, been expanded to many parts of the country. Third, the government has sought to convince companies of the benefits of environmental behavior in what is known as

CP. A similar discretionary feature underlies the voluntary certification of companies such as the Vietnam Green Label promoted by MONRE or international certificates such as ISO 14001 and the FSC.

Institutional reformers argue that relying on the market as the primary regulator can be an effective way to deal with the growing environmental crisis. The question which needs to be analyzed is whether market-based approaches can succeed where the state has failed before. For the institutional reformers, this holds much promise as incentives can be more effective than punishments. However, doubts have been raised about these new mechanisms. For instance, O'Rourke came to the bleak conclusion in 2004 that "the institutions necessary to support marketbased regulatory strategies do not yet function in Vietnam" (p. 51) and he was equally pessimistic about the near-term future. The new markets are still mainly designed to improve the government's capability to generate revenue and centralize control instead of actually enhancing governance. While reformers hope that this will eventually happen once the institutional basis is created, progress will depend on the extent of liberalization of the markets. This will be illustrated in regard to four market governance approaches from different business sectors: the polluter-pays principle, PES, CP, and certification.

Polluter-Pays Principle

The Vietnamese government has actively embraced the polluters-pay principle, which constitutes a transformation from the traditional top-down control approach toward seeking to address pollution as a form of market failure, which occurs because the market normally ignores issues of environmental destruction (Mahanty and Dang 2013). The use of fees and taxes for pollution is meant to motivate companies to include environmental investments in their business decisions. Through the use of economic means, incentives are created for companies to comply with environmental regulations. In other words, the main goal is to internalize the externalities so that no one can profit disproportionately from disregarding the natural environment. Once polluters realize how expensive pollution is, they will install technology that will reduce the pollution. As

one Vietnamese businessman explained why he did not see the necessity of investing in a wastewater treatment plant even though he would get a low-interest loan: "A treatment facility is an investment of no return" (cited in Le 2009, p. 29).

The principle first emerged in international environmental governance as a possible solution for dealing with the negative consequences of trade in which companies have sought to externalize their pollution to less developed countries. The goal of the principle was stated by the Organisation for Economic Co-operation and Development (OECD) in 1972: "This Principle means that the polluter should bear the expenses of carrying out the [pollution control] measures decided by public authorities to ensure that the environment is in an acceptable state" (cited in Gaines 1991, p. 466). The Rio convention in 1992 declared that countries should internalize the costs of pollution and that the polluter should pay the costs for any destruction (UN 1992).

The Vietnamese government has embraced the rhetoric of the principle and it has been applied both at a national and a company level. Most importantly, it has been enshrined in the legal framework. Decree 67, which became effective in January 2004, was the first time the principle was officially enshrined in a legal document. It was then embedded in the Law of Environmental Protection, which became effective in 2005. Moreover, the government also started a process of devising a separate Law on Environmental Protection Tax, which was adopted by the National Assembly in 2010 and came into force in 2012. Since 2014, it is part of Article 148, which specifies the costs for environmental protection that organizations and individuals have to bear. An environmental protection fee is required for anyone who discharges waste, which depends on the amount, the severity and the toxicity of the waste as well as on the type of environment to which it is released. The law also stipulates that the fees will be adjusted according the developmental stage of the country. Unlike in other developing countries, the principle was not meant to provide a more timely form of compensation to victims of environmental destruction (Luppi et al. 2012). Instead, the main goal has been to generate awareness about environmental pollution and create incentives for reducing the environmental impact of companies (Le 2009). Similarly, environmental taxes have had little effect. When the tax rate on gasoline was increased by 200 percent to

VND3000 (US\$0.13) in 2015, it did not lead to a significant price increase because the import duty on gasoline was lowered at the same time. As of March 2015, the government-set price in Vietnam is comparatively low with VND17,280 (US\$0.75) per liter (*Tuoi Tre News*, March 17, 2015).

However, despite its promises, the principle has faced many obstacles in Vietnam's only partially liberalized hybrid economic system with strong state controls (McElwee 2012). For companies, this means that they see very little difference between the fees and the traditional regulatory approach. As such, the polluter-pays principle faces the same barriers that also apply to the use of fines against violators. For instance, the great number of small-scale industries makes it very difficult to collect the fees. Moreover, it is very difficult to develop methods that fairly distribute both costs and benefits in craft villages because the production chain is divided between households. If only those who pollute directly are affected, it will disproportionately affect them. While it is possible to argue that the increased costs would eventually affect every company within a village, it creates initial barriers for implementation. This comes in addition to the huge administrative costs which are involved with collecting the fees from companies, simply due to the large number of companies (Mahanty and Dang 2013). Such an effort would be difficult in the most advanced administrative states but is impossible in developing countries, which also have to deal with serious problems of corruption in the system.

The primary means through which environmental protection money is dispersed is through environmental protection funds. In 2002, the government set up the Vietnam Environment Protection Fund (VEPF) which is designed to manage the financial side of important environmental programs and projects. It exists at both the national and local level. Similarly, to the rest of government's institutions, the different levels are not clearly separated so that it can come to overlaps. The fund mainly provides soft loans and only one percent of its budget is dedicated to other market-based instruments (MBI) (Tran and Nguyen 2014).

Payment for Environmental Services

An advanced version of the polluter-pays principle is the so-called PES which is also sometimes referred to as "payment for eco-system services"

(PES). In Vietnam, this approach has been of great interest in the forestry sector and some government officials regard it as the most successful case of market governance. Driven by the support of international organizations, which will be the focus of the next chapter, the approach seeks to establish a market for environmental benefits. Similar to creating fees, the basic idea behind this approach is to develop sufficient incentives for the preservation of the natural environment.

The PES approach is supposed to provide a mechanism for redistributing money from those who would profit from the environmental resources to those who profit from their depletion. People whose businesses depend on the existence of forest areas pay money to those who normally live from harvesting the timber. According to Wunder (2005), the design needs to consist of a voluntary transaction of a well-defined environmental service or land use which is bought by at least one buyer from at least one provider under the condition that the latter provides the service. The National Forest Protection and Development Fund (FPDF) was created in 2008 to manage the financial transfers. The project originated in the province of Lam Dong, where the pilot site for this project was the picturesque Da Nhim commune (Lac Duong district) with its gentle tree covered hills.

The VEPF works closely with government departments, local environmental organizations, and international organizations, particularly the World Bank. Presently, the VEPF is involved in a project dealing with the management of pollution in industrial parks in the Dong Nai and Nhue—Day River basin. The project was prominently featured on the website of the environmental fund. It is responsible for one component, which is a pilot investment loan of over US\$20 million intended for the construction of a wastewater treatment plant in an industrial zone. This demonstrates the extremely close cooperation with the bank as well as a willingness to learn. However, its small role also suggests that most of the funding still comes from international donors.

While the 2004 Forest Protection and Development Law had provided the basis for ownership and leasing of forest land by organizations, households, as well as individuals, most of the forests were in the hands of the state. The law had been actively supported with the help of international organizations such as the IUCN, which had been involved in the drafting

process. A detailed legal framework that explicitly included a payment system was introduced after 2008. The mechanisms have been codified and increasingly specified in 20 different legal documents including 4 decrees from the prime minister and 16 decisions and circulars (Pham et al. 2013). The FPDF was established in 2008. It has received its initial funding from the state but unlike the VEPF, this fund is administered by the MARD.

Despite the progress, serious questions have been raised in regard to the governance mechanisms. First of all, the various stakeholders and farmers were only insufficiently allowed to participate in the process, which was implemented through the administrative state from the topdown (Suhardiman et al. 2013). In fact, the main underlying goal was to improve centralized control rather than to involve all of the stakeholders. While during the policy formulation there was significant consultation, the implementation lacked sufficient involvement of the sellers of the service as well as local communities who did not participate enough in the decision-making process (Nguyen Quang Tan 2011). The most important problem relates to the shortcomings of the market which was established. As many Vietnamese structures are still dominated by socialist economic structures, it was difficult to develop the necessary incentive structures. First of all, land use rights and ownership have not been fully established. The ambiguous ownership rights in Vietnam's transitory regime pose a serious obstacle for market-based approaches which are deeply rooted in the assumption of property rights normally found in capitalist countries. The buyers and sellers still largely were the government while privately owned enterprises faced significant challenges of entering the market. However, the approach is viewed as an improvement by reformers because, according to Nguyen Tuan Phu from the Vietnamese government, "In the past, we raised revenues through tax, which meant it ended up in a general state budget. Now, the government plays only a supporting role by transferring the entrusted money from the payers to the payees through the Forest Protection Development Fund" (cited in Ecosystem Marketplace 2010).

Questions have also been raised about the intermediaries, which are essential for the functioning of the market. In Vietnam, those are international organizations (both NGOs and donors), government agencies,

local mass organizations, as well as professional consulting firms. The role of these actors has raised questions about their neutrality because of government and donor influences, special relationships with buyers as well as sellers, as well as time constraints which limit the degree of actual participation by the stakeholders (T.T. Pham et al. 2010). Instead of providing a base for the development of a market, the arrangement instead enhances the capacity of the government to collect taxes from the respective actors. While this is in the interest of the institutional reformers, it remains to be seen whether the PES program will work as intended because it may be difficult to ensure sufficient funds from powerful hydropower corporations or enough revenue for the farmers to act as a motivating factor against deforestation (Suhardiman et al. 2013). The latter can only be achieved through effective local organizations which are not only driven by the government but also lack the capacity to reduce poverty and enhance equity within the rural population (T.T. Pham et al. 2010).

The Vietnamese government has become convinced in the usefulness of the new market system. The primary driver of the PES scheme is the MARD, which is primarily responsible for issues related to forest preservation. However, the MONRE hopes to learn from the experience of the other ministry and also implement the scheme for the protection of wetlands.

Cleaner Production

Because of the low state capacity in enforcing environmental regulations, reformers believe that a strategy of convincing industries to adopt more efficient technologies could be an effective way to reduce the lack of compliance. The concept of CP was introduced to overcome the widespread misperception that measures to protect the environmental only involve costs but no benefits. The primary target of this approach was the many small- and medium-sized enterprises (UNIDO Evaluation Group 2012). In fact, energy savings, reduction of waste, and other efficiency savings could lower the costs of production and increase the companies' gains, while at the same time increasing competitiveness and innovation (Schaltegger et al. 2008). Awareness about this thus could provide significant incentives to upgrade outdated and polluting equipment.

In Vietnam, this approach was institutionalized in 1998 when the Vietnam Cleaner Production Centre (VNCPC) was founded as a cooperation project between the Ministry of Education and Training and the United Nations Industrial Development Organization (UNIDO). Financial support for the new center came from the Swiss government through its donor organization, the Swiss State Secretariat for Economic Affairs (SECO). The center presents itself as a non-profit organization which is located within the Institute for Environmental Science and Technology (INEST) of Hanoi University of Science and Technology. It is led by two associate professors and the employees are mostly high ranking technical experts which act as consultants in the center's many activities. Its four main goals are to raise awareness about CP in industry, to develop databases with information on the topic, provide technical assistance in the change toward CP, and to work on developing financial policies to enable the adoption of these new mechanisms.

The Vietnamese government has shown great support for the principle of CP because it is perceived to be compatible with the country's continued emphasis on economic development even though questions have been raised over whether it is suitable for developing countries (Mitchell 2006). As early as 2000, the government worked on an action plan to establish clear goals and concrete targets. The concept became an important component of the national strategy on the environment in 2003. In 2009, the CP Strategy in the Industry until 2020 was approved while the Viet Nam Green Growth Strategy was passed in 2012. Not only do these documents demonstrate that providing incentives for an environmental-friendly approach has become an important cornerstone of the government's environmental strategy but they also reveal the need to incorporate businesses in the overall approach of environmental governance. The priority of the measure was demonstrated by the fact that the main implementing agency is the Ministry of Industry and Trade while the MONRE only acts as one of the coordinating agencies.

The Viet Nam Green Growth Strategy (2012) sets very ambitious targets for the country until 2020. The share of green technologies should be increased to more than 40 percent of the GDP. Moreover 80 percent of all companies should also comply with environmental standards and 50 percent will apply great technologies. The environmental sector,

which will support these processes, would then comprise 3-4 percent of the GDP. Unlike in regard to other aspects of the environmental strategy, the government has claimed some success in regard to CP. In 2010, deputy director of Science and Technology of the Ministry of Industry and Trade Nguyen Huy Hoan said that the number of demonstration projects exceeded the original plan. Instead of 40 participating enterprises, there were already 57, while many other companies were informed of the results. Second, the projects showed success in reducing pollution. It resulted, for instance, in a decrease of 15-30 percent of water consumption and a 10-15 percent reduction in electricity usage in the paper industry of Phu Tho province. Finally, he considered the dissemination of the information over the five-year period as particularly successful. This included nearly 200 media events, 80 editions of the CP newsletter sent to 10,000 businesses, and the production of 40 documentaries. Finally, this resulted also in 53 performance targets for provinces as well as new guidelines for 13 industries (Thu and Phuong 2011).

Despite the obvious advantages, there are, however, also a great number of challenges for the implementation of this broad and far-reaching concept. Barriers for implementation come in the form of fiscal constraints, lack of sufficient information and awareness, lack of incentives due to weak government enforcement of regulations, and an unwillingness of companies and their management to make the necessary organizational changes (Mitchell 2006). This list highlights that using the principles of CP cannot replace the need for effective state institutions but instead should complement them. In addition, in a developing country such as Vietnam, which relies on cheap production, the high initial investments are also a significant hurdle (Nguyen and Ngo 2013). Unfortunately, there is a lack of comprehensive data to audit the total costs of the production process and highlight inefficiencies. As a consequence, it is nearly impossible to highlight the amount that is wasted and how much could be saved from CP processes. Finally, a root cause is the static organizational culture of control which is still deeply embedded in Vietnamese companies. Private companies which are subject to market pressures are more likely to adopt new and innovative measures (Mitchell 2006).

Certification: ISO 14001 and FSC

The last measure that will be discussed is the voluntary certification based on two examples in different fields of environmental governance: industrial production and forest management. The former is known as ISO 14001 certification, which mandates the introduction of environmental management systems in the production process. The latter is known as the FSC certificate which is a label on products that have been harvested in a more sustainable way. Both of these certificates have been introduced in the Vietnamese context. Using a voluntary approach is particularly intriguing for institutional reformers because it transfers the environmental management to the agents involved in the environmental exploitation. The underlying hope is that the improved voluntary compliance with international standards will strengthen the overall environmental institutions in the long term.

