In order to advance sustainable development globally, it is indispensable to change the course and mode of conventional economic growth in the East Asian region, which has enjoyed rapid economic growth but faces environmental challenges. This volume gives attention to the evolution of multilevel environmental governance in the East Asian region, including both Northeast and Southeast Asia. It examines how effective emerging environmental governance and policy has been and addresses the underlying causes of local, national, regional and global environmental challenges. Topical chapters include democratization and its effect on decision-making processes, international environmental aid, economic analysis of carbon reduction policy, regional and global environmental regimes and subsequent new financial mechanisms, and hybrid systems of environmental governance that emphasize the role of the private sector and civil society in contributing to environmental governance.

Special attention is also given to the regional economic and environmental regimes. The volume examines the advantages, challenges and solutions in addressing local, national, regional and global environmental challenges, and in changing the course of economic growth.

Akihisa Mori is an Associate Professor of Global Environmental Economics at Kyoto University, Japan, and the Director and Secretary General of the East Asian Association of Environmental and Resource Economics.

"East Asia is turning into a key region in the world, in terms of both accelerating environmental problems and innovative environmental reform. This very timely and up-to-date volume contains in-depth analyses of the successes and challenges of contemporary environmental governance in various East Asian countries and on multiple topics."

Arthur P. J. Mol, Wageningen University, The Netherlands / Renmin University, China

"The governance of environmental resources, such as local air quality or global climate change, remains a tough policy problem for all levels of governments. In this valuable new book, the authors present a comparative study of various environmental governance regimes in East Asia. It will be extremely useful especially to scholars with an interest in institutional evolution of environmental governance."

Daigee Shaw, Institute of Economics, Academia Sinica, Taipei, Taiwan / President, East Asian Association of Environmental and Resource Economics
Environmental governance for sustainable development: East Asian perspectives

Edited by Akihisa Mori
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Introduction

Sustainable development and environmental governance in East Asia

Akihisa Mori

Economic development and environmental degradation in East Asia

Industrial development is often referred to as a root cause of today’s ecological problems of global and systemic proportions. It is described as “a dynamic process fueled by a combination of (militaristic) values, cheap non-renewable energy, a certain type of (cheap fuel-consuming) technology, and modern institutions” (Finger, 2008: 40). The institution of nation-state also plays a prominent role in the emergence of ecological problems. By acting as a “development machine”, it “mobilizes natural resources and people for the purpose of combined military-industrial development” (ibid: 43).

East Asia, including both Northeast and Southeast Asia, has undergone great industrialization and urbanization during the last decades. The region has enjoyed rapid growth and is about to become the world’s centre of economic growth. The GDP (gross domestic product) share of East Asia has shown an upward trend after a short period of stagnation following the Asian economic crisis of 1997 (Figure I.1). Rapid economic growth has brought a sharp reduction in poverty.

On the other hand, industrialization and urbanization have caused serious environmental degradation. Industrial plants have increased the discharge of untreated air and water pollutants and solid wastes. Increasing energy demands and numbers of automobiles have made air pollution more serious. In the 1990s nine of the world’s 15 cities with the highest
levels of particulate air pollution were located in East Asia. Environmental pollution has caused serious physical, health and biological damage, some of which still remains unrevealed. Agricultural expansion, deforestation and dams have intensified conflicts over land and water, causing drought and flood. Increasing numbers of people protest against industrial development and government-sponsored development projects.

East Asian states have gradually recognized environmental degradation as a bottleneck of economic growth. Their first response was evident in the establishment of state organizations in charge of the environment, and the promulgation of environmental laws and regulations. Their effectiveness was often limited, however: decision-making authority and resources given to these organizations were quite small, while environmental laws and regulations were often “imported” from Western countries and did not reflect local conditions. State organizations had no choice but to address a limited number of serious environmental problems that were highlighted by fierce local protests.

This reactive response might be supportive of technological solutions. However, firms adopt such solutions only when they feel strong pressure and as far as they can afford to pay. In addition, it has intrinsic limitations in that it could not address the root cause of the problem. This implies that states should be more active in preventing environmental degrada-
tion, rather than trying to control it and help victims after serious damage has become apparent. In other words, states should change their course and mode of development towards an approach that goes beyond react-and-cure measures.

