The Environmental Cost of Asia’s Growth
By Simon SC Tay and Gavin Chua Hearn Yuit

The rise of Asia portends much for the world, and not just for the prevailing economic order. Asia’s growth will almost certainly be accompanied by a massive rise in urbanization, a growing consumer class, and intensified resource use.

ENERGY DEMAND, for example, is expected to double in the region over the next 20 years. This is already impacting world markets. If Asians blindly follow the development model of the West, rather than take a more sustainable path, the scale of China and India’s growth alone will adversely affect the global environment.

Evidence that sustainable development will prevail in Asia is, at best, mixed. Positive signs include interesting experiments with renewable energy and other sustainable practices at the local and municipal level in several countries, including China. There have also been public statements in favor of protecting the environment. In China, for example, Premier Wen Jiabao’s 2005 Government Work Report included environmental protection as a primary policy objective, seemingly in response to major ecological disasters that have adversely affected the nation’s people and provoked social unrest. In January this year, Wen stunned many observers with the uncommonly frank admission that targets for environmental protection in the 10th Five-Year Plan were not met.

Despite these signs, examples of environmental degradation and disaster abound. Indeed, some fear that in many Asian countries, the importance given to environmental protection has even slipped in the past decade. Cities struggle to provide such basics as clean air and water to their growing number of residents. In addition, many cross-border environmental problems remain unresolved, such as the forest fires and resulting smoke haze from Indonesia that periodically blanketed Southeast Asia for more than a decade.

Why the failure to tackle these environmental problems? One key reason is a lack of political will and focus. Despite rhetoric about sustainable development, many in the region still view the relationship between economic development, social concerns and environmental protection as fundamentally antagonistic. Even where there are solid efforts to strengthen environmental protection, they are often localized and limited in scale.

Another important factor is that Asia lacks a multilateral institution to direct attention to the region’s ecological interdependence. Regionalization in terms of trade agreements, security issues and high-level discussions among political leaders has resulted in numerous multilateral dialogues, such as the recent East Asian Summit in Kuala Lumpur at the end of 2005. Yet, the environment has largely been absent as an issue in efforts to deepen Asian integration.

It is therefore welcome that environmental issues in Asia are receiving renewed interest from experts and academics, both within and...
The rise of Asia portends much for the world, and not just for the prevailing economic order. Asia’s growth will almost certainly be accompanied by a massive rise in urbanization, a growing consumer class, and intensified resource use.

ENERGY DEMAND, for example, is expected to double in the region over the next 20 years. This is already impacting world markets. If Asians blindly follow the development model of the West, rather than take a more sustainable path, the scale of China and India’s growth alone will adversely affect the global environment.

Evidence that sustainable development will prevail in Asia is, at best, mixed. Positive signs include interesting experiments with renewable energy and other sustainable practices at the local and municipal level in several countries, including China. There have also been public statements in favor of protecting the environment. In China, for example, Premier Wen Jiabao’s 2005 Government Work Report included environmental protection as a primary policy objective, seemingly in response to major ecological disasters that have adversely affected the nation’s people and provoked social unrest. In January this year, Wen stunned many observers with the uncommonly frank admission that targets for environmental protection in the 10th Five-Year Plan were not met.

Despite these signs, examples of environmental degradation and disaster abound. Indeed, some fear that in many Asian countries, the importance given to environmental protection has even slipped in the past decade. Cities struggle to provide such basics as clean air and water to their growing number of residents. In addition, many cross-border environmental problems remain unresolved, such as the forest fires and resulting smoke haze from Indonesia that periodically blanketed Southeast Asia for more than a decade.

Why the failure to tackle these environmental problems? One key reason is a lack of political will and focus. Despite rhetoric about sustainable development, many in the region still view the relationship between economic development, social concerns and environmental protection as fundamentally antagonistic. Even where there are solid efforts to strengthen environmental protection, they are often localized and limited in scale.