First of all, in order to deal with the rising pollution, institutional reformers have promoted the ISO 14001 standard for environmental management by companies, schools, hospitals, non-profits and any other organization. The standard developed by the International Standard Organization is designed to reduce a company's adverse impact on the environment, institute procedures that enable the company to comply with all environmental rules and regulations, and to remain interested in continuously improving its operation. Potential benefits are a reduction in the costs for waste management, energy and material savings, as well as an improvement of the organization's image. Certified companies in Vietnam have used their status in promotional material.

Despite its lofty goals, however, research has been more critical about the actual impact of Environmental Management System certification in Vietnam once it has been implemented. Evidence that ISO 14001 certification will actually lead to a reduction in natural resource consumption or pollution is contradictory in many countries (Nguyen and Hens 2015). In Vietnam, only 903 companies have become certified and the country ranks only fifth in the region (Ni et al. 2015). The implementation in Vietnam has faced various obstacles including the lack of company awareness, limited knowledge, insufficient financing, and conflicting government policies and enforcement (Nguyen and Hens 2015).

A study of the cement industry, which produces an extremely high amount of pollution, revealed that few private companies chose to do certification while most of those who did were either joint ventures with foreign companies or state-owned enterprises. Overall, the main improvement was enhanced awareness about environmental issues, improved communication, as well as greater legal compliance. Despite this progress, however, there was little change in regard to the usage of energy and raw materials. The key problem was that this would require investments into new technologies. The companies are, however, either unwilling or unable to upgrade their equipment (Nguyen and Hens 2015). This is not surprising because, as was shown previously, most companies are also unwilling to comply with environmental regulations and rather pay the fines. Nevertheless, there are still benefits such as a reduction in waste and higher productivity (Ni et al. 2015).

The ISO standard is not the only standard that has been promoted to improve sustainability and enhance the competitiveness of Vietnamese products. In the area of forestry, the Vietnamese government in cooperation with international NGOs has promoted the FSC. The government has set a target of 30 percent of forest land to be certified by 2020 under the National Forestry Development Strategy (2006–2020), an extremely ambitious goal (VNS June 21, 2014). First developed in 1993, the international certification scheme seeks to set unified rules for sustainable forest management while encouraging customers to pressure producers to adhere to these rules with the use of a clearly identifiable label on products. It can be found on an increasing number of products. In order to guarantee that the whole process follows the guidelines of the FSC, the production path of the product is traced, a process that is known as a chain-of-custody certification system and includes ten principles. Worldwide more than 182 million hectare forests in 81 countries are already certified and almost 28,000 certificates of conformity exist in 113 countries (FSC 2014).

The label is not only used to improve the sustainability of forests but also to increase the quality of wood and thus enhance the competitiveness. In Vietnam, 80 percent of the wood used by producers comes from domestic sources. The existing wood plantations, which use mainly nonnative Eucalyptus, Acacia, and Pinus species, are often cut down too fast to produce qualitative wood because of the need for quick financial gain. The

wood then, however, is only suitable as firewood or woodchips (Hoang et al. 2015). Vietnam is one of the countries with the highest growth in regard to forest area. From 2012 to 2014, the forest area has increased 65 percent. Currently, there are 76,017 hectares which are certified by FSC (FSC 2014). In 2014, Dakto Plantation Single Member Limited Liability Company and Truong Son Forest Management Enterprise were the first Vietnamese companies, which received the full certification. Both of them are state-owned enterprises, which were selected as pilot sites in cooperation with the German–Vietnam technical cooperation program (*VNS* June 21, 2014).

There are, however, also significant challenges in adopting the FSC. First of all, the process of the audit is expensive and difficult. Second, farmers in Vietnam have very little knowledge about forestry and the professional management of forests. They also do not fully grasp environmental concepts such as environmental impacts or the conservation value of forests. As mentioned in the Chap. 1, mono-cultures are bad for biodiversity, poor as carbon sinks, and not resistant to adverse weather. In addition, the clearing of wood plantations poses additional challenges for the land such as serious erosion. As the harvesting time is prolonged, farmers may not have enough financial resources to survive. Few of them can imagine waiting for ten years before cutting the trees. This problem is compounded by the fact that there are no guarantees about the eventual price of the wood due to frequent fluctuations in the world market. Finally, the greatest problem with the pilot projects in Vietnam is the strong reliance on donor assistance. The FSC projects so far have been funded primarily by WWF Vietnam. There is an urgent need to find other sources of funding. Besides other donors and government subsidies, a sustainable possibility is the use of membership fees. Finally, they also need to be administered fairly and this can be a challenge under the current institutional framework (Hoang et al. 2015).

Conclusion and Outlook

This chapter illustrated how the institutional reformers have sought to circumvent the weaknesses in the environmental state by introducing new market-based mechanisms. They have actively promoted ideas such as the

polluter-pays principle, PES, CP, and voluntary certifications. As we have seen, much progress has been made in these regards. However, repeatedly the question was raised whether these approaches are suitable for the Vietnamese context. In fact, the state dominance in the economy and the very low implementation capacity of the state have frequently been identified as the fundamental obstacles in the process. This clearly highlights the urgent need to reform the state's institutions as well as the economic structure. In particular, the overly close links between the government and business must be significantly reduced before effective implementation can occur. Despite these seemingly insurmountable obstacles, institutional reformers have sought to introduce market-based approaches to drive the reform agenda and increase awareness both within the government and in businesses. As a consequence, there has been growing pressure for greater sustainable development. In particular, reformers have been able to demonstrate the advantages of environmentally-friendly technologies in order to remain globally competitive in the long-term.

While institutional reformers have been eager to promote new governance approaches, their introduction has largely been driven by numerous international organizations, which are prevalent in the environmental politics of Vietnam. For instance, both ISO and FSC certification demonstrate that these new governance mechanisms often depend on the support from foreign donors. A crucial question of the next chapter is thus to what extent Vietnam has profited from and perhaps even become dependent on foreign support in environmental politics. While institutional reformers from within the state have been proactive in supplementing their meager resources, the international assistance may reduce the urgency to find domestic solutions for the growing environmental crisis. Of course, under the current political system, it is difficult for reformers to see a viable alternative.

Notes

1. There are differences in the service sector where small-sized companies are between 10 and 50 and medium-sized companies between 50 and 100 persons.

2. There are so many different statistics on the number of villages that it is difficult to get an accurate number.

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The International Dimension

International organizations are playing a very important role in the reform process of the environmental state in Vietnam. On the one hand, Vietnamese policy-makers have looked for solutions abroad and have attempted to draw lessons from other countries in the region and beyond. On the other, the large number of international donors and international NGOs have sought to influence the reform process. As they have moved away from focusing only on economic growth and poverty eradication, they have increasingly emphasized the need to integrate environmental concerns. Moreover, non-state actors have become global organizations that can attract funds and volunteers from around the world thus providing the platform for collaboration among a growing number of like-minded people across national borders. This has spurred learning among movements, who have adopted new tactics to deal with governments and industry more effectively. Environmental standards have been diffused and multinational corporations have often been leaders of environmental protection in developing countries. Moreover, the sharing of ideas has quickened the environmental consciousness in developing countries, which have realized much faster the high costs of unmitigated economic development. As a consequence of the work of many international organizations and the existence of environmental treaties, progress in environmental law-making has been much faster than in the developed countries in the past. Unfortunately, however, despite the enormous efforts, all of the key indicators of environmental degradation demonstrate that the global environmental situation is getting worse every year (Newell 2012).

As Vietnam exists within the shadow of China, it has attracted much less attention from the international community, which is, among other things, reflected in the relative dearth of academic research on the topic. This chapter will fill this gap by discussing how the international environmental movement has impacted the Southeast Asian country. While national factors still largely determine the speed and trajectory of institutional change, Vietnam provides a good case-study for the influence of international actors on agenda-setting, policy-making, and even implementation as the country has become deeply embedded in the international environmental regime.

Vietnam has not only signed most important environmental treaties but also allowed international actors to play an important role in the evolution of environmental politics. This has been, in part, driven by the existence of donors, which have provided funding for many different types of projects including those that seek to promote governance mechanisms. In the past, there have been attempts to measure the impact of environmental aid, which can provide an estimate of its influence. Even though it has been difficult to quantify the success rate of environmental projects, the effect of donor assistance needs to be seen from a long-term perspective on the institutional development. In particular, it is important to discuss how foreign aid and international organizations seek to shape the institutional reform process. Aside from donor organizations, many international NGOs have sought to influence the changes in Vietnam's environmental governance. While some of them have acted as donors, they are normally involved in project implementation and thus have a direct impact on the institutional reform process. Similar to local NGOs, they have also formed networks which have enhanced their capacity to influence the process. Finally, this chapter will discuss the limitations of international aid, especially whether and to what extent, it provides an effective and sustainable support mechanism for

the institutional transformation. This raises the question whether environmental aid is actually beneficial or might even carry some risks for the reform process. In contrast to economic support, the country has to some extent become dependent on environmental aid in certain areas. This potentially reduces the reform willingness of the government because the urgency of the problem is reduced without the need to expend significant financial resources.

Vietnam in the International Realm

While the economic opening-up in 1986 marked the beginning of the economic miracle as well as the accompanying environmental crisis, it was also the year when the country started to become involved in the international community. The country has since ratified many international treaties primarily to draw foreign investments to the country and otherwise enable economic growth. Nevertheless, the government has also signed many environmental treaties, conventions, and agreements, including the Convention on Wetlands of International Importance (RAMSAR) in 1989, the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1994, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal in 1995, as well as more recently the Minamata Convention on Mercury in 2013. The UN Convention on Climate Change and the Kyoto Protocol were signed in 1998 and came into effect in 2005. Despite this willingness to engage with the international community, questions have been raised about the implementation of the treaties and the ability as well as willingness to fully comply with the terms (Bryant and Jessup 2005).

The main problem is that the conservative administrative state is still deeply suspicious about the role of international law and how it could potentially reduce the country's sovereignty and self-determination. Vietnam has been even more resistant to incorporating international treaties into its laws than China. While treaties are negotiated by the president, the National Assembly needs to approve any legal change

before they can be implemented. In many cases, this, however, has unfortunately not happened raising doubts about the applicability of international treaties. As Bryant and Jessup (2005, p. 117) note "it is not clear from these rules whether treaties entered into are self-executing or require the passage of national legislation to become enforceable domestically." Although it has been difficult for Vietnam to fully comply with its commitments due to the weaknesses in the environmental state, reformers have sought to use these treaties as leverage in the institutional reform process because of the international pressure for compliance.

Similarly, institutional reformers have also sought to make use of the many international organizations active in the country. As the Vietnamese government has welcomed assistance from abroad, international organizations, international NGOs, multinational corporations, foreign governments, and other foreign organizations have become an important financial asset for the reformers, which is particularly important in many projects that deal with social issues such as alleviating poverty or the environment. In 2010, ODA earmarked for environmental protection amounted to US\$3.2 billion, about 12 times of the amount the Vietnamese government allocates for environmental protection in its budget (Nguyen TT 2011). In 1999, the UNDP determined that most of the financial support has been directed at "green" issues such as the conservation of wildlife. In contrast, "brown" issues such as industrial pollution and the marine environment, known as "blue" issues, had received far less aid (UNDP 1999).

The amount of financial support alone suggests that international actors play an important role in environmental politics. The key question that needs to be explored is whether and to what extent these organizations contribute to the development of governance mechanisms. On the one hand, foreign support can potentially strengthen political power structures. For instance, Painter (2005) argues that the central government uses the distribution of aid to reassert control over the increasingly decentralized state and thus counters the increasing fragmentation within the political system. On the other hand, external assistance also introduces greater decentralization as part of new governance mechanisms. This includes support for market-based approaches as well as the focus on local governments and NGOs.

The Role of Donors

Donors provide large amounts of money to promote a number of development related causes in Vietnam. The donor assistance was formalized in 1993 with the first Consultative Group (CG) meeting, which was held in Paris and was co-chaired by the MPI and the World Bank in Vietnam. The year consequently also marked a significant increase in donor assistance. Since then, ODA has constantly played a very important role for the economic development as well as poverty reduction. The CG was moved to Hanoi in 1999 and transformed into the Vietnam Development Partnership Forum in 2013. These meetings have become an opportunity for the donor community to discuss important issues with the Vietnamese government. Although environmental issues have not been the main focus, since the emergence of the sustainable development discourse, they have become at least rhetorically part of most aid projects. The World Bank's country partnership strategy 2012–2016, for instance, stresses environmental sustainability along with enhancing competitiveness and measures against poverty (World Bank 2012).

In Vietnam, two-thirds of financial assistance comes in the form of loans which, however, has not resulted in an accumulation of debt. While the Vietnamese government has been cautious about accepting foreign help for fear of becoming dependent, it has nevertheless been open to a great deal of external assistance. It has been the third largest recipient of ODA in the world. At the same time, the country was in 2005 according to the EU not heavily dependent on aid (Lister 2005). Financial support comes from a number of different sources such as multilateral donor organizations including UN organizations as well as the big multinational development banks, especially the World Bank or the Asian Development Bank, and about 25 bilateral donors from various countries (Forsberg and Kokko 2008). International NGOs, which will be discussed below, are not necessarily only recipients of donor money but have also sometimes played the role of a donor. In fact, in 2014, they provided about US\$300 million in aid (Trung Pham 2014).

In the environmental field, a number of bilateral donors have been especially active which originate mainly from Northern Europe, Canada,

Table 7.1 List of key donors

Multilateral donor	Operation
World Bank	1976-today
Asian Development Bank (ADB)	1993-today
United Nations Development Programme (UNDP)	1978-today
United Nations Environment Programme (UNEP)	
United Nations Industrial Development Organization (UNIDO)	1978-today
United Nations Food and Agriculture Organization (FAO)	1978-today
International Fund for Agricultural Development (IFAD)	1993-today
Bilateral donor	Operation
Agence Française de Développement (AFD)	1994-today
Canadian International Development Agency (CIDA)	1990-today
Danish International Development Agency (DANIDA)	1993-today
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	1990-today
(Germany)	
Irish Aid	2007-today
Japan International Cooperation Agency (JICA)	1992–today
Netherlands Development Organisation (SNV)	1995–today
Swedish International Development Cooperation Agency (SIDA)	1967–2013
Swiss State Secretariat for Economic Affairs (SECO)	1992–today
United States Agency for International Development (USAID)	2002-today
Norwegian Agency for Development Cooperation (NORAD)	1972-today

and Japan. See Table 7.1 for more details. Currently, the largest donors are the World Bank, the Asian Development Bank and Japan which together make up 70–80 percent of ODA (Forsberg 2010). Of the overall ODA, only a small percentage is allocated for environmental issues. The total amount has, however, increased over the years (UNDP 1999). Moreover, an increasing number of projects incorporate environmental components while also focusing on other aspects of sustainable development such as the reduction of poverty. Today, most aid is attached with conditions which require improvements in policies as well as governance, including enhancing transparency, increasing participation, and ensuring accountability.

