

Fires and Haze in Southeast Asia

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This case study examines the Southeast Asian fires and resultant haze not so much to assess the biophysical causes and results but, rather, the implications on cooperation within the Association of Southeast Asian Nations (ASEAN) and the region.

By describing the efforts within ASEAN to deal with the fires and regional haze pollution, we examine not the environment per se, but the ASEAN processes and norms as they apply to the environment. The study also draws on, and makes suggestions regarding, ASEAN in other areas of activity and concern in order to understand its environment-related activities as part of a larger picture.

The study considers how cooperation might be developed within ASEAN or the wider Asia Pacific on the haze issue. In addressing both institutional and environmental questions, it seeks to be as much about ASEAN and Asia Pacific cooperation as it is about the environment.

First, ASEAN's development across different concerns and fields of activity is surveyed, to situate environmental cooperation in a broader institutional context. Second, ASEAN's environmental heritage and its cooperation to protect that heritage are reviewed with particular attention given to the ASEAN Agreement on the Conservation of Nature and Natural Resources, which is the only attempt to date to conclude a binding environmental treaty. Third, the study reviews ASEAN efforts to deal with the organization's greatest environmental challenge to date, namely, the Indonesian fires and haze, and, in so doing, it suggests why efforts thus far have been insufficient. Fourth, ways are suggested in which the fires and haze could be effectively addressed by ASEAN or the Asia Pacific community, and consideration is given to the broader institutional

Cross-Sectoral Partnerships in Enhancing Human Security

questions of how environmental cooperation is contributing, and could further contribute, to the evolution of ASEAN processes and institutions.

The study suggests that modes of ASEAN cooperation, known as the ASEAN way, do not serve well in dealing with environmental challenges. Yet, it is suggested that attempts to foist international approaches and principles onto ASEAN have so far failed because they have been attempts to replace the ASEAN way which, without either becoming ossified or being abandoned, would seem well able to evolve and change in ways that have implications not only for the environment, but also for the future shape of ASEAN.

The assumption that regionalism is always, or usually, the best focal point for environmental protection is thus rejected. The suggestion instead is that regionalism must be understood to be both open to international influences and resilient to the special needs and norms of the region. Only then does it make sense to speak of a regional approach and cooperation on environmental issues.

ASEAN's Development

Before its current problems developed, ASEAN enjoyed a reputation—for political and economic reasons—as one of the most productive regional or subregional organizations outside the European Union (EU).

In the 1980s, ASEAN drew international attention to the Cambodian situation, leading the way to the intervention by larger powers and the conclusion of the Paris Peace Accords (Kao and Kaplan 1999; Brown and Timberman 1998; Huxley 1985; Weatherbee 1989). In the 1990s, ASEAN economies grew at rates that led many to cite them as evidence of an East Asian miracle (World Bank 1993; Asian Development Bank 1997; Arogyaswamy 1998). Singapore, one of the newly industrializing economies (NIEs), led the region, while Malaysia, Thailand, Indonesia, and the Philippines (ASEAN-4) followed in emphasizing export-led industrialization (United Nations Economic and Social Commission for Asia and the Pacific [UN ESCAP] 1995a).

During this period, ASEAN expanded to include oil-rich Brunei Darussalam, Vietnam, and, during its 30th anniversary in 1996, both Myanmar and Laos (Soesastro 1995; Acharya and Stubbs 1995; Sandhu et al. 1992).¹ In April 1999, Cambodia was formally admitted to the group, thereby creating ASEAN-10 (Brunei Darussalam, Cambodia,

Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam). True to form, ASEAN had succeeded in transforming an area of political tension and economic backwardness into a dynamic regional grouping.

Many commentators have attributed this success to the pursuit of an ASEAN way that emphasized, among other things, noninterference in other states' affairs, preferred consensus and non-binding plans to treaties and legalistic rules, and relied on national institutions and actions, rather than creating a strong central bureaucracy (Antolik 1990; Haas 1989).

Building on its economic and political achievements, when ASEAN engaged major powers through such subgroupings as the Asia-Pacific Economic Cooperation (APEC) forum, the ASEAN Regional Forum (ARF), and the Asia-Europe Meeting (ASEM), it met with considerable success (Ball 1996; Da Cunha 1996; Maull et al. 1998; Bora and Findlay 1996; Chia 1994). The ASEAN way was also applied to these new initiatives, even though the new groupings spanned areas and included members outside Southeast Asia (Tay and Talib 1997).

But even during this period of success, ASEAN had its detractors and its limitations. In the area of security and peace, it is notable that, while ASEAN kept the Cambodian issue alive, its role in the processes leading to the Paris Peace Accords and in the United Nations Transitional Authority in Cambodia (UNTAC) thereafter was somewhat overshadowed by that of such great and medium-sized powers as France and Australia. It is also notable that, during this period, ASEAN self-help and resilience did not extend to a concerted effort to deal with the outflow of boat people and refugees from Indochina, and that there was, instead, heavy reliance on the United Nations and developed countries.