Another important factor is that Asia lacks a multilateral institution to direct attention to the region’s ecological interdependence. Regionalization in terms of trade agreements, security issues and high-level discussions among political leaders has resulted in numerous multilateral dialogues, such as the recent East Asian Summit in Kuala Lumpur at the end of 2005. Yet, the environment has largely been absent as an issue in efforts to deepen Asian integration.

It is therefore welcome that environmental issues in Asia are receiving renewed interest from experts and academics, both within and...
Focus on
Conserving Nature in Culture

Conserving Nature in Culture: Case Studies from Southeast Asia, edited by Dove et al, focuses on cultural questions, rather than foreign policy. The volume is divided into four parts, starting with historical and social perspectives on conservation and the failures of both state conservation and local responses. It then considers the role of biodiversity in traditional agricultural systems and the need for regional and global perspectives on the environment. The emphasis is on taking culture into account in addressing sustainability issues. This is especially the case in efforts to balance traditional perspectives and mainstream conservation principles, where solutions are often dictated by a centralized state and guided by inappropriate scientific logic – what the editors term, “scientism.” The tendency to ignore the cultural context, the authors argue, hinders outcomes that actually favor the environment.

In his discussion of the Indonesian province of Kalimantan, Dove, for example, argues that the introduction of intellectual property rights has disempowered indigenous communities by neglecting “the wider, marginalizing, political-economic relationships in which [the resources] are located.” Lye Tuck Po juxtaposes the worldview of indigenous Batek people with state-centric environmental ideology in Malaysia. He argues that indigenous people are crucial to promoting conservation and broadening the concept of environmental stewardship. The same point is illustrated by David Frassard in his account of efforts by a Filipino peasant movement to help farmers regain control over the genetic diversity of rice.

The essays in this volume seek to reframe conservation and environmental issues in an alternative paradigm where biodiversity is not mutually exclusive from cultural diversity. In this way, more attention is given to the ways in which social factors support conservation. Such an approach is supported by recent findings in ecology. As the authors assert, “rainforests require periodic human or natural disturbances to revitalize, maintain or enhance ecosystem structure and function.” This theme recurs in various chapters in the volume, well augmented by a combination of biological and social science methods. Using such multidisciplinary methods serves to address the political dimensions of ecology by including the broader society in the local ecosystem.

Overall, the authors have four findings. First, traditional and indigenous communities in Southeast Asia have an established record of promoting conservation even as they exploit the environment for their own uses. Second, large-scale, state-imposed environmental interventions often fail to achieve conservation aims. Third, contrary to commonly-held beliefs, traditional agricultural landscapes possess high levels of biodiversity. And finally, the local use of resources is affected by social, economic, and political events at the broader, regional level.

A significant contribution of this volume, especially Dove’s work, lies in its combination of biological and social science approaches. This allows us to see ecology not just as an objective science, but as something that is also subject to politics.

A limitation of the book is the inapplicability of its case studies to the growing urban areas of Southeast Asia. An urban and consumer culture has taken root and is spreading, and arguably, the culture in such urban communities will have different environmental attitudes from rural populations. As such, it is not only state actions that place conservation at risk; a tension between the urban and rural and indigenous communities also is growing in Asia.


outside the region. These four volumes provide a window into understanding key issues through different conceptual frameworks and methodologies. The books by Michael R. Dove and Paul G. Harris present a broad overview of the environmental outlook in East and Southeast Asia through national and regional case studies. Kristen A. Day, examining China, and Budy F. Resosudarmo, looking at Indonesia, provide more in-depth country surveys.

The essays in Confronting Environmental Change in East and Southeast Asia seek to “understand how, why and when international environmental cooperation happens, how to foster more of it, and how to implement it most effectively.” The volume is divided into two parts. The first discusses the actors, institutions, and forces shaping environmental diplomacy and foreign policy in East Asia, with an emphasis on China and Japan; the second deals with the relationships between ecological politics, international relations, and sustainable development in a wider context that includes Taiwan, Thailand, Vietnam, Papua New Guinea, and the Mekong River states.