The Vietnamese government has sought to closely manage the dispersal of foreign aid as well as the activities of international organizations. Foreign aid is mainly managed by the MPI in cooperation with other powerful ministries such as the Ministry of Finance, Ministry of Foreign Affairs, and Ministry of Justice. In 2001, the government enacted Decree 17-CP which details the way aid should be prioritized and distributed. It codified the interaction with donors and provides guidelines for project implemen-

tation. Environmental protection is identified as a priority area for ODA and environmental concerns are supposed to be considered in the process of determining the feasibility of a project. The decree was replaced in 2013 by Decree 38 ND-CP which states that one of the priority areas should be the "protection of the environment and natural resources, prevention against and minimizing risks of disasters, the response to climate changes, sustainable development, and green growth" (Article 7.6).

Traditionally, donors have cooperated particularly closely with the MARD, while there was much less cooperation with the MOSTE. In recent years, this has changed somewhat with the MONRE, the environmental ministry since 2003 playing an important role in the cooperation with many international organizations. However, even today, MARD maintains a higher profile in international cooperation, which is evident in the fact that it maintains a specific International Support Group (ISG), which was established in 1997 and is funded through a trust fund between the Vietnamese government and a group of core donors. A comparable group specifically concerned with environmental issues was created in 2001 as International Support Group on Environment, later renamed International Support Group on Natural Resources and Environment (ISGE) following the establishment of MONRE in 2002. While the group has been tasked with creating action frameworks, mobilizing, and coordinating aid, it has been much more unstable than the MARD's support group. Donors at the meeting in November 2010, for instance, were unhappy with MONRE because the ministry had not developed a general mechanism to attract donors (ISGE Secretariat 12/02/2010). The lack of agreement resulted in inactivity until 2014, when the environmental ministry sought to revive the forum to strengthen cooperation between donors and the government (Vietnam News Agency 11/25/2014). However, since then no news has been reported about the group's subsequent progress.

Evaluating Donor Assistance

The research on donor assistance has largely focused on the achievements in regard to economic development. Vietnam has indeed made great progress in reducing poverty and raising overall national income even if the problem of income inequality has also been rising, although

at a much slower pace than in China. In terms of development indicators, Vietnam has achieved many of the so-called millennium development goals. Overall, the living standards of most Vietnamese have been raised significantly. However, the goal of protecting the environment was not achieved due to the overemphasis on economic development. Environmental concerns have belatedly become a part of the development objectives of donor organizations, which unfortunately are increasingly leaving the country because the country has reached lower-middle-income status and supporting other less developed countries appears more urgent.

Environmental aid was only once evaluated in 1999 in a study spear-headed by the IUCN. Initiated by the Ministry of Planning and the UNDP and funded by Canadian, Danish, Dutch, Swedish, and Swiss development aid, the large-scale, multi-methods in-depth evaluation brought together a large number of international and Vietnamese experts. Accompanying this study, UNDP also published three compendiums of environmental projects. The first was published in 1996 and covered 256 projects between 1985 and 1995, the second appeared in 1999 and provided a snapshot of 230 concluded and ongoing projects of the same year, and the last one in 2003 analyzed 282 ongoing and completed projects as well as 52 planned projects. Although the study was conducted with major limitations, it revealed interesting insights about the aid situation at the time.

To put the study into context, it is first necessary to mention the limitations which were of both academic and political nature. Academically, the study suffered from the problem of developing a clear and practical definition of what constitutes an environmental project. The compendium of projects on which the study was based thus stated that "an environmental project is one where the main objective of the project is either the preservation of the natural environment or supporting the sustainable management of natural resources" (UNDP 1999, p. 6). In addition to this broad definition, there was a long list of the kind of projects that were to be included. Despite this effort, there were inconsistencies in the selection process, which resulted in some important issues excluded while questionable ones included. For instance, desalination projects were included while irrigation ones were left out (Saunier and Meganck

2007). In addition to this problem, the database is also biased due to a number of large-scale projects. Second, some of the project's prerequisites were of a political nature that potentially biased the research findings. First of all, the study lacked independence because it was led at the national level by those with the highest stake in a positive outcome. Moreover, it was clearly stated that any outcome had to be "constructive and positive" as well as "practical and implementable." These open fuzzy criteria negatively influenced the objectivity of the data and the report. In order to allow the Vietnamese government as well as donors to influence the outcome, the study was supposed to be "flexible," which meant that comments were sought for both the structure and the content of the report. The only upside to these limitations was that these rules were stated clearly at the outset of the analysis.

Despite the shortcomings, the study does provide a number of important insights about environmental aid at the time. While it is impossible to repeat all the findings, it is helpful to briefly summarize the main lessons which were identified. One of the main challenges was the need for administrative reform. The environmental state was low on transparency, was characterized by overlapping responsibilities, lacked horizontal and vertical linkages between different institutions, and had limited procedures for prioritization and weak structures for coordination between the government and donors. Bureaucratic structures and the hierarchical centralization were regarded as one of the main obstacles for effective aid distribution. In particular, the lack of involvement of local governments and other stakeholders in some projects was considered problematic. Moreover, the Vietnamese government showed reluctance in contributing financial support to projects, especially when they did not result in any tangible economic outcomes. Finally, language and culture was also an impediment to environmental aid. On the one hand, translations were inadequate and on the other the understanding of certain terms differed between donors and recipients. Moreover, cultural misunderstandings occurred in the negotiation process between the directness and commitment of donors and the implicitness and variability in Vietnamese culture. For instance, rather than to openly disagree with the ideas of donors, opposition was shown in

non-compliance during the implementation phase (IUCN-The World Conservation Union 1999).

While it is understandable that it is impossible to separate environmental concerns from other issues in developmental aid, particularly as donors seek to mainstream environmental concerns, it is still regrettable that there has not been a similar study with the same scope since. This would be very useful considering the long-term perspective of environmental support. Overall, this book highlights that the progress made in regard to the actual improvement to the environment has been modest so far. However, small progress has been made in regard to some projects and the overall institutional development. In order to gauge the effects of international support, it is necessary to make an assessment based on more recent reports released by a number of donors.

The Asian Development Bank's final review for its 2007-2010 country strategy shows that about US\$359 million or 7 percent of the total program were explicitly marked as environment, which was specifically targeted at forest management (ADB 2012a). According to the Regional Cooperation Operations Business Plan for the Greater Mekong Subregion for the period 2013–2014, the environment makes up 24 percent of the thematic priorities (ADB 2012b). Environmental concerns have become integrated into many projects which complicate the assessment of environmental aid from the bank. Still, according to the bank's seventh corporate performance report analyzing its effectiveness across all the countries in which the bank is active, projects with the goal of environmental sustainability were "generally positive" (ADB 2014, p. 28). Moreover, the contribution of financing for environmental sustainability had increased slightly over the previous period from 43 to 44 percent of the operations. The goal of 50 percent, however, was not met (Ibid., p. 43). In addition, the assessment also raised questions about the bank's support for climate change mitigation and regional integration (Ibid., p. 32). Unfortunately, no effort has been made to evaluate the progress in this regard. According to the Global Environment Facility (GEF), the main financial mechanism for fulfilling environmental agreements, Vietnam has since joining the organization received US \$119 million in grants for 43 national projects which amounted to more than \$1 billion in combined financial resources. The main focus of the assistance

was biodiversity (16 projects), climate change (11 projects), and pollution (7 projects). The World Bank, moreover, lists environmental projects worth US\$7 billion on its homepage. This includes projects on green transportation, waste, industrial pollution, food safety, and a number of sustainable development projects. However, the most important ones are primarily focused on improvements to the infrastructure, which may bring some environmental benefits but are not primarily environmental projects. The largest with US\$613 million is the construction of an expressway between Da Nang city and Quang Ngai province to enhance the efficiency of the road network. While this does potentially reduce some emissions, it is overall not an environmental project as there are likely to be negative impacts in terms of the road construction and as a consequence of greater economic activity. The next largest project is also a developmental project which seeks to enhance the transmission efficiency of powerlines valued at US\$500 million. Comparatively small is the amount for pollution management with US\$50 million, which includes reviews and revision of policy, monitoring and enforcement, as well as support for the disclosure of information and public participation (World Bank 2015). Overall, the analysis of foreign aid reveals that while donor support for environmental issues has increased over the years, there is still much room for improvement.

The Influence of International Assistance on Institutional Change

Foreign organizations have been able to exert influence on the process of institutional change because Vietnamese policy-makers have been greatly interested in drawing from the experiences of other countries. However, unlike during the period of colonialism, international organizations are not hegemonic actors manipulating the local elites. Instead, they seek a mutually beneficial interaction in which they not only make demands but also allow local reform agents to make strategic use of their support to achieve their own goals. Often lacking sufficient resources, external aid can be utilized to enhance the power of reformers. This, for instance,

happens in the attempt to utilize knowledge transfer or policy learning. At the very least, the significance of foreign money in environmental politics has resulted in "pressure from international donors and institutions to establish strategies that learn from others' failures" (O'Rourke 2004, p. 19).

In the environmental state, the task of knowledge transfer has been given to relatively recently established think tanks such as the ISPONRE, which seeks to collect and analyze solutions from other countries around the world in order to adapt them to the Vietnamese context. Although many foreign solutions, especially those in developed countries, cannot be easily transferred, these studies provide ideas, goalposts, and empirical justifications which serve as inspiration and knowledge resource for policy-makers. In regard to the latter, expert information can be a powerful resource in the conflict with opposing interest groups. The use of foreign experts is a valuable asset for reformers because they are a useful additional resource that can help in the development of policies. While this does not necessarily entail any substantial learning in the form of an actual policy transfer, the existence of successful foreign models can provide effective ideological justification for political reformers to influence the decision-makers and facilitate the necessary consensus with

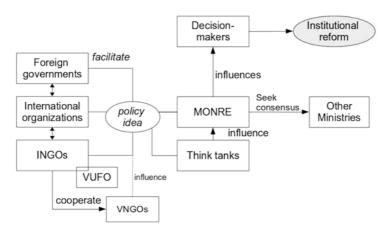


Fig. 7.1 The policy transfer process in Vietnam. Source: Created by the author

other ministries to adapt the environmental institutions (see Fig. 7.1 for a graphic representation of this process).

While there has been an active process of knowledge exchange which has given foreign experts some influence on the policy-making process, this has not resulted in any fundamental changes because the actual problem is the dissonance between policy-making and implementation, which was discussed in Chap. 4. In order to deal with this problem much more fundamental institutional changes would have to be made. For instance, the socialist legal system is unable to deal with sophisticated environmental regulations that would require an independent legal system for effective implementation. Of course, international experts have shied away from giving such advice. The Vietnamese government would consider this as meddling in the internal affairs and close the door to the external advisor.

Knowledge transfers are an important part of many environmental projects. To illustrate how the transfer of knowledge affects the reform process, the analysis draws on an ambitious project funded primarily by Canadian aid that sought to enhance the implementation of environmental policies at the local level. As such, the Canadian International Development Agency (CIDA) promoted the idea of decentralized governance by enhancing the administrative structures of local DONREs. This emphasis was reflected in the English title of the five-year project, which was called VPEG. The project began in 2008 as a follow-up to two phases of the Vietnam—Canada Environment Project (1996–2006) and ran until 2013, when no additional funding was granted by the Canadian government. To transfer the knowledge, the project management was in the hands of the Canadian Executing Agency (CEA) with six Canadian permanent staff, as well as technical consultants from Vietnam and abroad. The Vietnamese staff of the VPEG office in Hanoi was also part of CEA.

The key goal of the project was the capacity building of local officials in eight provinces and thus improve the management of industrial pollution. An important task of the project was to enhance the province's environmental expenditure management capacity and the technical knowledge to effectively implement the existing environmental regulations, in particular, in regard to industrial pollution. The eight provinces participating in the project were: Hanoi, Bac Ninh, Hai Duong, Da Nang, Binh Duong,

Long An, Quang Ngai, and Soc Trang. The project was innovative in its emphasis on improving local governmental institutions for implementing environmental policies rather than focusing on central government policies and institutions. The focus on the decentralized administrative structure which stressed the involvement of local officials in the overall decision-making process was the key aspect of the projects' attempt to improve governance.

In spite of this emphasis on local government, there was a clear attempt to frame the project in a way that reinforces the hierarchical structures of the Vietnamese state. This was reflected in the strong central government management component and its primary goal to enhance the environmental management capacity of the central government and provide lessons for improved industrial pollution policies and regulatory frameworks for the MONRE. The main outcome of the project was the development of an effective IPM policy for the central government. Other ministries and local governments were supposed to assist in this process. The emphasis on enhancing centralized government structures is also reflected in the Vietnamese translation of the project which uses the word management ($quan \ l\hat{y}$) rather than governance ($quan \ tri$). The hierarchical nature of the project was not only reflected in the official documents but also in the administrative structure. Despite the focus on local governments, both the Project Steering Committee (PSC) and the Project Management Board (PMB) were strongly influenced by central authorities. In January 2010, the VEA became the responsible agency for developing and implementing the VPEG project at the national level as well as managing the project as a whole. Associate Professor Dr. Le Ke Son, the deputy director general of VEA, became the director of the VPEG National PMB. The PMB's task was to support the discussions on operational and management issues and the sharing of the experiences that were made at the provincial level. Besides operational guidance, the PMB also had to endorse the consolidated annual work plans before they were submitted to the PSC. In this regard, the project was fully in line with the administrative conception of centralized government.

However, the implementation of the project did not primarily deal with enhancing central administrative structures but rather sought to strengthen local governments to become autonomous actors in the

process. To some extent, the emphasis on the central government was a framing strategy to increase support for the project and thus discursively deal with the resistance of some administrators who favored top-down processes. The most important objective was the improvement of the financial management of local governments, in particular, the goal was to create cost-effective mechanisms to manage the expenditures for environmental efforts according to the priorities at the local level. In addition, there was an attempt to assist local governments in developing "effective, sustainable and gender-sensitive industrial pollution management programs." The main outcome was to enable local governments to increase their funding for IPM. Finally, local governments should be able to prioritize those programs which dealt with particularly serious pollution issues at different scales of complexity such as craft villages, industrial parks, and even across borders.