The challenge here is how to change a course and mode of development that has enabled East Asia to enjoy rapid economic growth, and who should do it. As long as East Asian development states are satisfied with their achievements and captured by business interests, they have no motivation to address the underlying causes of environmental degradation.

Discourse of sustainable development in East Asia

Sustainable development is the most prominent discourse that aims at reconciling economic development with the rising needs of environmental protection. The most famous and quoted definition is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987: 43). In economic terms, this definition is interpreted as future generations being entitled to at least the same level of opportunities and thus economic well-being as is available to present generations: in other words, the assurance of non-declining per capita well-being over time. However, present generations do not know the preferences of future generations, making it difficult actually to measure and compensate the losses that future generations would suffer from an action that benefits the current generation. Instead, non-declining productive capacity, which consists of man-made, human and natural capital, is regarded as an operational goal of sustainable development (Pearce and Barbier, 2000).

This interpretation of sustainable development emphasizes intergenerational equity in the use of environmental services and resources, reflecting predictions of future resource depletion and global environmental crisis. It does not pay sufficient attention to intragenerational or North-South equity.

This shortcoming incurred criticism for the concept of sustainable development. Anand and Sen (2000) argued that environmental sustainability would make little sense if the life opportunities that are to be “sustained” in the future are miserable and indigent, thus locked into eternal poverty. They insist on interpreting “the ability of future generations to meet their own needs” in terms of not only overall living standards but also equity, which demands specification on particular entitlements.
This criticism fuelled arguments over the relationship between economic growth and the environment. Shafik (1994) and Grossman and Krueger (1995) show the so-called environmental Kuznets curve (EKC) hypothesis that insists environmental pollution and degradation worsen in the early stages of economic growth but slow down as the economy grows beyond a certain income level. Arguments over the EKC hypothesis have clarified the factors that incite developing nations to improve their environment amid economic growth: an increase in consumers’ marginal utility for environmental improvement and an accompanying rise in expenditure on pollution prevention and eco-friendly products; policy changes, especially strengthening environmental policies and elimination of policies escalating environmental degradation; increased environmental efficiency of firms through improvements in environmental management as well as technological innovation and advancement; a decline in the share of the secondary sector exerting great stress on the environment as a result of changes in the industrial structure; and international industrial relocation (de Bruyn and Heintz, 1999). This argument also suggests that developing nations can enjoy the “advantages of backwardness” in environmental management because they can adopt production methods with lower emission and/or resource intensity that were developed by industrialized nations; implement environmental policies based on scientific knowledge on environmental pollution and damage; and promote industrial sites leading to low emission intensity in the early stages of economic development (O’Conner, 1994). This implies that developing nations can avoid the serious environmental deterioration and pollution industrialized nations have experienced and “tunnel through” the EKC (Munasinghe, 1999).

Even when an EKC relationship holds true, however, the turning point on the curve often proves to be too high for most developing nations to improve the environment. In addition, an EKC relationship does not ensure the equity and entitlements that are needed to get out of the poverty-environmental trap. In contrast, a number of cases indicate that ensuring entitlements empowers the poor to get out of poverty and protect the environment (Broad, 1994; Martinez-Alier, 1995). This has some serious implications for East Asia, where a large number of people are poor, resource-dependent and endowed with few entitlements. Specific policies are required to reduce environmental degradation in poor nations and regions.

New understanding of poverty opens the door to pro-poor environment policies. Bass et al. (2005: 11) list eight aspects that are commonly considered as poverty: inadequate and often unstable income; inadequate, unstable or risky asset base; poor-quality and often insecure, hazardous and overcrowded housing; inadequate provision of “public” infrastruc-
tured; inadequate provision of basic services; limited or no safety net to mitigate risks; inadequate protection of poorer groups’ rights through the operation of the law; and poor groups’ lack of a voice and powerlessness within political systems and bureaucratic structures. These aspects point to the importance of ensuring primary means to protect access to natural resources and guarantee freedom from environmental hazards. This requires empowerment and opportunity of poorer groups to claim and protect their rights, solve problems independently and negotiate cooperation with outside agencies (UNDP Thailand, 2003).

However, the state has little, if any, incentive to foster this empowerment, for it requires political change that has significant implications for vested interests. In most low-income and many middle-income nations, most potential for economic growth is linked to exploitation of natural resources. Decisions over such exploitation are made politically, without taking poverty reduction or environmental management into account. The state limits the power and scope for local governments and communities to control any activities that it regards as national interest, which more often than not reflects concerns of middle- and upper-income groups. Globalization has increased opportunities for this exploitation as a means of earning foreign exchange (Bass et al., 2005).