This focus on foreign policy shows how interactions between states and inter-state institutions at a regional and global level can drive state behaviour. It also illuminates how different forces, such as inter-governmental organizations, non-governmental organizations (NGOs), and academic and research institutes can encourage the state to better understand and prioritize environmental issues. The exploration of this connection between environmental issues...
Focus on
Conserving Nature in Culture


The volume, Conserving Nature in Culture, edited by Michael R. Dove et al., focuses on cultural questions, rather than foreign policy. The volume is divided into four parts, starting with historical and social perspectives on conservation and the failures of both state conservation and local responses. It then considers the role of biodiversity in traditional agricultural systems and the need for regional and global perspectives on the environment.

The emphasis is on taking culture into account in addressing sustainability issues. This is especially the case in efforts to balance traditional perspectives and mainstream conservation principles, where solutions are often dictated by a centralized state and guided by inappropriate scientific logic – what the editors term, “scientism.” The tendency to ignore the cultural context, the authors argue, hinders outcomes that actually favor the environment.

In his discussion of the Indonesian province of Kalimantan, Dove, for example, argues that the introduction of intellectual property rights has disempowered indigenous communities by neglecting “the wider, marginalising, political-economic relationships in which [the resources] are located.” Lye Tuck Po juxtaposes the worldview of indigenous Batek people with state-centric environmental ideology in Malaysia. He argues that indigenous people are crucial to promoting conservation and broadening the concept of environmental stewardship. The same point is illustrated by David Frassard in his account of efforts by a Filipino peasant movement to help farmers regain control over the genetic diversity of rice.

The essays in this volume seek to reframe conservation and environmental issues in an alternative paradigm where biodiversity is not mutually exclusive from cultural diversity. In this way, more attention is given to the ways in which social factors support conservation.

Traditional and indigenous communities in Southeast Asia have an established record of promoting conservation even as they exploit the environment for their own uses. First, traditional and indigenous communities in Southeast Asia have an established record of promoting conservation even as they exploit the environment for their own uses. Second, large-scale, state-imposed environmental interventions often fail to achieve conservation aims. Third, contrary to commonly-held beliefs, traditional agricultural landscapes possess high levels of biodiversity. And finally, the local use of resources is affected by social, economic, and political events at the broader, regional level.

A significant contribution of this volume, especially Dove’s work, lies in its combination of biological and social science approaches. This allows us to see ecology not just as an objective science, but as something that is also subject to politics.

A limitation of the book is the inapplicability of its case studies to the growing urban areas of Southeast Asia. An urban and consumer culture has taken root and is spreading, and arguably, the culture in such urban communities will have different environmental attitudes from rural populations. As such, it is not only state actions that place conservation at risk; a tension between the urban and rural and indigenous communities also is growing in Asia.


The essays in Confronting Environmental Change in East and Southeast Asia seek to “understand how, why and when international environmental cooperation happens, how to foster more of it, and how to implement it most effectively.” The volume is divided into two parts. The first discusses the actors, institutions, and forces shaping environmental diplomacy and foreign policy in East Asia, with an emphasis on China and Japan; the second deals with the relationships between ecological politics, international relations, and sustainable development in a wider context that includes Taiwan, Thailand, Vietnam, Papua New Guinea, and the Mekong River states.

This focus on foreign policy shows how interactions between states and inter-state institutions at a regional and global level can drive state behaviour. It also illuminates how different forces, such as inter-governmental organizations, non-governmental organizations (NGOs), and academic and research institutes can encourage the state to better understand and prioritize environmental issues. The exploration of this connection between environmental issues outside the region. These four volumes provide a window into understanding key issues through different conceptual frameworks and methodologies. The books by Michael R. Dove and Paul G. Harris present a broad overview of the environmental outlook in East and Southeast Asia through national and regional case studies. Kristen A. Day, examining China, and Budy F. Resosudarmo, looking at Indonesia, provide more in-depth country surveys.

Overall, the authors have four findings. First, traditional and indigenous communities in Southeast Asia have an established record of promoting conservation even as they exploit the environment for their own uses. Second, large-scale, state-imposed environmental interventions often fail to achieve conservation aims. Third, contrary to commonly-held beliefs, traditional agricultural landscapes possess high levels of biodiversity. And finally, the local use of resources is affected by social, economic, and political events at the broader, regional level.