In terms of its impact, the project was clearly able to demonstrate more tangible outcomes at the local level. While in regard to the central government, there were improvements in regard to legal framework, technical skills and intergovernmental communication, local governments profited from increased administrative capacity, more effective use of financial resources, and access to information. In order to create incentives, the different provinces competed against each other. An IPM portal was first introduced in Binh Duong province in January 2012, which centralized the information on industrial facilities, and thus allowed for collaboration between different DONRE staff. Moreover, the project also sought to improve the cooperation between government and businesses, which was achieved through providing many workshops that strengthened the credibility of government officials. Finally, there were also attempts to include community participation in the process. This was, for instance, achieved through strengthening the local environmental bureau's capacity to implement EIAs, which require input from the community.

Although the project achieved much progress in terms of strengthening the governance mechanisms, there were also some shortcomings. First and foremost was the initial slow progress and eventually the reluctance of the Canadian government to extend funding. This made it difficult to determine to what extent the institutional innovations were sustainable. Moreover, although the project was extremely ambitious and focused

perhaps on too many issues, it lacked a national framework that would allow it to expand to other provinces. Finally, the project faced a number of practical problems affecting the local DONREs including personal relationships, family structures, internal departmental conflicts, the role of the Communist Party, and the problem of corruption. The greatest problem was the fact that salaries of local administrators are often too low. If local government officials only relied on their salaries, they would not even have enough to support their families. Finally, the involvement of communities in the project was limited and mainly involved mass organizations. There was no attempt to involve NGOs in the process.

While the VPEG project mainly focused on local governments and did not involve any NGOs, many of the international organizations have played a crucial role in strengthening Vietnamese organizations outside of the government. This was reinforced in the Vietnam Partnership Document (VPD), adopted at the CG meeting in December 2012, which states: "Development Partners commit to support the Government to expand partnerships with civil society, the private sector, and triangular co-operation with other developing countries" (Ministry of Planning and Investment 2012). VNGOs are often at a disadvantage when they compete with INGOs because of their small size, short history, and limited relationships (Wells-Dang 2012). Attempts to strengthen the role of local NGOs have improved over the years. While in the past submissions for funding had to be made in English, many donors now accept Vietnamese submissions. Documents and information is now also increasingly provided in Vietnamese. This is important because many of these cashstrapped small organizations do not have sufficient language skills. Another attempt to increase the involvement of NGOs is the establishment of NGO awards. They were initiated in late 2013 by the Resource Alliance, an international NGO, together with the Research Center for Management and Sustainable Development (MSD), a VNGO, and supported by the Rockefeller Foundation and IrishAid. The main aim of the four different prizes for small, medium, large, as well as rising organizations is "to advance the country's non-profit sector by promoting financial and organisational sustainability and strengthening community support of civil society" (The Resource Alliance 2014).

These cases and, in fact, many other instances throughout this book demonstrate clearly that international donors have played a crucial role in the institutional reform process by promoting governance processes beyond the central government and hierarchical mechanisms. While local reformers have been able to increase their own political influence with the help of foreign support, international organizations have also been able to shape the environmental state according to their own ideas. This is particularly evident in the reform process that established EIAs, which was discussed at length in Chap. 3. Through the use of financial pressure, donor organizations were able to require the Vietnamese state to apply environmental standards in all development projects. Moreover, international organizations have influenced the legal framework through the help of foreign experts and detailed discussions about how to develop the mechanisms in environmental assessments. For instance, German and Swedish developmental organizations developed a road map to enhance the role of SEAs as well as to improve the cooperation between donors in this field. While Swedish assistance helped write the technical guidelines, the Asian Development Bank as well as the Danish development organization provided pilot testing and elaborated the guidelines of SEAs for key ministries. The donors have thus played an active role in influencing gradual institutional change while seeking to help reformers adapt the environmental state to the growing need for effective environmental governance.

International NGOs in Vietnam

There are many international NGOs active in Vietnam and the number has been steadily increasing. While in 1990 there were a mere 50 organizations, by 2005, this had increased to almost 600 (Norlund 2007). Similarly, Wells-Dang also counts over 500 INGOs ranging from small organizations with only a few employees to large-scale operations with hundreds of staff and over US\$10 million budget (Wells-Dang 2012). Some of the NGOs even act as donors, and in 1996, they already contributed 6 percent of the overall donor commitment and provided support for 32 percent of all projects (UNDP 2003). In 2014, the amount

of financial support was about US\$300 million (Trung Pham 2014). The presence of international NGOs has increased significantly in recent years. According to the Vietnam Union of Friendship Organization (VUFO)-NGO Resource Centre, "(a)s of 2012 some 900 foreign NGOs have relationships with Vietnam" (VUFO-NGO Resource Centre 2012). About one third of all international NGOs have opened an office in the country (Nguyen 2006). At the time of O'Rourke's publication, several dozen of those groups were involved in environment-related projects. The current directory of INGOs in Vietnam lists these groups in terms of different categories among which one is labeled "Natural resources—environment." There are presently 25 groups listed with this category. However, there are many other categories that also deal with environmental issues including other natural resources groups (agriculture, forestry, water and irrigation, and wildlife), climate change, war legacies, water supply and sanitation, capacity building, and so on.

The impact of international NGOs on the institutional reform process has often focused on grassroots projects as partners of donor organization or together with trusted local NGOs, which are chosen through an often rigorous selection process. In these cases, their work is often limited to providing a technical solution for environmental projects. However, some of the organizations are also active in seeking to have an impact on central and local governments. For instance, WWF Vietnam conducts policy relevant research as well as organizes public relations campaigns in an effort to influence government officials. Another example is the Hanns Seidel Foundation, a German party foundation, which has provided expert knowledge for the formulation of the environmental strategy as well as funded the printing of the document as a bilingual book. As the document is used by reformers to weaken reform opponents and produce powerful and convincing input to achieve institutional reforms, the international organization was able to act as an important intermediary in the process.

International NGOs have also had an impact on the development of local NGOs. As many seek local partners, this has spurred the development of local organizations who will seek to partner with INGOs. In some cases, local organizations have even emerged from international NGOs, as happened in the case of Sustainable Rural Development, which

came out of the Coopération Internationale pour le Développement et la Solidarité (CIDSE), a Catholic social-justice organization with a head-quarter in Brussels that had implemented many developmental projects between 1978 and 2005. CIDSE, in fact, is a network much like Live & Learn that provides support for the development of local NGOs.

However, the work of international NGOs is limited by some of the same institutional restrictions faced by local NGOs mentioned in Chap. 5. The Vietnamese government has also sought to tie all international NGOs to the state. In order to deal with the growing number of foreign NGOs, the government has established the Committee for Foreign NGO Affairs (COMINGO) in 2001 which brings together the prime minister and the most important ministries to monitor the foreign NGOs as well as deal with other issues. A main task is to "provide guidance, monitoring, and oversight for the implementation of laws and policies relating to the operations of foreign NGOs" (Decree No. 12/2012/ND-CP). It appraises the organizations and decides whether they are allowed to operate and, in case of violations, it can revoke an organization's license. While this has not happened yet, it may influence the decision-making process of organizations. The implementation agency of the committee is the VUFO, a mass organization which is part of the Vietnam Fatherland Front and thus the VCP. Its main task is to develop and maintain peopleto-people relationships with other countries in regard to cultural, economic, technical, and scientific issues. As such, all international NGOs have to be registered with VUFO. Part of its task is to organize meetings, seminars, and workshops, which are of use for networking as I will demonstrate below.

As part of VUFO, the government has also established the People's Aid Coordinating Committee (PACCOM) in 1989 which is described as "a specialized and functional body" and is directly responsible for registering international NGOs. Moreover, it is also tasked with maintaining relations with INGOs as well as to mobilize financial assistance. The committee consists of four specific offices, one for administration and three for different geographical regions, Europe, North America, and Asia Pacific. It has both administrative and technical responsibilities that include a wide spectrum of tasks such as facilitating the work of INGOs, providing

information, conducting feasibility studies to determine strategic plans, organizing seminars, and workshops, among others.

The government closely monitors international NGOs because it is worried that their activities might cause "negative attitudes of the public toward the government" (Nguyen 2006). The state is thus keen to keep close control over international NGOs which should not become involved too deeply in domestic politics. With other words, the fear of conceding power is a central concern behind the attempt to strictly regulate international activists. In terms of their role within the political system, they have been "very important for facilitating and inspiring the other organisations, but they are not themselves civil society actors" (Norlund 2007, p. 11). The level of control is justified by the need to keep out possibly illegal organizations which could use the title of NGO for other purposes, such as criminal activities. It should be noted that not all international NGOs are perturbed and some have even shown understanding for government regulations.

The need for government cooperation means that there are some limitations to their work. For instance, the registration of INGOs involves a great deal of paperwork and can be quite difficult, particularly for small organizations. Due to administrative problems and lack of clarity, it has happened that licenses have lapsed before they could be renewed. In addition, the government places limits on the geographic areas to which organizations are granted access. In particular, politically sensitive regions with a majority of ethnic minorities remain largely closed to them. In order to overcome some of the challenges and increase their impact, many of the INGOs have collaborated in networks which will be discussed in the following.

Networking for Change

While donors interact with each other and the government through high-level CG meetings and working groups, there is an even greater need for the myriad NGOs to work together. The reasons are similar to the VNGOs discussed in Chap. 5 including combining resources and exchanging information. Although international NGOs have more

resources, cooperation in terms of information exchange, resource allocations and networking is still an important asset. For example, in 2006, the Vietnam Environment Network, a Yahoo mailing group, was created with the goal to provide networking opportunities between government officials, NGOs, donors, international organizations, academic institutions, and freelancers. The primary objective is to provide social and recreational interaction to deepen the relationships. Currently, the mailing list has 263 members and there are about 20 to over 200 messages each month. In 2011, its founder Nguyen Van Duyen was honored by the Australian embassy for his contribution in the environmental field (Huong Thu 2011). Unfortunately, the amount of e-mails has declined over the years, and there has been little effort to extend the cooperation beyond the internet.

The active cooperation and exchange between international NGOs as well as the government and donors has been facilitated with the creation of VUFO-NGO Resource Centre in 1993, which is currently headed by a team of one Vietnamese and one foreign staff. About 14 percent of the NGOs operating in Vietnam have joined the center. As the name indicates, the organization is also part of the VUFO. It seeks to strengthen the linkage of international NGOs to the state as a whole. In addition to its control function, the center also serves as an effective networking tool for many prominent international actors and an opportunity to communicate as well as collaborate with the government and donors. It receives no funding from the government and also conducts no fundraising. It thus works on a small budget. First of all, the center organizes and hosts regular INGO forums to increase the communication between the NGOs, the government, and other organizations involved in developmental aid. Secondly, there are 19 active working groups which meet regularly in its office.

Only one of the working groups has a direct relationship to environmental issues: the Climate CCWG, which was founded in 2008 and meets once every month. There are unfortunately no working groups that deal with traditional environmental concerns such as wildlife protection, nature conservation, or industrial pollution. Even the CCWG focuses mainly on climate change adaptation rather than mitigation. Other groups, such as the Water Supply, Sanitation, and Hygiene Working

Group, only marginally deal with environmental issues. This is a pity because they provide a good basis for cooperation between INGOs and the Vietnamese government, UN agencies, donor organizations, and so on. In fact, the monthly meetings are open to the public and any interested person can participate. The groups are supported by a mailing group, which allows for the dissemination of information for anyone interested.

The emphasis of NGOs on the issue of climate change was, in part, the result of the increasing availability of donor money. This occurred because climate change was increasingly regarded as the most important global environmental problem, while Vietnam will be seriously affected due to the many low-lying areas that are at particularly serious risk of the changes of sea level rise as a consequence of higher temperatures. Moreover, the government declared in the National Strategy on Climate Change, issued in late 2011, that dealing with climate change makes it "necessary to make full use of internal forces and international cooperation" (Decision 2139/QD-Ttg). In addition, the complexity of the problem revealed the need for a decentralized, grassroots approach. Within the international network, one of the most important driving forces is the humanitarian organization Cooperative for Assistance and Relief Everywhere (CARE) International which perceived a very good opportunity to network with other organizations and to mainstream climate change into existing projects. CARE itself is the product of cooperation because it originated from a coalition of 22 American aid organizations in 1945 in response to the plight of World War II and with the goal of sending care packages to people in Europe who were affected by the war. Since then, the organization has changed significantly but has remained true to its main cause to eradicate poverty. Its goal to help the disadvantaged has brought it to the problem of climate change, which disproportionately affects poorer people.

The network seeks to influence the institutional reform process in two regards: first of all, it seeks to strengthen the involvement of communities to become involved. One of the successes of the network has been the effort to mobilize local residents which has created awareness for community involvement and thus strengthened the role of civil society. This is encouraged by the government, which in its climate change strategy offi-

cially asserted that the participation of "socio-political and professional organizations" as well as communities is required. Second, the network also aims to change policy through advocacy, which has focused on a number of climate related policies. Examples are assisting the MARD to devise a Climate Change Action Plan, which was adopted in 2012, as well as efforts to mainstream climate issues in the Social Economic Development Plan, the New Rural Development program, and the Sustainable Poverty reduction program, as well as developing green growth programs (Nguyen and Nguyen 2013). The latter is especially relevant from an environmental perspective because these programs seek to reduce Vietnam's own impact on climate change. Due to the collaboration, it was possible to set up an advocacy task force, conduct regular expert meetings as well as workshops, which included relevant policymakers (Ibid.).

The Limits of International Support

International support has played an important if not crucial role in the institutional reform process toward environmental governance. Donors have provided important financial support while many foreign organizations are deeply involved in many environmental projects. Vietnamese officials have profited greatly from the knowledge exchanges both at the macro and micro level of environmental politics. For institutional reformers, these organizations and the financial resources that they provide can be an asset to initiate reforms and overcome opposition from strong interest groups. However, there are also significant limits to what international assistance can provide. First of all, reformers may not share the same interests as international organizations or they may differ over how reforms should be implemented. Moreover, the cooperation with foreign organizations is subject to changes over time which can make it difficult to rely on them as a reform supporter. Political as well as economic changes can, for instance, reduce or even eliminate the support originating from a donor. Finally, practical aspects, ranging from quality of life issues to cultural differences, also complicate the work of international organizations.

While reform agents in the Vietnamese government and foreign organizations both seek to strengthen the environmental state, there are differences over how this should be achieved. Vietnamese officials, who are still deeply embedded in the Communist political system, believe that the primary objective should be enhancing the legal framework and the management structures of the central government. It is a state-centric view that envisages more effective top-down procedures to deal with environmental problems. The preoccupation with law-making suggests that the government believes it can effectively use central regulations to deal with the mounting environmental problems. In contrast, international organizations promote the idea that hierarchical management of a complex policy-field such as the environment is impossible. Local government, communities, companies, and NGOs should be the key driving force while the central authorities merely lead this process. Although a growing number of officials recognize the need for a decentralized approach, traditional mindsets are difficult to abandon. As mentioned above, governance is thus still translated as management. Moreover, the adaptation of governance structures is problematic because historically Vietnam lacks the separation between government, society, and the market. The government is the main owner of key industries and closely linked to those companies which were privatized. This creates a conflict of interest in which effective monitoring is difficult because the regulator and the regulated are under the same roof. Even when intentions to environmental monitoring exist, they tend to be overridden by economic development concerns, which have the highest priority.