Green growth turns up as a more acceptable and pragmatic understanding of sustainable development in low-income and emerging nations in East Asia. It is advocated by the Republic of Korea, was adopted at the Ministerial Conference on Environment and Development in Seoul and became part of the UN Economic and Social Commission for Asia and the Pacific’s Regional Implementation Plan for Sustainable Development 2006–2010. Green growth is recognized as an improvement of ecological quality of growth that simultaneously realizes economic expansion, improvement of welfare, poverty reduction and environmental protection, and emphasizes eco-efficiency of consumption as well as production (Chung, 2010). It proposes eco-tax reform, sustainable infrastructure development, greening of business and sustainable consumption as key pillars (UN ESCAP, 2008).

Even if policy instruments of green growth are acceptable, however, individual states do not adopt them without ensuring their effectiveness and sufficient national capacity. Underlying structural problems, compatibility with existing policy style and structure, and political feasibility of the specific policy instruments significantly affect their adoption (Tews, Busch and Jörgens, 2003).

This argument makes us focus on how environmental governance is supplied, as well as to what extent a specific environmental policy instrument or programme has environmental, economic and social impacts.
Policy instruments, governing process and governance

Even if East Asian nations are willing to adopt the concept of green growth and policy instruments, they are not likely to implement and enforce them seriously unless the use of these instruments is accompanied by changes in higher-order principles: in other words, change in policy goals; change in policy paradigm or the hierarchy of policy goals; and change in the role of the state (Eckersley, 2004).

This implies that changing the course of development requires more than learning and “import” of standards, regulations, policy instruments and technological solutions, as most East Asian states have often done in the past: it requires stronger political will in changing policy goals, policy paradigms and the role of the state.

However, states do not usually have any significant motivation to reorder the hierarchy of economic and environmental policy goals. The source of normative-cognitive innovation is more typically found in local, national and transnational environmental organizations and other advocacy coalitions, policy professionals and scientists, universities and think-tanks, local networks and communities, progressive business, and international organizations and multilateral arrangements (Eckersley, 2004).

Here, governing process and political will play a critical role in delivering the normative-cognitive innovation that occurs outside of the state, and having it incorporated into policy goals and instruments. It includes such procedural instruments as policy-making rules and assessment processes, as well as organizational structures. This innovation is more likely to lead to the desired policy outcomes where participative capacity, defined as the openness of the input structures of the political process, is enhanced. This relates to constitutional support for political representation of environmental interests, and access to information, participation and justice (Petkova et al., 2002). The governing process is affected by problematic characteristics, however, for it easily becomes a power struggle and bargaining process between entrenched interests and isolated decision-making rather than joint problem-solving (Nilsson and Persson, 2003). If a problem causes social conflict, the political will to control the outcomes becomes stronger.

But political will is also influenced by domestic and international political pressure, balance in parliament and public opinion. This leads to government failures: slow, ill-functioning and ineffective problem-solving. Worse, government can become a part of the problem rather than a part of the solution.

Here the idea of governance without the state is becoming a significant option in thinking about the challenges for sustainable development.
(Delmas and Young, 2009). Governance is defined as a social function centred on efforts to steer societies or human groups away from collectively undesirable outcomes and towards socially desirable outcomes (Young, 1999). The concept has become increasingly important since the end of the Cold War in the late 1980s, when many governments did a poor job in meeting the demand for governance while organizations other than governments emerged as important players to meet this demand (Delmas and Young, 2009). It is different from the transformation in the role and functions of the liberal capitalist state; rather, it allows private corporations and civil society to play a major role in providing governance for sustainable development.

Increasing demand for environmental governance in East Asia

*Rise and fall of development of authoritarian regimes*

In East Asia, authoritarian or sometimes dictatorial regimes have been dominant. After independence several nations faced violent revolutions and/or *coup d’état* under the Cold War, which caused civil wars that often brought international intervention. To survive at the front of the Cold War, East Asian nations intensively mobilized resources and people to obtain economic power. They placed high priority on the interests of the nation in seeking rapid industrialization, at the expense of respect for individuals, families, local communities or ethnicity (Suehiro, 1998). They also concentrated military and economic power in the state and/or president, adopting a repressive regime. The United States supported these regimes to suppress violent revolutions and curb the spread of communism. These political conditions enabled East Asian nations to prioritize economic growth and give legitimacy to the development of dictatorship.