A significant contribution of this volume, especially Dove’s work, lies in its combination of biological and social science approaches. This allows us to see ecology not just as an objective science, but as something that is also subject to politics.

A limitation of the book is the inapplicability of its case studies to the growing urban areas of Southeast Asia. An urban and consumer culture has taken root and is spreading, and arguably, the culture in such urban communities will have different environmental attitudes from rural populations. As such, it is not only state actions that place conservation at risk; a tension between the urban and rural and indigenous communities also is growing in Asia.

and foreign policy will appeal not only to those already interested in environmental issues, but also to those primarily interested in Asian strategic issues and international relations.

In his contribution, Harris proposes “a matrix of environmental foreign policy” in which state-centric theories are cross-referenced with traditions of international relations based on power, interests, and ideas. Harris argues that combining the various theories according to this matrix would improve policy making analysis by paying greater attention to important variables shaping policies and behaviour. Unfortunately, few of the other essays in the volume demonstrate how such an approach might be pursued.

Instead, most of the chapters provide a basic historical narration or description of specific environmental challenges, or otherwise use simple and singular lenses of analysis that are not always appropriate.

One exception is Hiroshi Ohta’s study of Japan’s foreign policy on global climate change. Using a theoretical framework based on game theory, Ohta concludes that “Japanese public opinion… whole-heartedly supported making an international contribution to arresting global warming.” He argues that this was driven by factors that arose within Japan in the 1990s, including the sense of kokusai (internationalization of policy fervour), coupled with an exuberance driven by the high value of the yen and the “bubble” economy of that period.

Another of the better contributions is that of Philip Scott Jones. He examines how the lessons drawn from his case study can be applied vertically across different localities and at different scales.

The essays in this volume on China go beyond the familiar litany of environmental sins to consider changes in national attitudes. They remain ambivalent, however, about how much progress is being made. Harris suggests that China’s varying positions in negotiations on climate change reveal an overriding concern to protect state sovereignty, acquire foreign aid and assistance, and promote economic development. Yet, he concludes that “there is now a genuine desire… to protect the country’s dwindling natural resources and to reduce ‘natural’ disasters.”

Other contributors are more cautious. Shapiro argues that “environmental measures have not kept pace with rapid economic growth, population pressures and rising consumer expectations” despite a higher priority being given to the environment in China. Yuka Kobayashi reviews China’s environmental diplomacy with the sobering suggestion that “China’s strategy of unifying with the developing world has been pushing it to take a more uncooperative stance...” Lee Ho-Ching explains that China wishes to “engage in a process of [environmental policy-building] participation itself [without] committing to any responsibilities, and promoting broader domestic interests at the same time.” In this regard, one of the important contributions of Confronting Environmental Change is to question the real intentions behind the environmental rhetoric in the region.

One shortcoming of the book, though, is its insufficient discussion on Southeast Asia, despite its title. Just three chapters focus on the region, and of these, two consider environmental issues from a largely national perspective, reviewing Thailand’s position on the Convention on Biological Diversity, and efforts to protect the Vietnam Sea. While useful, these chapters lack the interstate and foreign policy dimensions that characterize the volume as a whole.

Harris and Dove both point to a key feature of Asian environmentalism: it is predominantly addressed in diplomatic and state-centric terms. The heavy hand of the state remains symptomatic of the current institutional challenges that Asia faces. Paradigms that take into account environmental concerns as they are viewed from the ground up (rather than from a top-down approach) are largely marginalized. The case studies in these two volumes help to correct that view. The books by Day on China and Resosudarmo on Indonesia take this approach a step further.

China’s Environment and the Challenge of Sustainable Development is a collection of essays covering issues such as sustainable development, the environmental law regime and other enforcement measures, market solutions in the form of trading emissions, and the role of international organizations in environmental policy-making. China’s environmental record is strongly criticized by Dan Millison for embodying a type of “scarred earth” industrialization, from the Great Leap Forward (1958-60) through the 1990s, with the un-stated principle of, “Get rich first, clean up later.”