A related problem is fundamental disagreements over the strategies and goals of the foreign assistance which are the result of the political system. Similar to other actors in the state, the government seeks to closely control its influence over the form of aid and where it is directed. International organizations thus have to work with the authoritarian government. While donors might favor bottom-up processes which involve the relevant stakeholders from the earliest beginning, this faces opposition from within the hierarchical organizational structure of the state and thus potentially creates differences in the understanding of the nature of projects. Because the government is worried about any threats to the power of the ruling party or any other government institution, it is care-

ful in allowing too much popular participation. For donors, the fear of meddling can thus be an obstacle in some projects, especially those that can be seen as politically sensitive such as in regard to issues of governance and the degree of civil society involvement.

Even when international organizations strive to reduce the direct impact of the government, this may not be possible. An EU funded project that aimed to enable the commercial spreading of clean technologies to small and medium enterprises initially kept the government's involvement to a minimum only to find out that the government was vital in the process because many of the important business organizations are part of the government. Only after the project leaders became aware of this did they collaborate closely with the government to utilize government initiatives. While it is certainly important to involve the small businesses in the process, ignoring the government risks losing important assets especially in this kind of project which is of mutual benefit (MEET-BIS Vietnam 2008).

A second limitation of foreign assistance is the extent of its effectiveness on the institutional reform process. In fact, the success of environmental projects that seek more than to transfer a technological solution is often difficult to determine because of the lack of objective criteria. This is especially the case when the goal is to achieve long-term behavioral changes. Naturally, it is also not easy to decide the appropriate timeframe for these projects. Even if there is a grounded estimate in this regard, unforeseen circumstances, particularly as a consequence of Vietnam's cumbersome bureaucracy, can significantly delay any project. At the same time, particularly bilateral donors are subject to political changes in their own country, which can have many different impacts ranging from which kinds of issues should be emphasized to decisions on the amount of funding.

Changes in the direction of financial aid can have a significant influence on the long-term effect. In particular, this is a problem when funding for environmental efforts is terminated or scaled down before a project is successfully concluded. This can happen when donor organizations decide to leave the country such as the SIDA which completed its cooperation in December 2013. Unlike other countries, Sweden had become active already in 1967 and has since been the largest contributor

of donor money for many years, contributing more than US\$2 billion for projects involving poverty reduction, infrastructure, and other reforms (Sida 2014). Another reason is the reorientation of foreign policy, which, for instance, happened under the leadership of Prime Minister Stephen Harper of the Conservative Party in Canada. As a consequence of the 2013 budget, the CIDA was placed under the foreign affairs department which required that aid should be tied to the country's economic interests. This had serious consequences for environmental projects such as the VPEG which was discontinued after it failed to get additional funding. These changes in the provision of aid can have serious consequences for the sustainability of environmental projects. For example, the decision of the Danish development organization DANIDA to end the funding of a project on enhancing the role of societal players left the unions, which had been supported to enhance their environmental activities, without important financial resources to continue their work (Parenteau and Ngvuen 2005).

The effectiveness of international support is also partially impaired by the limited amount of coordination among the large number of international organizations present in Vietnam. As I mentioned above, there is some networking and cooperation which help in channeling the support. This, however, is not sufficient. In the environmental field, cooperation has largely been limited to strategic issues such as climate change and sanitation. There are no formal discussion groups dealing with pressing issues such as pollution or wildlife protection. The lack of institutionalization means that there is little in terms of cooperation. In addition, there are problems of interacting effectively with the government. This may be due in part to the high degree of competition between the many bilateral and multilateral donors, which is also the case in the health sector (Wood Pallas et al. 2015).

Finally, the work of international organizations in Vietnam faces a number of practical challenges. This involves many aspects ranging from the factors that discourage the most important experts to come to cultural differences that lead to miscommunication and other problems. Experts may be dissuaded because of the country's dangerous traffic situation or the problematic health care system. Issues about visa or work permits are an additional barrier. For instance, getting work permits approved

in Vietnam's extremely complex bureaucratic system can in some cases take many months (Godfrey et al. 2014). However, the most important practical obstacle is cultural differences. As mentioned above, previous research has shown that Vietnamese society is governed by different rules which are hard to understand by outsiders. This not only involves interpersonal issues but also relates to the overall structure of the political system, which is dominated by informal networks and relationships and cannot be understood by knowing the formal institutions. Unfortunately, this has so far been neglected or downplayed in the analyses. Similar to China and other East Asian societies, relationships play an essential role in daily life. These bonds are strong and burden individuals with extra responsibilities, which can override other considerations such as effective policy implementation or the recruitment of qualified staff. The main problem for international organizations is that the informal processes are difficult to detect and are subject to wide regional differences. They are thus not only difficult for any rational bureaucratic implementation but also frustrating to foreign organizations which are supporting the Vietnamese state in enhancing its capacity. In order to overcome this kind of obstacle, the VPEG project attempted to create competition between similar offices in different provinces to enhance state capacity. While this seems a very sensible approach to solve the problem, it is also extremely complex and time-consuming.

Another issue related to culture is the language barrier, which exacerbates the problem of informal institutions. The Vietnamese language not only is extremely difficult for foreigners to learn but, in contrast to Chinese, also taught at only very few institutions abroad. In addition, it is very difficult to find a good textbook as most of them are poor in quality. Only a handful of the foreigners living in Vietnam actually speak the language proficiently. While English is taught in Vietnamese schools, only few master the language sufficiently to be able to communicate on an international level. While the English language skills have improved over the years, many important government officials cannot communicate in English. They need the support of younger university graduates but many of them find jobs in more attractive environments, such as international organizations, corporations, or even international NGOs, which pay a much-higher salary and have better working environments. Moreover,

not all of the conferences organized by international organizations in Vietnam have simultaneous translation, which naturally limits their potential. The reason is that translation services are expensive and there is not sufficient funding to pay for them. International organizations have, however, worked hard to overcome the language barrier by hiring more Vietnamese staff who are bilingual and can translate important documents into Vietnamese.

On the Problem of Aid Dependence

While international support has provided important resources for institutional reformers and also shaped the reform process, it has also been attached with negative consequences. In some cases, foreign aid even threatens the institutional transformation toward greater state capacity. Vietnamese activists such as climate scientist Nguyen Huu Ninh have argued that "Vietnam has a lot of international organisations; it leads to dependence" (cited in Clark 2008). Due to the expediency of policymakers, the environmental state has become overly dependent on foreign assistance, which is very different from issues related to economic or social development. This has happened because environmental protection enjoys only a relatively low priority within the government. Faced with a growing environmental crisis, environmental officials have embraced the foreign assistance and sought to make use of it as much as possible. Unfortunately, this has delayed or even limited the institutional reform process. As many problems are mitigated by well-meaning international organizations, the pressure to solve the environmental issues has been reduced.

In some instances, environmental support has unfortunately resulted in wasteful assistance and even dependence as it has enabled projects that have received insufficient involvement from local authorities, which is essential because the efforts must be localized. Government officials and communities must become sufficiently familiar with the procedures behind the projects. Not surprisingly, there have been questions raised about the sustainability of efforts which lacked such support. For example, the main environmental program of the SIDA in Vietnam,

Strengthening Environment Management and Land Administration (SEMLA), which lasted from 2004 until 2009 and cost about US\$25.9 million, revealed serious problems in this regard because only one of the positions in the main office came from the Vietnamese government and the rest were externally contracted employees. As a consequence, only very few MONRE staff had become sufficiently familiarized with the work. Instead the international technical experts sometimes filled gaps in the government (Andersen et al. 2008). When the external assistance ended, the institutional innovation was lost which demonstrated that there was not enough support from the Vietnamese side. This naturally raised serious questions about the sustainability and highlighted the degree of reliance of the Vietnamese government on foreign support (McGillivray et al. 2012). Unfortunately, these failures not only are a waste of financial resources but may also impair the institutional development because the urgency of direct government action is reduced. This applies particular to projects that deal with the actual environmental outcomes rather than the legal or institutional frameworks.

The main reason for the high degree of dependence is that the economic interest groups within the government have resisted a significant increase in the amount of government funding for the environment. As mentioned before, only one percent of the budget is used for environmental protection. This has been a problem in many different fields. For instance, funding for Hanoi's metro rail network has come mainly from foreign sources with only 20 percent contribution from the Vietnamese government. The rest of the funds is provided by a number of different sources including the French Treasury with over 30 percent, the Asian Development Bank with a little over 27 percent, and the rest split up between the French Development Organization and the European Investment Bank.

The existence of a large number of international organizations in a country influences the internal resource dynamics. On the one hand, foreign assistance can result in new sources of corruption. While international organizations are trying hard to channel their support only to their development projects, it is impossible to fully avoid the siphoning of aid funds by government officials at all levels of the state. Moreover, the existence of international organization makes it more difficult for domes-

tic organizations to attract highly qualified human resources. As both donors and international NGOs are paying much better salaries than the government, they tend to be more attractive for the most talented individuals. Besides higher salaries, these organizations also provide greater flexibility and allow individuals more influence on the decision-making process. Moreover, they are also much less prone to internal corruption, which means, for instance, that it is not necessary to pay off superiors for promotion. It is thus quite difficult for the government to find the necessary qualified employees to fill its jobs. This becomes more pressing the higher the qualification should be. An official think tank such as the ISPONRE therefore faces difficulties finding enough people who have graduated with PhDs, a problem which was already identified in the 2003 Compendium of Environmental Projects in Viet Nam and has remained a serious problem since. Nevertheless, international organizations do provide valuable training opportunities for Vietnamese staff who might later join the government.

Despite the threat of aid dependence, it should be noted that this is likely to change in the future. On the one hand, it was already mentioned that overall developmental aid will be reduced as a consequence of Vietnam's success in achieving many of the developmental targets. On the other, international aid is not sufficient to deal with the growing environmental crisis. Although international donors and NGOs have devoted much attention to the issue, the magnitude of the problem coupled with the comparatively meager financial support will force the government to take greater ownership of the problem and enhance the environmental state or risk facing a growing social problem that could become unmanageable in the future. The most recent reforms in regard to the environmental law and the legal system demonstrate that the government is serious about institutional development.

Conclusion

Donors have played an important role in the development of environmental governance in Vietnam. As the country has reached all of the UN development goals except for the environment, much development aid has been reoriented toward environmental issues, although poverty alleviation continues to be a focus of many projects. As aid was redirected, it impacted the institutional structure in Vietnam in significant ways. Eager to draw on the support from donors, the Vietnamese authorities have improved the environmental state, allowed and even promoted the development of NGOs, and supported market-oriented governance approaches that have stressed incentives over punishments. In fact, many of the governance structures that have evolved were significantly shaped by international support.

While overall the environmental assistance has been positive, it is necessary to acknowledge that support must remain only a trigger for institutional reform and should not replace governmental efforts. The lack of government involvement in some projects has raised serious concerns as international organizations have sometimes filled a void left by the lack of sufficient government funding. In addition, international organizations should remain realistic of what can be achieved with the amount of money available. Environmental projects have a timeframe and will be concluded at some point. There will also be a point at which developmental assistance will be reduced or end entirely. As Vietnam develops further, fewer developmental organizations will provide financial support although the environmental problems are unlikely to be resolved. For this reason, the best approach is to assist institutional reformers to strengthen the country's environmental governance, be it in terms of state capacity, the development of civil society, or greater involvement of businesses. The next chapter will conclude the book by reflecting on future trajectories.

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8

Perspectives for the Future

It is always difficult to speculate about the future and it is not different in regard to the institutional reform process underlying environmental politics in Vietnam. Nevertheless, using a comparative perspective it is possible to draw attention to possible development paths. In particular, this chapter will refer to China, which has a very similar political system and economic development path but which mainly differs in the duration and extent of the economic liberalization process. China's reform and opening period officially started in 1978 with the introduction of market principles and included the decollectivization of agriculture, the privatization of some businesses, and the gradual relaxation on limits of foreign investments. In Vietnam, the same process started in 1986, almost a decade later. Moreover, China's per capita GDP is more than twice as large as Vietnam's. In 2014, it had reached US \$7590 compared to US \$2052 in the Southeast Asian country. Not only is China's economic development much more advanced, but environmental technologies have also received greater attention from companies and the government. The massive demand has generated optimism about the country's environmental progress. As such, China's situation may reveal the possibilities

of reform under the current political regime, while the continuing problems may also reveal some limitations to the institutional reform process.

First of all, China's attempt to manage the environmental crisis through the one-party state has raised the possibility whether political reforms toward democratization (understood as the process toward the rule of law and institutional checks on power, an increasingly autonomous society, and a clear separation between state and business) are at all necessary. The country could thus evolve into an example of an "eco-dictatorship" which more effectively deals with the environmental crisis than liberal democracies by simply enhancing the top-down processes. The hope behind this vision is that a strong central state would be more effective than a decentralized approach that relies on the support of local officials, the society, and businesses. It is based on the worry that people are unlikely to support the unpopular consequences of greater environmental repression. Unfortunately for supporters of such an authoritarian approach, neither China and Vietnam nor any other country is likely ever able to achieve such a miracle.

In reality, a slow evolutionary institutional reform process toward governance has taken place in China and Vietnam, although it has not always proceeded in one direction and there have repeatedly been setbacks and insurmountable barriers. For this reason, it is useful to determine the kinds of changes that may be possible under the current political regime. The Chinese case shows that there is still significant room for progress, for instance by increasing the incentives for using environmental technologies. One such attempt has been to increase the use of certifications that require companies to implement environmental management. At the same time, however, the fear of losing power makes it very difficult to reform the legal system as well as to develop an effective civil society necessary to drive the social movement for environmental protection. As the one-party state threatens to undermine essential aspects of effective governance, more fundamental political reforms may be necessary before it is possible to see qualitative improvements in the environmental state.

While China is increasingly becoming suspicious of foreign interventions, Vietnam's relative openness to the international realm may prove to be another possible avenue for improvements in environmental governance. The growing international integration and, in particular, the

country's alignment with Western powers to counter the growing threats from China could create incentives for institutional reform. Not only is Vietnam likely to remain much more open to foreign assistance but this final chapter will also draw attention to the country's involvement in the Trans-Pacific Partnership (TPP), which, although it was eventually abandoned, demonstrates how greater international involvement could benefit Vietnam's environment. Although the trade agreement had been widely criticized in the West for its relatively weak environmental commitments, for Vietnam's institutional reformers the treaty would have provided additional reinforcements in their struggle to modify the environmental state and its underpinnings.