In economic matters, too, even before the crisis, people had pointed to ASEAN shortcomings. Early efforts at cross-border industrial cooperation had not amounted to much and when foreign investment had flowed into the region, it had mostly been bilateral or subregional, with a number of growth triangles, quadrangles, and special zones. Many efforts for declared cooperation, moreover, had been declared ambitions, and had not actually been achieved. ASEAN-wide economic agreements had come late; a free-trade agreement first mooted in 1992 is, even now, being implemented.

Institutional questions about ASEAN have also been raised. The ASEAN way—especially its norm of non-interference and aversion to a strong central bureaucracy—has meant that the body was more an association

Cross-Sectoral Partnerships in Enhancing Human Security

than an institution, particularly in the first phase of its development, from 1967 to 1976. In this period, ASEAN was characterized by a loose and highly decentralized structure with functions and programs driven by national governments, and ASEAN itself was merely labeled a letter box. In the next phase, from 1976 to 1992, ASEAN was more of a traveling circus, with activity increasing in various fields but receiving only minimal and largely administrative support from the ASEAN Secretariat. Only since 1992, with the Singapore Declaration and the first economic undertakings, has ASEAN required greater coordination and institutionalization (Chin 1998; Tay and Yeo 1999; Acharya 1999).

Since the onset of the financial crisis, the old doubts about ASEAN have returned and newer ones have developed, a number of critics having suggested that ASEAN is out of its depth (Furmston 1998). The criticisms concern ASEAN efforts, or the lack thereof, to deal with the economic crisis, the East Timor question and Indonesia's transition, the admission of Cambodia and Myanmar to the grouping, and the Indonesian fires and haze. In the context of this mix of admiration of, and anguish at, ASEAN's record, what has been its record on the environment?

ASEAN's Environmental Record

Southeast Asia has a rich environmental heritage and some of the largest tracts of tropical rainforest and coral reefs, both of which areas are known for their biological diversity. Indonesia, Malaysia, and the Philippines are among the world's top ten megadiversity countries. Areas in Laos and other parts of Indochina that are newly opening up to the outside world have revealed species that were thought extinct.

However, ASEAN's record in terms of appreciating and protecting this heritage has been mixed. Member states have often been criticized by environmentalists and nongovernmental organizations (NGOs) for their tropical deforestation and lack of conservation efforts (Keck and Sikkink 1998, 150–163). To date, many countries in the region have experienced the trials of industrialization on one hand, and the continuing problems of poverty and the lack of infrastructure on the other (UN ESCAP 1990, 1995b). Some contend that, whatever attention politicians have given to the rhetoric of sustainable development, the de facto policy of development has been pollute first, clean up later (Bryant and Parnwell 1996, 1–12, 330–338; Tadem 1990).

ASEAN took its first step toward environmental protection in 1978, when the grouping convened its first meeting of ASEAN experts on the environment (Koh 1996; Boer, Ramsay, and Rothwell 1998, from p. 225; Sucharitkul 1994, 317). Its first ministerial-level declaration regarding cooperation on environmental issues followed in 1981 (Koh 1996). It has, however, become better known for taking a pro-developing country stand, as at the 1992 Earth Summit in Rio de Janeiro (Koh 1996, 69), emphasizing the rights of developing states to permanent sovereignty over their natural and other resources (United Nations 1963) and development (United Nations 1986),² and deemphasizing the concepts of the environment as a global commons and the heritage of all humankind. This position has been most pronounced in regard to the conservation of rain forests and biodiversity (Nayar and Ong 1996). Malaysian Prime Minister Mahathir Mohamad spoke for many ASEAN members when he said “[n]ow the developed countries have sacrificed their own forests in the race for higher standards of living, they want to preserve other countries’ rain forests—citing a global heritage—which could indirectly keep countries like Malaysia from achieving the same levels of development” (Sik, Pinto, and Syatauw 1991; Bragdon 1992; Taib 1997).

ASEAN countries have also rallied to lobby successfully against Austrian eco-labels on tropical timber (Chase 1994; Tay 1997; Gillespie 1996). Most recently, ASEAN countries have played a central role in the World Trade Organization (WTO) challenge of U.S. laws prohibiting shrimp imports from nations that do not mandate the use of production methods which safeguard against the killing of sea turtles (World Trade Organization 1998).

In addition, ASEAN members have taken some steps toward improving environmental cooperation both among themselves and with non-ASEAN states. This includes participation in environmental programs that evolved to form the 1994–1998 ASEAN Strategic Plan of Action on the Environment (Koh 1996, 181; Boer, Ramsay, and Rothwell 1998). The associated strategies covered a broad range of environmental concerns and adopted many of the approaches recommended in Agenda 21, the plan of action resulting from the Earth Summit, with a view to integrating environmental and developmental concerns in the decision-making process of governments through such mechanisms. The strategy plan also recognized the need to foster government and private sector interaction, strengthen institutional and legal capacities, establish a regional framework on biological diversity conservation and sustainable use, promote

Cross-Sectoral Partnerships in Enhancing Human Security

the protection of coastal zones and marine resources, and promote both environmentally sound management of toxic chemicals and hazardous wastes and a system for promoting environmentally sound technologies (Koh 1996).