In a similar vein, The Politics and Economics of Indonesia’s Natural Resources sees Indonesia’s environmental history starkly in the exploitation of natural resources that occurred under Soeharto’s reign through large-scale extraction activities aimed at generating national revenue and attracting foreign investment. It then explores whether reformasi and decentralization of government power in the post-Soeharto era have promoted better natural resource management.

Both books provide nuanced views of the interaction between central, provincial and local governments. They conclude that more responsibility should be given to local governments for environmental protection and the regulation of resource allocation. Decentralization is not, however, a panacea.

Instead, decentralization brings into play different challenges. A reliance on local governments, the books caution, must be conditioned on the capacity and political will to deal with the problems. These are critical concerns, given the scale and diversity of both countries.

In Indonesia, reformasi and a wave of decentralization have overturned the old order of centralized, top-down management of natural resources.
In Indonesia, reformasi and a wave of decentralization have overturned the old order of centralized, top-down management of natural resources.

and foreign policy will appeal not only to those already interested in environmental issues, but also to those primarily interested in Asian strategic issues and international relations.

In his contribution, Harris proposes a matrix of environmental foreign policy in which state-centric theories are cross-referenced with traditions of international relations based on power, interests, and ideas. Harris argues that combining the various theories according to this matrix would improve policy making analysis by paying greater attention to important variables shaping policies and behaviour. Unfortunately, few of the other essays in the volume demonstrate how such an approach might be pursued.

Instead, most of the chapters provide a basic historical narration or description of specific environmental challenges, or otherwise use simple and singular lenses of analysis that are not always appropriate.

One exception is Hiroshi Ohta’s study of Japan’s foreign policy on global climate change. Using a theoretical framework based on game theory, Ohta concludes that “Japanese public opinion…whole-heartedly supported making an international contribution to arresting global warming.” He argues that this was driven by factors that arose within Japan in the 1980s, including the sense of kokusaika (internationalization of policy fervour), coupled with an exuberance driven by the high value of the yen and the “bubble” economy of that period.

Another of the better contributions is that of Philip Scott Jones. He examines how the principles of conflict management, combined with the notion of sustainable livelihood, are applied at the community level in Papua New Guinea’s Lakekamu Basin. From this, he argues that even foreign policy makers need to recognize the importance of effective implementation of environmental policies and how conflict management can be achieved within a sustainable framework. This, he believes, will allow for a “holistic exploration” of the interactions between physical, social, natural and human capital. He argues that the lessons drawn from his case study can be applied vertically across different localities and at different scales.

The essays in this volume on China go beyond the familiar litany of environmental sins to consider changes in national attitudes. They remain ambivalent, however, about how much progress is being made. Harris suggests that China’s varying positions in negotiations on climate change reveal an overriding concern to protect state sovereignty, acquire foreign aid and assistance, and promote economic development. Yet, he concludes that “there is now a genuine desire…to protect the country’s dwindling natural resources and to reduce ‘natural’ disasters.”

Other contributors are more cautious. Shapiro argues that “environmental measures have not kept pace with rapid economic growth, population pressures and rising consumer expectations” despite a higher priority being given to the environment in China. Yuka Kobayashi reviews China’s environmental diplomacy with the sobering suggestion that “China’s strategy of uniting with the developing world has been pushing it to take a more uncooperative stance…” Lee Ho-Ching explains that China wishes to “engage in a process of [environmental policy-building] participation itself [without] committing to any responsibilities, and promoting broader domestic interests at the same time.” In this regard, one of the important contributions of Confronting Environmental Change is to question the real intentions behind the environmental rhetoric in the region.

One shortcoming of the book, though, is its insufficient discussion on Southeast Asia, despite its title. Just three chapters focus on the region, and of these, two consider environmental issues from a largely national perspective, reviewing Thailand’s position on the Convention on Biological Diversity, and efforts to protect the Vietnam Sea. While useful, these chapters lack the interstate and foreign policy dimensions that characterize the volume as a whole.