Environmental Dictatorship or Democratization?

While some form of democracy is essential for effective environmental governance, a number of people have argued for the possibility or even need of an environmental dictatorship, also referred to as "eco-dictatorship." The notion is appealing because of the obvious shortcomings of human development which has led to unprecedented environmental destruction. An environmental dictator could effectively enforce green behavior among both people and companies. Even if people want to consume more, the green tyrant would institute severe restrictions. Such a hypothetical scenario can be attractive to not only those who believe that an environmental apocalypse is imminent but also institutional reformers in authoritarian regimes who hope to combine the current one-party state with more effective institutions.

The idea of an eco-dictatorship or the "steady state," in the words of Ophuls (1977), has attracted repeated interest among scholars and activists (see: Heilbroner 1974; Ophuls 1977; Beeson 2010; Shearman and Smith 2007). As awareness of the environmental crisis has grown over the years, many have pointed to the shortcomings of the liberal democratic model. Officials running in democratic elections need to appeal to the majority of the population, which unlikely would accept restrictions

on their consumption and adopt a more environmentally conscious approach. Moreover, as environmental issues are often too complex for the average citizen to understand, the people have become susceptible to psychological manipulation. For instance, although the majority of scientists agree on the issue of climate change and the effects of human behavior, there has been a concerted effort to discredit the science from popular writers. In the USA, there has even been a rise in climate skeptics, particularly among Republican politicians, who assert that there is not enough information on climate change. Instead, to counter this potential of misinformation, a technocratic leadership of experts would be needed to make decisions which are in the best interest of mankind (Shearman and Smith 2007).

While the idea of an environmental dictatorship was the strongest in the 1970s, even today there are supporters of this idea. For instance, Mark Beeson (2010) suggests that the growing environmental crisis will make it even more difficult for democracy to emerge in China or Southeast Asia because of the growing social conflicts over limited resources and the effects of pollution and global warming. He writes: "The central question that emerges from this discussion is whether democracy can be sustained in the region—or anywhere else for that matter—given the unprecedented and unforgiving nature of the challenges we collectively face" (p. 289). While there is a distinct possibility of global disintegration and increasing wars, Beeson instead speculates about the possibility of the emergence of a "good authoritarianism" which can effectively deal with environmental problems where "environmentally unsustainable forms of behavior are simply forbidden" (p. 289). Unfortunately, however, this notion rests on the assumption of an inherently good nature of humans in which a benevolent leader would actually primarily rule in the interest of the people instead of personal interests. Such a leader has not yet existed in human history and may as well be a fantasy akin to the Communist paradise envisioned by early Marxists. Even Singapore, which is often used as the paradigmatic example, is anything but governed by a selfless elite. Instead, the ruling elite has the highest salaries and profits significantly from the economic development of the citystate. While the country has portrayed itself as a "garden state" because of its many green spaces, which have received much praise, nearly complete

destruction of the natural environment of this small island city-state for urbanization has led one study to conclude that Singapore is the world's worst environmental offender (Bradshaw et al. 2010). In addition, its current development path depends on the environmental destruction in the region, further reducing its authoritarian approach as a role model.

Despite the hypothetical promise of an environmental dictatorship as the ultimate solution, the reality is that human behavior defies this option. It is highly unlikely that an authoritarian regime would be willing to prioritize environmental issues over other concerns. Even if there was a benevolent environmentalist dictator in control, it would be hard to imagine that he or she could enforce unpopular environmental rules against the wishes of the population. The high costs of monitoring and enforcement of strict legislation would be very difficult for the richest countries and impossible for developing ones such as Vietnam. Finally, even authoritarian regimes rely on popular support for making decisions. Using coercion against the majority of the population is thus not feasible.

Authoritarian regimes are ruled by a small elite which benefits disproportionately from the exploitation of natural resources. Although all people suffer from the environmental pollution, the negative impact is felt excessively by poor people. Cancer villages, for instance, are located in the poorer regions of the country. Particularly, ethnic minorities in areas with steep slopes suffer from poverty and higher incidents of environmental degradation. Even if rich people also suffer from some of the effects of the pollution, they can protect themselves better. For instance, they can buy air purifiers, send their children abroad for study, and buy safer imported food. They may even see the growing pollution as a necessary evil to allow these luxuries for themselves.

As Vietnam has opened up its economy, the Communist system has transformed into a system in which the state still controls the main means of production but the primary objective is profit. This naturally has meant that the small group of elites that control the VCP are also materially interested in the profitability of their assets. State-owned enterprises are among the worst polluters and the environmental state has been helpless in forcing these companies to comply. Moreover, even environmental violators in these state-owned companies do not get punished. As the case of Sonadezi Corporation reveals, even when there is flagrant misconduct,

such as the illegal release of chemicals into a river in 2011, officials are unlikely to get punished. Instead of being removed from her leadership position, the company's chief executive and deputy in the National Assembly Do Thi Thu Hang became deputy party secretary in 2015 (see Chap. 6 for more details).

Moreover, authoritarian regimes need legitimacy similar to democracies, even if they do not conduct regular, free, and fair elections. While legitimacy can result from a charismatic leader or based on traditions, modern societies draw their support from the consent of the governed, either implicit or explicit. In Communist one-party regimes, it is the vanguard party which governs in the interest of the people. With the introduction of economic reforms, the state's legitimacy has been based on economic performance and the ability to provide better living conditions for the population. While the latter suggests that environmental concerns should be included, this is easier said than done. In fact, economic concerns are much more important as they provide the tangible benefits to the population. As people exit poverty, they also begin to strive for the same luxuries as everyone else. In effect, the regime's legitimacy increasingly depends on the expanding consumer society, the very opposite of the restrictions supporters of environmental dictatorships would want.

In addition, authoritarian regimes primarily rely on a top-down approach. Power is maintained with coercion. On the one hand, the implementation of environmental policy would need very high priority but this is unlikely considering the prevailing interest conflicts. On the other, many studies on environmental problems highlight the short-comings of the top-down approach, which is very costly compared to a decentralized approach based on incentives and self-monitoring. A massive apparatus of official control systems would need to be set up to effectively monitor and enforce all of the rules even at the most basic level which would be extremely expensive. Besides massive investments in manpower, this would also require substantial acquisitions in advanced technologies.

Authoritarian regimes do not have the rule of law, which restricts the ability to enforce environmental policies, especially when the state profits from the destruction. Corruption and rent-seeking is dominant. Instead, enforcement relies primarily on a reward and promotion system. Since

the goal of environmental protection clashes with economic development, any attempt to set goals leads to contradictions. As goals need to be very clear and priorities need to be explicitly set, it is impossible to achieve sustainability and development at the same time. In particular, it is extremely difficult to find a reasonable balance that is effectively enforceable.

The idea to actually create such an approach can be found in the attempt to introduce a "Green GDP" which would include the environmental costs in the calculation in the GDP. In 2012, the government announced that it was preparing the measure to be implemented by 2014, although the Central Institute for Economic Management (CIEM) already conceded that it would be very difficult to achieve this target because environmental accounting was new to the country (*Viet Nam News* March 28, 2012). It is therefore not surprising that by 2016 the index had not yet been finalized. The basic idea of Green GDP is reasonable. As environmental destruction involves significant costs, it should be reflected in the actual economic growth numbers used for performance assessment of government officials.

The Chinese case demonstrates that introducing Green GDP as a tool to evaluating the performance of local officials can face substantial opposition. Opponents of the measure were able to point to the problem that it is very difficult to account for the actual environmental impact of economic production. They can draw attention to the fact that government officials in Norway had concluded that it would not be feasible to quantify environmental assets such as air or water (Li and Lang 2010). Nevertheless, the main environmental institution in China at the time, the State Environmental Protection Agency (SEPA) under the renowned reformer Pan Yue, decided to conduct a Green GDP survey starting in 2004 followed by a second one from 2006. The first report stated that the costs of the environmental pollution accounted for only 3.08 percent of China's GDP in 2004, which was far lower than both domestic and international observers had expected (Economy 2010). Reformers in the environmental agency tried to push for a much more realistic assessment as Vice Minister Zhu Guangya published another report almost at the same time which estimated the environmental damage at about 10 percent of GDP annually (Ibid.). While the first official report was released to the

public, the second one never saw the official printer. On the surface, there were disagreements between SEPA and the National Statistics Bureau, which was also involved in the study. More importantly, however, there was significant resistance from within central, regional, and local governments. In particular, there was significant concern from those regions which had a high GDP growth and at the same time a high amount of environmental pollution. They were worried that an accounting of the negative environmental externalities would impact their own performance. As the geographic distribution of industries in China is uneven, some regions would be more heavily impacted if the new GDP numbers would be used for official evaluations (Li and Lang 2010).

The case of the failed introduction of "Green GDP" also highlighted the weakness of environmental reformers within the central government. As SEPA fought for the change and eventually did not succeed, it highlighted the strength of influential economic interests within the government. Shifting toward a greener approach would clearly entail changes in the power structure, which reform opponents were unwilling to accept. This highlights the inherent weakness of authoritarian regimes in dealing with contradictory agendas. While the one-party state can focus on promoting economic development, it cannot at the same time implement policies which run counter to this priority.

Finally, authoritarianism rejects any form of checks on its power. This includes a strong civil society willing to challenge the government and industry, an assertive media which uses investigative journalism to monitor the government, and last but not least a resilient judiciary. These institutions could at least contain the excesses by the government as well as reduce the collusion between business and the government. The most important obstacle is the insistence on the leadership role of the Communist Party. In fact, the party stands above any other institution in the state including the law, which is merely considered a tool for the enforcement of legislation. It has centralized power at the top of a unitary state apparatus. Article 4 of the Vietnamese constitution passed in 1992 states:

The Communist Party of Vietnam, the vanguard of the Vietnamese working class, the faithful representative of the rights and interests of the

working class, the toiling people, and the whole nation, acting upon the Marxist-Leninist doctrine and Ho Chi Minh Thought, is the force leading the State and society. All party organizations operate within the framework of the Constitution and the law.

This article received massive criticism at the time of the revision. However, not for the heavy emphasis on the party but rather its de-emphasis. Before that, the VCP had been described the only force leading the State and society and even under the new framework, the role of the party is still above the rest of the state apparatus and the society. While the change reflected the growing importance of other political forces and an attempt to emphasize the need to subject the party to the law, this cannot be achieved as long as the party becomes just another political organization within the political system that is subject to the same rules as everyone else. Moreover, the second sentence, which states that all party organizations have to operate within the rule of law, is too vague and allows for many different interpretations (Sidel 2009).

As mentioned earlier, the concept of civil society in Communist Party regimes is problematic because it contradicts with the fundamental structure of the socialist state in which the party and its organizations dominate. In China, a memo by senior party leaders even released the infamous Document No. 9 which, among other Western democratic ideas, attacked the concept because "advocates of civil society want to squeeze the Party out of leadership of the masses at the local level, even setting the Party against the masses, to the point that their advocacy is becoming a serious form of political opposition" (ChinaFile 2013). The top-down principles are inherent in this system and require more fundamental political change than the leadership is willing to allow. However, numerous studies demonstrate the usefulness of grassroots organizations. Even Vietnam has allowed some limited form of independent organization in the hope that it can improve the situation without threatening the ruling party's hegemonic control on power. The need to respond to popular demands by allowing more democratic elements may not naturally lead to democracy. In fact, many scholars argue that it strengthens authoritarian rule. The new partially open regimes are more resistant toward pressures for liberalization.

In conclusion, significantly strengthening the environmental governance will face a long, uphill battle because of the competing concern for economic development, which is still viewed as the primary objective. This is not surprising as the Vietnamese one-party state depends on it for its legitimacy. Environmental concerns can become a problem in situations when they affect the social peace. However, the costs of effective environmental policy implementation are prohibitively high that it is unlikely the Vietnamese state is going to make any major progress in the next years. This might even be exacerbated as economic growth slows and the country faces the possibility of much slower economic growth, which could result in much more widespread social unrest. Weighing economic concerns against environmental objectives, it seems unlikely that officials will opt for the latter in the foreseeable future. However, as demands for more effective environmental protection increase, the state is bound to continue to make incremental progress, which is certainly better than no progress at all.

Environmental Institutional Development in a One-party State

In order to explore the future prospects of institutional development in Vietnam, it is helpful to take a comparative perspective. The case of China is particularly relevant in this regard because of the many similarities in the past trajectory of the institutional reform process. At the same time, China arguably has already reached a much more advanced stage of economic development which might give some ideas how economic growth and environmental institutional development are linked in this regime form. Ren and Shou (2013) succinctly summarize the changes of the past decades as follows:

From the institutional design and policymaking point of view, China has made great achievements in environmental protection. With the enhanced awareness among the government and the public, environmental protection has become one of the most burning issues in the society and has obtained higher status on the political agenda. The regulatory agencies and

policy system have improved. The number of government staff for environmental protection is increasing. Environmental governance tools have become diversified. (p. 5)

Similar to Vietnam, reformers were able to pursue a strategy of continuous institutional improvements. For instance, the legal process was enhanced to improve the ability to bring environmental violators to court by enhancing the definition of what accounts as criminal behavior, by allowing public interest lawsuits, by allowing expert opinions as evidence in court, and by developing environmental courts that deal exclusively with environmental crimes. In addition, the fines for non-compliance were raised, targets were clarified and expanded, and techniques of enforcement were improved (Brettell 2013).

Chinese reformers have sought to develop a rational state bureaucracy rather than to promote democratic decision-making processes, which was rejected in 1989 following the crackdown on peaceful demonstrators in and around Tiananmen Square. Nevertheless, the process of rationalization naturally runs counter to the arbitrariness of Communist Party rule. In theory, special interests associated with the party are supposed to subject themselves to the administrative state, which leaders hope restricts their power. In the field of environmental politics, these interests largely still resist enforcement by either ignoring environmental rules entirely or only selectively abiding by them. However, as the situation worsens, the weak reformers in the government were empowered and sought to increase their ability to strengthen the administrative state, in addition to enabling civil society and the media to grow and push for greater international integration. Because of the strength of reform opponents, progress remained very slow and tedious while the environmental crisis deteriorated further. The severe smog situation in China has not only forced thousands of people to wear masks and buy air purifiers but even led to shutdowns of the airports in major cities such as Beijing and Shanghai due to extremely low visibility as well as the need to close factories for a certain period of time (e.g. Glum 2015; Wong 2015). As a consequence, fewer tourists are traveling to China with the largest decline in Beijing which saw a drop of more than 10 percent in the period between 2012 and 2013 (Mudallal 2015). This naturally has led to significant economic

costs. Although the situation in China is much worse than in Vietnam, when air pollution reached record levels in 2016, many Vietnamese feared that the country was headed in the same direction.