To keep legitimacy within the nation and divert people’s attention away from the suppression of freedom, authoritarian states became development-oriented and implemented policies to show good economic performance. They established central agencies in charge of economic development and planning, proposed policies to set a direction of industrialization, ensured macroeconomic stability by managing prudent financial policy and foreign exchange systems, and intervened directly in labour-management relations. At the same time they initiated public projects to develop infrastructure in both rural and urban areas by, for example, fixing levees and providing irrigation, water, sewerage systems, roads and public housing in order to distribute the fruits of economic growth
to people in a visible manner. Moreover, they developed industrial complexes and invested in economic infrastructure including railways, ports, roads and power plants linked to the complexes as a means of reducing regional gaps.

But the state has often disregarded the adverse environmental implications of these public projects. Authoritarian states kept people voiceless and placed pressure on the court when victims of environmental hazards brought a case. They have no incentive to cancel public projects on the grounds that they are deemed harmful to the environment and/or local communities.

The external debt crisis in the 1980s triggered a shift from a state-planned import substitution strategy towards export-oriented industrialization. To increase the competitiveness of domestic goods relative to imports, they devalued national currencies, adopted market-promoting policies and institutional reforms that encouraged firms to compete in the international market, and used direct and indirect policies to stimulate selected industries (World Bank, 1993; Stiglitz, 1996). These policy measures brought rapid growth in labour- and resource-intensive industries, in which East Asia has had comparative advantages. East Asian nations also offered preferential measures to attract foreign direct investment (FDI), which accelerated export growth and increased per capita income and political power of industries and business associations.

This export-oriented growth has weakened state control of the economy. Massive foreign investment flow has made it difficult for the state to intervene in financial markets to allocate financial resources to strategic sectors. The state has become more dependent on fiscal revenue to develop economic infrastructure, which limited the wider distribution of the fruits of economic growth. Preferential treatment offered to FDI reduced the tax revenue the state would gain to spend on the environment and the social sector (Mori, 1997). Weakened control disabled the state in properly managing the widening disparity among regions and industrial sectors, and the worsening domestic environment eventually had trans-boundary and global implications.

Emergence of multiple actors that supply environmental governance

There were a number of reasons for states to give up their monopolistic supply of environmental governance. First and foremost, democratization fostered growing public concern for the environment. Under authoritarian regimes there were growing numbers of protests against polluters and development projects. However, most of them were unorganized and their safety was not secured, making it difficult to gain wider support.
Democratization provided the legal basis to organize protests and movements, share information and knowledge, and participate in the state-led decision-making process, directly or through elections, thus enabling people to articulate potential complaints and launch protests. This pushed the state towards creating tougher environmental regulatory institutions and measures.

However, democratization is not a panacea. The state implements stringent environmental policies as far as these policies do not harm business interests under a democratic regime. In Thailand a combination of non-democratic politics, weak interest groups and rent-seeking feudalization of sectoral agencies by powerful elites in the bureaucratic polity was sufficient to thwart the development of effective public sector industrial pollution management programmes (Rock, 2002). Democratic governments tend to increase funding to constituencies, thus initiating environmentally destructive projects and leading to serious fiscal deficit that may destabilize macroeconomic policy and cut environmental expenditure.

Second, international contexts have increasingly exerted influence on various actors. East Asian firms’ increase in exports and international financing demands better environmental behaviour even without stringent domestic regulations. International aid has supported capacity development not only in state institutions and policy but also in local governments, civil society and communities. Multilateral environmental conferences and agreements have raised states’ concern on environmental matters and pushed them to implement domestic measures. International non-governmental organizations (NGOs) have played an active role in sharing knowledge and policy that have had proven effects in other countries with their counterparts in East Asia, which has pushed their empowerment.

However, international influence also has pitfalls. Increasing reliance on international trade and investment has led East Asian nations on a path towards “misery growth”. The current export-oriented growth strategy triggered a flow of value added from manufacturing nations to nations of final consumption, such as in North America and Europe (Watanabe, Fujikawa and Shimoda, 2009), and increased inclusive carbon emissions and water consumption to satisfy the demand for goods and services at the sites of final consumption (Shimoda et al., 2009). Environmental conditionality in multilateral aid has often brought about forced relocation of poor farmers in the name of environmental protection, or encouraged states to deprive local communities of traditional entitlements, bringing in agro-industrial plantations that may have detrimental effects on the environment.