Harris and Dove both point to a key feature of Asian environmentalism: it is predominantly addressed in diplomatic and state-centric terms. The heavy hand of the state remains symptomatic of the current institutional challenges that Asia faces. Paradigms that take into account environmental concerns as they are viewed from the ground up (rather than from a top-down approach) are largely marginalized. The case studies in these two volumes help to correct that view. The books by Day on China and Resosudarmo on Indonesia take this approach a step further.

China’s Environment and the Challenge of Sustainable Development is a collection of 10 essays covering issues such as sustainable development, the environmental law regime and other enforcement measures, market solutions in the form of trading emissions, and the role of international organizations in environmental policy-making. China’s environmental record is strongly criticized by Dan Millison for embodying a type of “scoched earth” industrialization, from the Great Leap Forward (1958-60) through the 1990s, with the un-stated principle of, “Get rich first, clean up later.”

In a similar vein, The Politics and Economics of Indonesia’s Natural Resources sees Indonesia’s environmental history starkly in the exploitation of natural resources that occurred under Soeharto’s reign through large-scale extraction activities aimed at generating national revenue and attracting foreign investment. It then explores whether reformasi and decentralization of government power in the post-Soeharto era have promoted better natural resource management.

Both books provide nuanced views of the interaction between central, provincial and local governments. They conclude that more responsibility should be given to local governments for environmental protection and the regulation of resource allocation. Decentralization is not, however, a panacea.

Instead, decentralization brings into play different challenges. A reliance on local governments, the books caution, must be conditioned on the capacity and political will to deal with the problems. These are critical concerns, given the scale and diversity of both countries.

In Indonesia, reformasi and a wave of decentralization have overturned the old order of centralized, top-down management of natural resources. According to Krystof Obidzinski, the large scale frenzy of logging and deforestation associated with the Soeharto era has given way to small-scale forest-harvesting concessions. As a result, new problems have arisen. Existing legal and administrative structures have failed, with local governments drafting and interpreting their own rules, or worse, adopting policies that are even more detrimental to the environment.
The economic and political implications of Asia’s rise, especially the growth of China and India, has been widely discussed but environmental issues have received less attention. Yet the global, regional and local implications are real, and are interconnected.

A similar, but more gradual decentralization of environmental enforcement is taking place in China, as Day’s book describes. Although not faced with the political fractures seen in Indonesia, China is moving from a system of central power to “bureaucratic fragmentation,” and a more convoluted “matrix of authority relationships.” There is also a phenomenon of so-called “green mission creep” among regional agencies, as they use environmental issues to attract greater visibility and resource allocation from the central government.

The importance of local governance for environmental protection was reinforced by China’s recent 11th Five-Year Plan (2006-2010) for National Economic and Social Development. But, as Elizabeth Economy argues, this devolution is hampered by limited manpower and other resources, as well as conflicts of interest between local environmental protection bureaus, and other local officials and state-owned enterprises.

Eric Zusman and Jennifer Turner explain how the shift to local governance has created “extra-bureaucratic scope” for international organizations to offer assistance in policy-making and implementation. This development goes beyond funding, and involves the work of the state and non-state actors.

Coordination and policy coherence is another issue that needs to be addressed in tandem with decentralization, especially in Indonesia. For Isna Marifa, inter-governmental roles in Indonesia remain ill-defined, but provincial agencies can potentially play a role bridging national and local policies. She calls for the establishment of a high-level government agency to pursue “non-sectoral, integrated” environmental policy-making.

Making and enforcing legislation is another key issue for Indonesia. James Fox, Dedi Adhuri, and Ida Resosudarmo paint a bleak picture in which “inadequate” or “ineffective” legislation, such as the first Law on Local Government (Law 22/1999), has “created a diversity of systems of management and mismanagement with no mechanism for supporting one or discouraging the other.”