The problem is as Ren and Shou (2013) note that the Chinese governance system is still in a state of fluid transformation which results in many self-contradictory results. Although interest in green energy has grown significantly, the overall trajectory of environmental decline has continued unabated. This is blamed on the weakness in the environmental institutions, the great degree of decentralization coupled with an emphasis on economic development, and the collusion between government and industry. Moreover, insufficiencies in the law have been identified as a key problem. Due to vague language and missing details, implementation of the legislation is very difficult. The solution to this problem has not been easy because implementing the increasingly specific legislation has also been difficult because it reduces the flexibility of local governments in adapting the rules to their own situation, a serious problem in a huge country such as China which has large climatic and geographic differences between different regions.

Of course, local governments have often failed to implement legislation, either because they were not capable to do so or more seriously they intentionally ignored the laws because they would limit economic growth. The most important problem therefore is that environmental protection bureaus remain very weak and under the control of the local governments. For local governments, it is even more difficult to prioritize environmental protection while funding for the implementation remains low. This includes both inadequate staff and lack of relevant technologies. Monitoring costs can be very high and thus are not always fully applied (Brettell 2013).

In addition, the key problem that is often identified is the lack of political will as one of the main problems. This is very similar to Vietnam, where many argue that the lack of determination is an important obstacle. Activists and officials remain optimistic because they believe this can be changed in the future with the rise of awareness. However, the Chinese case shows that an increase in awareness is not necessarily sufficient. There must be concerted efforts to transform the awareness into

political change, which does not happen when media, society, and courts are constrained.

Finally, China still lacks an independent judiciary and it is unlikely to develop in the future. Instead, Oran et al. (2015) argue that China is not converging toward a law-based governance regime similar to what is in place in the USA. The main principle underlying the Chinese system is the reliance on central plans and compliance mechanisms to entice local officials to comply with government policy. This system, however, rests heavily on priorities which are still strongly biased in favor of economic development. Moreover, plans require accurate information, which is difficult to collect and monitor, particularly in an authoritarian regime with strict limits on the freedom of the press. The study argues that they expect "an overlay of the rule of law with Chinese characteristics" (p. 176). In spite of the overused and empty phrase "with Chinese characteristics," which is often used to negate the original meaning, the authors do consider laws of increasing importance but they only remain additions which, it is implied, still rely on the whims of the political leadership.

Without a legal and rational foundation, however, institutions will continue to rely more on internal consensus and rules can be easily broken because there is no accepted process through which justice can be achieved. The small elite which is in control of the ruling party escapes independent monitoring. This gives a few the ability to abuse the law as they please. In addition, it creates a system of relationships and corruption, which negates the rules for those who are in power. If those who are responsible for pollution, for instance, are well connected, they will not be punished according to the law. Only if someone ends up on the wrong side of internal power struggles are laws implemented. Officials who seek to survive and get promoted prefer to maintain strict limits on information, which could possibly be used by enemies against him or her. This creates a system without transparency which is flexible and malleable, thus obscuring the ability to develop strong environmental institutions.

Overall, the Chinese case thus clearly suggests that the shortcomings are inherent to a modernizing Communist regime. Under these circumstances, even the most well-meaning reformers are unlikely to make substantial progress unless there is more fundamental change in the political regime because the power of economic interests, which are

closely tied to the state, needs to be severely curtailed. In addition, a top-down approach, which is currently in place, is insufficient to effectively deal with the growing environmental crisis because the costs of such a system are too high. Reform opponents can continuously deprive the environmental state of the institutional capacity to implement policy effectively, a problem that is also visible in the USA, where there are constant attempts to restrict the influence of the environmental protection agency. Vietnam's changes must therefore go well beyond improving laws and strengthening institutions and involve adequate checks on power, for instance through civil society, as well as greater incentives for environmentally-friendly behavior.

The Limits of the Growing Influence of Environmental Activism

There has been a steady growth in the number of environmental non-governmental organizations as well as an increase in the number of environmental protests. Pressure has come from within institutionalized and non-institutionalized channels, as the previous chapters have shown. However, what are the prospects of further change into the future? Can the environmental activism transform into a social movement? This question obviously depends on the degree of openness of the political regime and its transformation. If Vietnam follows the path of China's development, a sustained environmental movement will remain unlikely because of the many obstacles for grassroots activists to coalesce into sustained contentious activity that could pressure the regime for change (Stalley and Yang 2006). Although development paths may differ significantly, the Chinese example can demonstrate the possibilities for and limits of environmental activism in another Communist one-party state.

While Vietnam has seen a significant increase in environmental activism, a similar development has occurred in China. This is particularly visible in regard to the rapid growth of environmental non-governmental organizations. More volunteers are willing to deal with the negative fallout of pollution. This demonstrates that there has been a certain

increase in environmental awareness. Green activism has particularly flourished online, with many websites promoting green lifestyles. Finally, environmental protests have also become more prominent over the years (Xie 2009). In fact, environmental activists have achieved a number of successes from stopping the construction of controversial dams (for instance along the Nu River) to closing or moving of factories that have caused serious pollution. Activists have also saved rare animal species such as the Yunnan golden monkey by stopping the deforestation of its habitat (Yang and Calhoun 2007). Steinhardt and Wu (2016) moreover observe that Chinese citizens are engaging in cooperation between different protest movements across the country and proactively mobilize against planned projects with potentially serious environmental consequences. They thus argue that in the Chinese context "street protests over environmental issues have been the first to intersect successfully with NGO-led policy advocacy" (p. 81).

Although the Chinese, like the Vietnamese, government has been more lenient in regard to environmental activism than other forms, there are also numerous examples of the limits of environmental activism. While in Vietnam overt government repression of environmentalists has occurred in only a few cases including the 2009 campaign against Bauxite mining in the Central Highlands and the arrests of protesters against the massive pollution of the ocean in 2016, the Chinese government has more frequently used repression against environmental activists. Restrictions on the press are extensive with the governments at various levels seeking to control any kind of potentially damaging content. For instance, local officials in 2005 were able to conceal for more than ten days the release of toxic water into the Songhua River in Harbin. The news could no longer be hidden when it became an international incident because the river crosses the border into Russia. One day in advance, officials finally admitted the existence of the massive spill (Tilt and Xiao 2010).

Aside of strict controls on the media, Chinese authorities have repeatedly arrested environmental activists. A few cases can illustrate the dilemma between the government's call for greater participation and the threat of arrest and harassment by the authorities. In 2005, the founder of "Green Watch," Tan Kai, was arrested for illegally gaining access to "state secrets" for which he served 18 months in jail (Shapiro 2012). In

the same year, another prominent environmental activists Wu Lihong was arrested by the government and his house searched. Even in recent years, activism outside of the state has frequently met with repression. In October 2012, Liu Futang, a former forestry official was put on trial for publishing and distributing a book about the deforestation in Hainan Island without permission. He had received the China Environmental Press Awards for best citizen journalism earlier in the same year (Richburg 2012). A number of activists were arrested in 2015. First, on March 9, 2015, two activists were jailed for holding up banners that read: "The government has a duty to control smog" (Phillips 2015). Moreover, in June 2015, the Shanghai police arrested dozens of protesters who had rallied against a rumored chemical plant in Shanghai's Jinshan district, about 70 kilometers from the city center (Traynor 2015). In late October 2015, Tan Kai was again arrested when he tried to open a bank account for his organization, which is needed for fund-raising.

Particularly striking has been the case of the banning of the documentary Under the Dome—Investigating China's Smog, which was produced by Chai Jing, a prominent CCTV journalist, and had received significant support from some Chinese leaders. The film remained careful about its criticism of the Chinese political system, although it clearly demonstrated a number of failings especially in the second half. One case for instance showed a network of conflicts of interest and corruption in the oil sector over which state-owned companies have a monopoly. Moreover, there are pointed comparisons between China and other countries, which effectively highlight the shortcomings of the Chinese state. These references probably made it too sensitive for the central government and the censors decided to remove the video from the Chinese internet (it can still be viewed on YouTube). Overall, the suppression of the video fits clearly within President Xi Jinping's wider clampdown on independent civil society since he took power in late 2012 (Yuen 2015). The crackdown casts a pall over the hope that environmental journalism would be able to continuously increase its ability to report about the reasons underlying the massive air pollution.

The Chinese regime's willingness to use repression when its interests are threatened effectively demonstrates how difficult it is for environmental activists to influence the state. Most activists thus prefer to work

within the limitations of the state, which allows for some progress but overall poses serious hurdles for the emergence and development of a meaningful environmental movement. There are basically two aspects that constrain environmental activism in this context. On the one hand, it is determined by the strength of powerful economic interest groups which are prioritizing economic growth as the main goal of national development. On the other, the concern with potential political challenges to the current authoritarian political order creates severe obstacles for independent activism which is seen with great suspicion. The government has thus made it difficult for a national discourse to emerge that might link the different environmental incidents into a coherent social movement which in turn could exert sustained pressure on the powerful economic elite (Steinhardt and Wu 2016).

Following the collapse of many Communist one-party states in the former Soviet bloc as well as the successful democratization of one-party regimes in South Korea, Taiwan, and beyond, the remaining one-party regimes have become more worried about the potential impact of the emergence of social forces that could threaten their power. This threat is not unfounded as environmental movements have played a crucial role in a number of regime transformations as opposition activists could make use of the regime's dismal environmental record to mobilize support (Jancar-Webster 1998). In Taiwan, for instance, environmental activists were closely aligned with the opposition movement. The main opposition party, the Democratic Progressive Party (DPP) even chose green as its main color (Kim 2000). As part of its campaign against the Kuomintang regime, opposition activists used environmental problems as indicators of misrule by the authoritarian regime. Many environmental activists joined the DANGWAI movement which later merged into the DPP. Taiwan, however, is a cautionary tale because the success of the top-down process of democratization did not instantly lead to an improvement in the natural environment (Ibid. 2000).

Similar to China, the Vietnamese ruling party has also prioritized regime survival over other goals. As long as the Communist Party remains worried about political activism outside of the party, a civil society with strong non-governmental organizations cannot emerge. This also means environmental activists will not be able to gain significant influence

within the country. The overriding focus on maintaining power will severely restrict the possibilities of grassroots activism and public participation. When activists become threatening to existing interests, arrests are likely and will deter most people from becoming active. Instead, a majority of the people will seek refuge in the emerging consumerist culture and adopt materialist behavior to adapt to the changing society. On the whole, this means that the emerging governance structures will remain curtailed until there is much broader political change. An effective environmental movement thus needs much more than the current process of institutional reform and instead must involve a political transformation toward a more inclusive, open, and less hierarchical political system.

Prospects for Businesses

The Chinese experience demonstrates that interest in environmental technologies is likely to increase. Companies who had been to China before coming to the trade fair in Vietnam reported eager interest in their technologies. The intensity had even created concern for the potential of intellectual property theft to which one company responded by placing anti-photography signs around their exhibit. While in Vietnam, there was no need for this, yet interest in environmental technologies is likely to increase although it will not nearly be sufficient to significantly mitigate the worsening situation. This can be demonstrated by analyzing the rapid expansion of China's interest in environmental machinery.

According to the US government, China is not only the largest but also the fastest growing market for environmental technologies among developing countries. It ranked first in regard to air and water pollution control and second in waste and recycling. At the same time, some downsides were weak intellectual property protection, the need to expend additional resources on demonstrating the success in a number of provinces, and only certification for locally manufactured technologies (Hinman 2015). Exporters expect more growth in the future as China has enhanced its Environmental Law (2015) and made promises about greater energy efficiency.

The recent increase in investments in environmental technologies in China is impressive. For instance, the *Wall Street Journal* reported in 2012 that 7.1 percent or US\$1.2 billion of private equity money was invested in businesses related to the environment. This was seen as a reflection of China's attempt to enhance its market-based approach for natural resources as well as ensure stiffer penalties for polluters. However, at the same time most of the money was directed toward basic technologies in order to clean up the most seriously polluted areas. In addition, most of the environmental projects came from the government themselves rather than from businesses (Deng 2014).

Despite the fact that there has been significant progress in recent years, the current use of environmental technologies is still at a relatively low level. The Chinese government has only started in 2009 to switch to energy-saving technologies in state-owned enterprises (Deng 2014). Similar to Vietnam, these companies are also serious polluters. Generally, international companies and those that have connections to foreign enterprises are the driving force toward greener technologies. The reason for this is that foreign customers place higher demands on the environmental aspects of production processes. External pressures have proven to be much more effective than those from either regulation, domestic clients, or other competitors (Qi et al. 2013).

The failure to implement environmental legislation has also resulted in the need to stress voluntary schemes such as the ISO 14001 certification, which requires the adoption of an environmental management system in companies. China has been involved in the development of the standard from a very early stage. Already in 1995, early drafts of the standard were made available in Chinese and discussed among various different actors including business representatives, scientists, and government officials. According to the ISO Survey 2014, the country now leads the world in terms of certifications while there has been a constant increase in registration over the years from only 510 in 2000 to 117,758 in 2014. In comparison, the USA had 1042 in 2000 and now has 6508 registrations. Vietnam has currently 830 companies, which is also a massive increase from the nine companies in 2000, but the growth rate in recent years has stagnated. In 2012 there were 775 and in 2013, 903 registrations. This means that there has been a much more concerted effort in China to

receive certification for most of its companies. Lozanoa and Vallés (2007) found that environmental management systems are common in private firms but there are regional differences with almost half of the companies (45 percent) located in the rich provinces of the east of China while very few in northern regions.

Different scholars have suggested a number of reasons for China's strong interest in the voluntary scheme. McGuire (2014) argues that the primary motivation was customer demand for better environmental standards. Naturally, ISO registration can increase the perception that companies are green and thus enable the companies to fulfill standards set by Western countries. As such, companies' motivation is driven by international market demand (Zeng et al. 2005) and the goal is to increase international trade (Christmann and Taylor 2001; Yin and Ma 2009). Registration promises companies with a competitive advantage toward other companies (Fan 2006). As the emphasis on environmental management increased, there was a growing sense of environmental awareness about the need to reduce environmental impacts (Ibid.). As a consequence, some companies also became interested in improving their environmental performance (Fryxell et al. 2004). Potential benefits are cost savings, improved regulatory compliance, reduced resource use and updated procedures, and better infrastructure and diffusion effects (Cushing et al. 2006). However, larger companies are more likely able to pay for the registration while smaller enterprises, which account for 99 percent of all businesses in China and which are responsible for more than 50 percent of pollution, are less likely to adopt ISO registration. Similarly, older and less profitable state-owned enterprises lack sufficient financial resources for building effective environmental management systems (Cushing et al. 2006). It is thus not surprising that size, export status, and the potential for environmental protection costs were important indicators whether companies had registered (McGuire 2014).