Third, private corporations and civil society appear as effective suppliers of environmental governance. However, they can deliver their
share effectively only in certain circumstances. As a consequence, hybrid systems emerge in which diverse actors seek to form coalitions that cut across different approaches to governance to meet the growing demand for governance (Delmas and Young, 2009).

About this book

A number of studies have conducted comparative analyses of environmental politics and governance in East Asia, not to mention the various studies of particular nations. For example, Rock (2002) conducted a comparative analysis on politics over pollution control, while Adeel and Nakamoto (2003) analysed specific environmental issues. Recent publications have paid more attention to regional environmental governance in East Asia (Harris; 2002; Campbell, 2005; Nguitragool, 2011). In addition, there is various research that scrutinizes national responses to emerging multinational environmental governance regimes, especially global climate governance, as seen in Zhang (2011) and Mori and Hayashi (2012), though their focus was exclusively placed on China.

In the process of rising interdependency within the region, as well as in the world, multiple actors – state, private sector and civil society at global, regional, national and local levels – are intertwined to contribute to a large amount of environmental governance even within a nation. In addition, the main players have changed over time. The state has reduced its share, while the private sector and civil society emerged as significant actors. International donors deliver a smaller share, while developing nations, the private sector and civil society have enhanced their capacity and role in global climate governance.

The emergence of multilevel environmental governance in East Asia raises a set of questions.

- What is the evolution of environmental governance in the region?
- How effectively has emerging environmental governance addressed local, regional and global environmental problems?
- To what extent can evolution of environmental governance push states to change the prevailing course or mode of development?

Despite the increasing number and diversity of actors in environmental governance, this volume focuses mostly on the state for two reasons. The state still commands a dominant position in decision-making and choice of policy instruments in East Asia. It will pursue economic growth as the most effective way of keeping legitimacy within the nation. Without changing this policy paradigm, emerging governance regimes cannot effectively address the root cause of problems.
To date, we have too little knowledge to answer these questions for all East Asian nations. Instead, we focus on the process and effectiveness of specific policy instruments and environmental programmes that address or can address national, regional and global environmental problems. We employ a mixture of economic and political analysis: most of the chapters make an economic analysis to show how effective a specific policy instrument or an environmental programme is or will be in problem-solving, while some evaluate processes towards good environmental governance.

Part I of this book contains a chapter by Akihisa Mori, who seeks to provide the analytical perspective for the chapters to come. He provides an overview that covers the evolution of environmental governance in East Asia and key actors involved in the process.

Three chapters in Part II focus on domestic pressures that have or have not changed the governing process for the environment. Chapters 2 and 3 examine impacts of democratization on the governing process of environmental decision-making. In Chapter 2 Hoi Seong Jeong and Tae-wook Huh show how the Republic of Korea comes to make use of a participatory approach to environmental governance and what this approach has achieved under the Kim Dae-Jung and Noh Muhyong governments. Akihisa Mori in Chapter 3 examines what political liberalization and democratic institutions established with the 1992 democratization in Thailand have done to enhance institutional and social capacity for sustainable development. In Chapter 4 Shin’ya Koyama pays attention to the fiscal crisis and the revision of assessment method that followed in Japan. A fiscal crisis can be a good reason for any nation to change the current course of infrastructure development. In Japan the state attempted to do it by revising the manual on cost-benefit analysis for road projects to take environmental benefits and costs into consideration in a more comprehensive way. Koyama shows how this revision has affected the decision-making process for road development projects.

The final chapter in Part II takes on the domestic response to the global environmental regime. Due to a visible distributional impact, carbon-energy taxation is one of the last policy instruments for the state to implement. Yoshihisa Inada and Mitsuru Shimoda in Chapter 5 conduct a simulation analysis to show that it has marginal distributional impacts.