Not all of the authors are as pessimistic. Jason Patlis cites current and promising initiatives adopted by provincial governments for natural resource management, and cases in which laws have been revised to correct earlier mistakes. Even while enforcement remains a problem, especially at the local level, he says the reformasi era has ushered in “greater information flow, greater public involvement and greater legislative engagement with the executive branch.” In coastal and marine resource management, Ian Dutton believes that new legislative measures and the subsequent establishment of a Ministry of Marine Affairs and Fisheries have “enabled fisheries-related marine issues to be considered in an integrated manner for the first time in the history of Indonesia.”

The environmental law regime in China also has encountered problems in implementation. The main stumbling blocks for both regulatory and non-regulatory communities alike, according to Richard Ferris Jr. and Hongjun Zhang, are the obscure, non-transparent internal protocols and norms of practice within environmental law. Additionally, the authors note that provincial and municipal authorities account for more than 1,000 environmental laws, alongside more than 80 bilateral and multilateral environmental treaty obligations.

Yet, there has been progress. Much of the country’s legislative enforcement efforts are spearheaded by “political will and hard work at the ground level.” The multi-level coordination of central governmental inspections, enforcement by local environmental protection bureaus, and actions by civil society in the domestic and global arena have also improved.

A third critical issue that faces both Indonesia and China is their ability to use market-based responses to environmental challenges, such as climate change. This is especially so given their status as emerging economies, and the inefficiencies and ineffectiveness of command-and-control measures in enforcing environmental rules.

To address the long-term effects on climate change from Indonesia’s rising energy use and greenhouse emissions, Warwick McKibbin proposes a single blueprint for the creation of property rights and market incentives to encourage sustainable economic development. This would allow “governments in each country [to] impose a requirement that energy producers have an annual emission permit to produce energy each year, based on the carbon content of that energy.” Elsewhere, McKibbin argues that market solutions can be designed by the country itself to fit its context, rather than “to impose… the sorts of institutions and property rights that would be required under the Kyoto Protocol.”

China too is experimenting with emissions trading as a market solution to promote sustainable development and improvements in the environment. Yet, China remains a “planned market economy with monitoring and enforcement systems in their infancy,” in which state-owned companies are often major polluters.

The economic and political implications of Asia’s rise, especially the growth of China and India, has been widely discussed but environmental issues have received less attention. Yet the global, regional and local implications are real, and are interconnected.

Environmental issues interact with regional trade, for instance, when we recognize that much of Southeast Asia supplies resources, such as timber, for China’s consumption and growth. Growing energy needs in China, India and other...
The economic and political implications of Asia’s rise, especially the growth of China and India, has been widely discussed but environmental issues have received less attention. Yet, the global, regional and local implications are real, and are interconnected.

A similar, but more gradual decentralization of environmental enforcement is taking place in China, as Day’s book describes. Although not faced with the political fractures seen in Indonesia, China is moving from a system of central power to “bureaucratic fragmentation,” and a more convoluted “matrix of authority relationships.” There is also a phenomenon of so-called “green mission creep” among regional agencies, as they use environmental issues to attract greater visibility and resource allocation from the central government.

The importance of local governance for environmental protection was reinforced by China’s recent 11th Five-Year Plan (2006-2010) for National Economic and Social Development. But, as Elizabeth Economy argues, this devolution is hampered by limited manpower and other resources, as well as conflicts of interest between local environmental protection bureaus, and other local officials and state-owned enterprises.

Eric Zusman and Jennifer Turner explain how the shift to local governance has created “extra-bureaucratic scope” for international organizations to offer assistance in policy-making and implementation. This development goes beyond funding, and involves the work of the state and non-state actors.

Coordination and policy coherence is another issue that needs to be addressed in tandem with decentralization, especially in Indonesia. For Isna Marifa, inter-governmental roles in Indonesia remain ill-defined, but provincial agencies can potentially play a role bridging national and local policies. She calls for the establishment of a high-level government agency to pursue “non-sectoral, integrated” environmental policy-making.

Making and enforcing legislation is another key issue for Indonesia. James Fox, Dedi Adhuri, and Ida Rososudarmo paint a bleak picture in which “inadequate” or “ineffective” legislation, such as the first Law on Local Government (Law 22/1999), has “created a diversity of systems of management and mismanagement with no mechanism for supporting one or discouraging the other.”