While registration is generally supposed to be a voluntary process, in China adoption is heavily influenced by the government at all levels. In 1997, five government ministries established the Steering Committee for Environmental Management System Certification (CSCEC) (Fan 2006). Ministries as well as local environmental development boards are conducting the registrations. Often, the quality management stan-

dard is combined with environmental management in dual registrations (Cushing et al. 2006). In addition, He et al. (2015) also point out that the adoption of the standard is not necessarily always voluntary. Instead, because it has become part of official policy and as a consequence of pressure from local governments, registration has become almost a requirement for many companies. This raises the possibility that China's success in promoting the environmental standard could suffer similar implementation problems as other measures, in particular since compliance of registered companies is not monitored and enforced by any external organization. For this reason, companies are likely to implement the standard very differently. There is a lack of quantitative data to test whether ISO 14001 has had a positive effect on the environment although some case studies have shown success. Those cases, however, were in advanced industrial zones in Suzhou and Dalian, which does not allow for any generalization (Cushing et al. 2006). Even more problematic is that the incentive to implement the standard is lowered by the fact that overall there has not been an improvement to the financial situation of companies. If the costs were included in the calculation, He et al. (2015) came to the sober conclusion that there were only insignificant financial gains. The reason for implementation thus is rather "relief from coercive environmental inspections by the government" (p. 55). In other words, companies with ISO 14001 registration have to worry less about government interference in the company's operation.

The case of China suggests that Vietnam could become another great market for environmental technologies if it follows a similar approach. This is likely to happen as the country becomes increasingly integrated into the international market, which will be shown in the next section. Coming from an overall low level, a great demand for technologies could soon emerge. The growing interest in voluntary and market-based mechanisms, as was shown in Chap. 6, is likely to proceed further and at least to some extent compensate for the weak top-down implementation capacity of the state. As in China, however, these approaches are unlikely to have a meaningful effect on the deterioration of the environment. To be effective, market-based mechanisms also need a strong institutional framework. Small steps in advanced industrial zones is the right step forward but in order to achieve a fundamental transformation toward

sustainability, the institutional development, including an effective legal system, and a vibrant civil society are essential for lasting progress in this area. In part, this may be spurred by international commitments which will be discussed in the following sections.

International Dimension

Although environmental problems are driven by the increasing international integration of markets and commodification of natural resources, which place heavy constraints on prices and lead to a "race to the bottom," globalization has also brought some benefits (Ren and Shou 2013). As mentioned in the chapter on the role of international organizations, donor money is heavily involved in improving the natural environment, although there is the risk that aid supplants local efforts and becomes unsustainable. This, however, can be overcome if donors seek local support and only finance projects which are sufficiently backed by government resources. Moreover, international treaties create incentives for the Vietnamese government to comply and develop the necessary laws and institutions. For this reason, it is possible to conclude that the international integration overall is a positive development that should be deepened further.

International integration is particularly beneficial if it is coupled with demands for more stringent environmental protection. Western countries and Japan have increasingly moved to tie developmental assistance with requirements for environmental protection. Organizations such as the World Bank and the Asian Development Bank, for instance, seek enhancement in the process of Environmental Impact Assessment process. Even if the extent of the environmental aspects can be questioned, it is still an improvement over the lack of any such requirements.

International politics provides an important incentive for Vietnam to improve its governance. These stem from the fact that the country is facing increasing tensions with China over territorial disputes in Vietnam's East Sea, internationally known as the South China Sea. The tensions date back many centuries when the northern part of Vietnam was under Chinese control from 111 BC until 938 AD, for a period of about a

thousand years. During this time, Confucianism as well as the use of Chinese characters slowly spread to Vietnam as the country changed from a matriarchal to a patriarchal society (Nguyen NH 1998). This legacy makes Vietnamese leaders constantly wary of the intention of China, which is increasingly showing willingness to re-exert control over lost imperial territory. The most recent conflict dates back to a bloody border war in 1979. Up to 50,000 people died as a consequence of the Chinese invasion that was supposed to teach Vietnam a "lesson" in retaliation for the invasion of Cambodia (Stout 2014).

As a consequence of the rising tensions, Vietnam's leaders have carefully started to seek greater cooperation with other countries in Asia and beyond. For instance, Japanese organizations are increasingly playing an important role in Vietnam where they are among other things involved in promoting environmental issues. One benefit of Vietnam's shift away from China could be greater environmental protection because for instance Japanese development assistance has a much better environmental record in addition to labor safety, technology, and cost effectiveness (Trung and Vu 2015). In addition, there has even been a significant shift in the relationship with the USA, which despite the bloody decade-long Vietnam War has greatly improved in recent years. This culminated in the visit of the US President Barack Obama in 2016 during which he declared an end to the arms embargo and promised closer military cooperation. Obviously, having the support of the superpower would be of great advantage in the dispute with China. Vietnam's military capabilities are not comparable to those of China, which has rapidly modernized its force and even started to build aircraft carriers which will soon make it a formidable military force in the region.

A milestone in international integration could be achieved with the TPP which was heavily promoted by the US government and which included Vietnam. Although it was abandoned following the election victory of the US presidential candidate Donald Trump, who had shown great opposition to the treaty during the election campaign, a similar trade agreement might emerge at some point in the future. In any case, the trade agreement had presented a major milestone for the developing nation. According to *Bloomberg*, Vietnam would have been the greatest potential beneficiary because it relies heavily on exports and the treaty

would have removed approximately 18,000 tariffs (Boudreau 2015). In regard to the environment, the treaty also included a full chapter which sought to ensure sustainability. First of all, there was a provision for environmental justice, which would allow citizens to file lawsuits against violations of national law. This could strengthen the current emphasis of the government to improve the legal system, as mentioned in Chap. 3. Eventually, it could trigger demands for a more independent judiciary, a necessary step in the development of an effective environmental state. Moreover, the article stressed the need to protect the ozone layer by providing alternatives for ozone-depleting substances, the need for protection of the marine environment from the pollution of ships, the goal of maintaining biodiversity as well as controlling the possible invasion of alien species, the need for reducing emissions, the sustainable management of fisheries, and the prevention of the illegal trade in wildlife and protected plants. In addition to specific issues, the article also stresses the need for implementing voluntary mechanisms for environmental protection and conducting public participation and consultation in the process. In contrast to the secrecy during the negotiations of the treaty, the article also promoted the need for transparency in the development and implementation of any measures that deal with the environmental issues mentioned. In order to monitor the implementation, an environment committee would have to be set up which includes government representatives of both trade and environmental authorities. The committee would meet biannually and would need to achieve a consensus. In the fifth year after the signing of the agreement, an evaluation of the implementation would also be required. The World Wildlife Fund (WWF) described the agreement as a potential game-changer as "each nation will need to take on ambitious measures to effectively comply with their TPP obligations" (Roberts 2015).

In the case of Vietnam, the TPP elevates the issue of environmental protection from a domestic to a global concern. As the profile of companies in international trade is raised, it would prompt demands to include measures for environmental protection in business decisions (Hoang Phong 2015). For institutional reformers, the treaty would provide additional leverage to exert pressure on recalcitrant interest groups to comply with already existing international environmental agreements and to enhance

sustainable development in production processes. According to Thanh Thao (2015) this constitutes an opportunity for Vietnam to improve the situation by enhancing its cooperation with partner countries. In particular, investments in environmental sectors would be beneficial. Another potentially positive effect of TPP could have been the growing pressure on Vietnam to reform its state-owned enterprises, which, as mentioned in Chap. 6, are among the worst polluters in the country. Greater reliance on market pressures could entail the need to become more environmentally sustainable.

However despite the potential for progress in Vietnam, many environmental groups in the West had criticized the trade agreement for the weaknesses in the mechanisms that are mentioned in the treaty. For instance, the head of the Sierra Club, a prominent environmental nongovernmental organization in the USA, asserted that "the Trans-Pacific Partnership threatens our families, our communities, and our environment" (cited in Solomon 2015). Aside of the fact that the agreement was negotiated in secret and did not include any input from environmental organizations, the most common complaint was the lack of any reference to climate change, even though this has become the most prominent environmental issue in recent years, particularly for Vietnam. The provisions for enforcement had also been criticized for being ineffective. The need for consensus between the different parties raised the possibility of inaction in the case of disagreements. Moreover, the treaty did not specify any strong penalties for violations and thus risked becoming similar to previous trade agreements which only paid lip service to environmental protection. Last but not least, some critics had even raised concern about the possibility that the treaty could be used to undermine strong environmental regulations in advanced countries through the use of trade tribunals rather than strengthening the environmental protection mechanisms in weaker states such as Vietnam (Brune 2016; Volcovici 2016).

Finally, the treaty was of course primarily a trade pact and not an environmental agreement, which severely limited its possibilities for environmental protection. The sections related to the environment were only relevant when it involved any form of trade. Moreover, while environmental protection would have become an important consideration in trade, increased trade would likely worsen the overall environment.

For instance, the relocation of many firms from China and elsewhere to Vietnam, which would bring economic benefits to the country, would also lead to greater pressure on the natural environment. The increase of industrial activity in the country would likely further strain the natural resources and result in environmental degradation. New industrial zones would have to be built and new highways would have to be constructed. Still, the TPP constituted a potential improvement for Vietnam and the environment. While environmental treaties have achieved very little in the past, for the first time there would have been actual international pressure on the Vietnamese government to enforce its environmental obligations (Vincent 2014).

Even in the absence of TPP, the growing integration of Vietnam in international organizations is likely to have a positive effect on the institutional reform process of the environmental state. Naturally, this requires that the country makes significant institutional changes that it has so far largely resisted. As sovereignty is still the dominant concern, international organizations can only assist. Moreover, they should never replace local efforts and instead help Vietnam develop and improve the environmental state. Whether Vietnam will comply with international agreements, moreover, depends not just on determination but also on state capacity. This requires significant reforms of the whole environmental state and even the political system.

Final Thoughts

Institutional reformers have achieved much in Vietnam but much more must be done to develop an effective environmental state which can cope with the growing environmental crisis. This chapter has demonstrated that even without a fundamental transformation of the political regime, there is some room for incremental improvements in the future. The constant institutional reform process, which is mirrored in China, improves the legal framework and creates increasingly effective governmental institutions. Although dominant political actors within the state still prefer top-down processes, the reformers have not promoted the idea of an environmental dictatorship, which is not a realistic alternative, and instead

sought to enhance the mechanisms of governance be it through improving the capacity of the central as well as local governments, increasing the influence of society or enhancing the role of businesses through market-based approaches.

Each of the dimensions of governance has shown some progress over the years. The current one-party state with its limits on the rule of law, however, severely limits the institutional reform process of environmental institutions. The environmental state can, for instance, not resolve the interest conflicts between economic development and environmental protection. The lack of effective, fair, and transparent conflict resolution mechanisms means that social concerns such as the environment are likely to suffer. As economic growth is of primary concern for the performance legitimacy of the regime, it will continue to dominate the agenda of policy-makers. Economic interest groups are extremely powerful and in control of the most important institutions in government, which is particularly the case in regard to state-owned enterprises.

Despite the limits of authoritarian rule, the role of civil society has increased over the years. Both loosely organized social networks and formal non-governmental organizations are able to exert greater influence on decision-makers. This ranges from direct policy advice to protest movements which pressure local authorities to enforce environmental regulations or abandon developmental projects. However, the case of China reinforces the fact that one-party states are generally suspicious to uncontrolled and uncontrollable activism. As this book was in its final stages, Vietnamese officials decided to suppress environmental activism that erupted following massive fish deaths that were widely blamed on a Taiwanese steel producer. When a company representative stated that Vietnamese need to choose between a clean environment and foreign investments, it angered many people who responded on social media. Even though he was eventually removed from his position, protests erupted throughout the country, which were not reported in the media. In addition, a number of activists were arrested. The fact that it triggered a nation-wide movement likely worried political leaders aware of the potency of activism against regimes governed by a small elite.

While social activism is likely to remain contained, Vietnamese reformers could and perhaps should push for enhancing the market-based

mechanisms. Especially the use of voluntary incentives has shown promise of making headway in this difficult policy field. The Chinese situation demonstrates that the interest in the environment among companies can be enhanced, which is reflected in the fact that the market for environmental technologies is much stronger with many companies investing in environmental management systems. At the same time, however, it is still unclear to what extent this has led to a qualitative change in terms of the environmental pollution because superficial compliance with the requirements of certificates may not lead to actual improvements in the company's behavior. Companies may well install environmental technologies but then not operate them due to the high costs of operation. This means that voluntary schemes cannot supplant a weak administrative state as effective monitoring is necessary to ensure compliance.

Finally, this book suggests that Vietnam's growing international integration can give reformers the opportunity to exert pressure on the rest of the state, particularly in regard to additional institutional reforms to improve the implementation of environmental rules. On the one hand, international organizations can set requirements which the government needs to fulfill to get additional funding. On the other, the need to adhere to treaties such as the TPP can give reformers additional leeway in their attempts to modify the environmental state. The growing desire to align with Western powers and Japan may trigger attempts to establish an effective and independent rule of law, which would constitute a fundamental reform that Communist regimes have so far dismissed. In contrast to China, Vietnam is not fully rejecting the Western discourse of checks and balances or judicial independence, which creates openings for a more fundamental transformation toward effective environmental governance.

The first steps in this process have already been taken. The courts are set to become much more important for the implementation of environmental law. There is hope that they can play an increasing role in dealing with the worst environmental offenders. Moreover, with the growing prominence of the legal system, there is likely to be growing pressure toward installing the principle of the rule of law. As such, this may be the beginning of more fundamental reforms to the judicial system. At the same time, the environmental law legitimizes the role of civil society, although it does not explicitly use this term. The reference to socio-political organizations in the law as well as the enumeration of the rights and obligations is a major step in the

process toward societal involvement. Vietnamese law has also enshrined the use of market-based mechanisms to deal with the pollution. The continued prominence of state-owned enterprises, which pose a unique challenge to effective policy implementation, is an obstacle, which may provide incentives for further privatization or equitization, as it is known in Vietnam. All of these changes highlight the institutional changes in the evolution of environmental governance. As long as institutional reformers can stay in control of the institutional reform process, they may trigger the more fundamental reforms which are necessary for effective environmental governance.

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