Three chapters, making up Part III, focus on international financial mechanisms for pro-poor environmental programmes. These programmes are expected to empower communities and/or poor farmers in sustainable use of the environment and natural resources, as well as local sustainable development. In Chapter 6 Chen Li-Chun examines international donors’ “innovative” programmes for community-based wildlife protec-
Mori tion in rural China. He emphasizes the importance of community rules on resource use when international donors address the trade-off between environmental protection and rural poverty. Akiko Furuya and Akihisa Mori follow in Chapter 7, with a special focus on NGO-assisted pro-poor environmental programmes in Cambodia, which are often said to have advantages in terms of achieving good results in community-based projects. Drawing on a beneficiary household survey, they show that it is not only the donor but also the approach that matters in enhancing a sense of ownership among beneficiaries. Takasei Kusube and Yoshihisa Inada in Chapter 8 shed light on a CDM (Clean Development Mechanism) project to provide insights into the conditions under which a methane recovery CDM project can be both pro-poor and pro-environment in rural China.

Part IV consists of four chapters that pay particular attention to regional governance, which emerged in response to increased economic and environmental interdependence. The first two chapters provide insights into how regional economic interdependence affects the environment. In Chapter 9 Akihisa Mori shows that, unlike Europe, increasing economic interdependence has not opened the door for regional economic integration in East Asia; rather, the Republic of Korea and China have implemented trade and investment policies that increase their international competitiveness. This leads to several different options for trade liberalization in terms of participating nations, timeframe and range and extent of liberalization. Against this background, in Chapter 10 Kazuki Taketoshi analyses different options of free trade agreements to show the most preferable in terms of GDP and carbon emissions reduction.

The subsequent two chapters focus on regional environmental approaches, which may bring better performance in solving regional and global environmental problems. The regional environmental approach may generate co-benefits of improving local pollution and income generation if it is well designed, coordinated and implemented effectively. In Chapter 11 Hikari Ban and Kiyoshi Fujikawa show that a regional carbon market enables East Asian nations as a whole to gain economic benefits from carbon emissions reduction, albeit at the cost of China’s inefficient energy consumption sector. Nevertheless, Akihisa Mori in Chapter 12 shows that besides the rivalry in regional initiatives and frameworks, a stronger sense of national sovereignty and distrust among neighbouring nations, different understanding of the underlying cause of the problems among concerned nations has significantly made it difficult for the region to address environmental problems that have regional implications.

The chapters in Part V focus on the role of the private sector and civil society. In Chapter 13 Seonghee Kim and Akihisa Mori investigate why the energy efficiency standards and labelling programme, which has been
promoted by governments, has not yet worked effectively despite its environmental and economic benefits. Ying Sun et al. in Chapter 14, on the other hand, show how drivers and barriers for green supply-chain management in Japanese and Chinese firms play a significant role in reducing environmental impacts in the whole product life cycle while keeping profits intact. In Chapter 15 Tadashi Hayashi looks at civil society to show the conditions under which its transnational network affects the process and policy contents in developing nations in East Asia.

In the final chapter we bring the various contributions together to discuss the current situation and present future perspectives on environmental governance for sustainable development in East Asia.

Note

1. Dasgupta (2007) adds science and technological knowledge and institutions as a resource allocation mechanism to the components of productive capacity.

REFERENCES


UN ESCAP (2008) Greening Growth in Asia and the Pacific, Bangkok: ESCAP.
In order to advance sustainable development globally, it is indispensable to change the course and mode of conventional economic growth in East Asia, which has enjoyed rapid economic growth but faces environmental challenges.

This volume gives attention to the evolution of multilevel environmental governance in East Asia, including both Northeast and Southeast Asia. It examines how effective emerging environmental governance and policy have been and addresses the underlying causes of local, national, regional and global environmental challenges. Topical chapters include democratization and its effect on decision-making processes, international environmental aid, economic analysis of carbon reduction policy, regional and global environmental regimes and subsequent new financial mechanisms, as well as hybrid systems of environmental governance that emphasize the role of the private sector and civil society in contributing to environmental governance.

Special attention is also given to the regional economic and environmental regimes. The volume examines the advantages, challenges and solutions in addressing local, national, regional and global environmental challenges, and in changing the course of economic growth.

"East Asia is turning into a key region in the world, in terms of both accelerating environmental problems and innovative environmental reform. This very timely and up-to-date volume contains in-depth analyses of the successes and challenges of contemporary environmental governance in various East Asian countries and on multiple topics."

—Arthur P. J. Mol, Wageningen University, The Netherlands / Renmin University, China

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