Not all of the authors are as pessimistic. Jason Patlis cites current and promising initiatives adopted by provincial governments for natural resource management, and cases in which laws have been revised to correct earlier mistakes. Even while enforcement remains a problem, especially at the local level, he says the reformasi era has ushered in “greater information flow, greater public involvement and greater legislative engagement with the executive branch.” In coastal and marine resource management, Ian Dutton believes that new legislative measures and the subsequent establishment of a Ministry of Marine Affairs and Fisheries have “enabled fisheries-related marine issues to be considered in an integrated manner for the first time in the history of Indonesia.”

The environmental law regime in China also has encountered problems in implementation. The main stumbling blocks for both regulatory and regulated communities alike, according to Richard Ferris Jr. and Hongjun Zhang, are the obscure, non-transparent internal protocols and norms of practice within environmental law. Additionally, the authors note that provincial and municipal authorities account for more than 1,000 environmental laws, alongside more than 80 bilateral and multilateral environmental treaty obligations.

Yet, there has been progress. Much of the country’s legislative enforcement efforts are spearheaded by “political will and hard work at the ground level.” The multi-level coordination of central governmental inspections, enforcement by local environmental protection bureaus, and actions by civil society in the domestic and global arena have also improved.

China too is experimenting with emissions trading as a market solution to promote sustainable development and improvements in the environment. Yet, China remains a “planned market economy with monitoring and enforcement systems in their infancy,” in which state-owned companies are often major polluters.

The economic and political implications of Asia’s rise, especially the growth of China and India, has been widely discussed but environmental issues have received less attention. Yet, the global, regional and local implications are real, and are interconnected.

Environmental issues interact with regional trade, for instance, when we recognize that much of Southeast Asia supplies resources, such as timber, for China’s consumption and growth. Growing energy needs in China, India and other
Asian countries such as Japan and South Korea interact with concerns over clean air at the local level and climate change at the global level. When forestry companies and plantations in Indonesia use fire to clear land, the region is impacted by the resulting haze pollution, as well as the carbon released into the atmosphere.

These four volumes reveal the scale and depth of these and other environmental problems. Countries in the region are justifiably criticized for failing to give sufficient priority to environmental concerns. Many of the writings in these books also call on the state to move beyond mere rhetoric to implement environmental goals in tandem with the goals of economic growth and security.

They offer no easy or immediate solutions, especially given the diversity of Asia. But they are not without hope.

They suggest, for example, that government and industry are becoming better attuned to the environmental consequences of their policies and the voices of ethnic minority groups and civil society. They also suggest that efforts to decentralize environmental protection need to be accompanied by better policy coherence and coordination, and that many more stakeholders need to be recognized and included in the process. Some of the writers also point to the need for regional institutions to integrate environmental concerns with economic, security and other areas of cooperation.

As Asia continues to rise, its demand for resources and the regional and global impact this will have on the environment, will need further attention.

Simon Tay is a member of the Editorial Board of Global Asia and Chairman of the Singapore Institute of International Affairs (SIIA). He also teaches international environmental law at the National University of Singapore. Gavin Chua is a researcher at the SIIA.

As Asia continues to rise, its demand for resources and the regional and global impact this will have on the environment, will need further attention.

SK’s new identity is designed with our customers in mind.

At SK, we firmly believe that we cannot achieve happiness, until our customers reach theirs. So, with our new “Wings of Happiness” spread wide, we will soar and continue to deliver and share our happiness with our customers.

A leader in Energy and Telecommunications, SK is soaring to new heights in its core fields.

SK is Asia’s leader in the energy and chemicals businesses, being involved in oil refining and production in 23 blocks from 13 countries around the world. In addition, SK is also the world’s leading telecommunications company, becoming the world’s first to commercialize 5G/MA technology and introduce the Satellite CMB Service.

SK, with its world-renowned technologies and services, is committed to creating a happier world.