The effectiveness of such measures, however, suffers from weaknesses in monitoring, assisting, and ensuring state compliance that are endemic to the ASEAN way and its preference for noninterference in the domestic affairs of member states, nonbinding plans instead of treaties (Koh 1996, 27; Churchill 1995),³ and central institutions with relatively little independent initiative and resources. The ASEAN environmental undertakings may, thus, be characterized as plans for cooperation between national institutions, rather than as the creation or strengthening of any regional institutions as a central hub for policymaking or implementation.⁴

Such a situation limits the stability and certainty of ASEAN cooperation. Environmental undertakings, whether as action plans or other instruments—no matter how solemn and well meant—are left to the individual states to implement or delay as they see fit.

The nature and limit of ASEAN cooperation on environmental matters can be seen in the fate of the ASEAN Agreement on the Conservation of Nature and Natural Resources. The agreement was drafted for ASEAN by a group of experts from the International Union for Conservation of Nature (IUCN), a blue-chip international organization with expertise and influence.⁵ The 1985 agreement was notable for a number of innovative principles and forward-looking approaches. Many of these have found their way into subsequent international treaties, such as the Convention on Biodiversity, concluded at the 1992 Earth Summit (*International Legal Materials* 1992, 188). Despite this, while the agreement was initially signed by ASEAN members, it has failed to achieve the required number of ratifications to come into force. Academics have bemoaned the fact and praised its drafting (Boer, Ramsay, and Rothwell 1998, 227–229; Churchill 1995; Koh 1995), but after having been in a limbo for fifteen years, the agreement may well be stillborn. The ASEAN countries that have yet to ratify the agreement—Brunei Darussalam, Malaysia, and Singapore—have not publicly stated their reasons,⁶ nor have the other ASEAN members pressed them for their reasons, which are, therefore, subject to speculation.

But the preliminary assessment of this study is that the agreement has not come into effect in ASEAN not despite its forward-looking principles and approaches, but because of them. In crafting the agreement, the international experts on the environment seem to have paid insufficient

attention to both the ASEAN way and the ASEAN response to international and Western approaches to environmental protection, as was seen later in their joint position on the Earth Summit.

Other reasons for its not having come into effect include the fact that little attention seems to have been paid to the few agreements that bind ASEAN members. Further, the principles of the agreement suggest that one ASEAN country might be under an obligation to consider funding other ASEAN members to help in the conservation of the region's natural heritage. However, such a principle of substantial transfers from one ASEAN member to another has no precedent in the grouping.

This study thus suggests that the agreement succumbed to overambition, idealism, and perhaps ignorance of the norms and institutional practices of ASEAN. Yet it is too easy to suggest that environmental cooperation within ASEAN can and must only follow the ASEAN way as it now stands. To do so would beg the question of whether the ASEAN way and ASEAN institutions in their present form can, in fact, effectively protect the environment. If not, then any environmental agreement that is acceptable will prove ineffective. The answer to this important question may be found in an examination of the ASEAN response to the Indonesian fires and resulting haze pollution in the region.

ASEAN and the Indonesian Fires⁷

In 1997 and early 1998, Southeast Asia suffered outbreaks of fires and resultant smoke haze that had major human and environmental consequences. Centered in the Indonesian provinces of Kalimantan and Sumatra, the fires caused smoke haze to drift across borders affecting the entire region—especially Malaysia, Brunei Darussalam, and Singapore—and forcing some 20 million people to breathe potentially harmful air for prolonged periods (Dudley 1997). The chief of the United Nations Environment Programme (UNEP), Dr. Klaus Toepfer, declared the fires a global disaster (*Asiaweek* 18 March 1998, 46).

The fires occurred almost wholly on Indonesian territory,⁸ the most immediate and worst effects having been experienced by Indonesia's peoples and economy. It could therefore have been expected that Indonesia should and would deal with the problem at the national level. However, although some measures were taken by the Indonesian government and NGOs, effective action was lacking. This is for a number of reasons,

Cross-Sectoral Partnerships in Enhancing Human Security

including the lack of capacity and administrative reach, the priority of the crisis and political instability in relation to environmental issues, and the corruption, cronyism, and nepotism that limits the effective implementation of laws and policies, given that many of the companies implicated in the fires have been close to the former centers of power. There are prospects for improvement in Indonesia in the post-Suharto period, with the emphasis on good governance, but short-term improvements may be few.

Given this lack of action in Indonesia, the fires and regional haze pollution have become the most important and prominent challenge to ASEAN cooperation in the area of the environment. In June 1995, ASEAN environment ministers agreed to a Cooperation Plan on Transboundary Pollution.⁹ This was followed, in 1997, by a Regional Haze Action Plan. These are briefly described below and assessed for their effectiveness.

The cooperation plan set out broad policies and strategies to deal with atmospheric and other forms of transboundary pollution, and outlines efforts to be made at both the national and regional levels to deal with the smoke haze that hit Southeast Asian countries in 1994. Each country agreed to establish focal points and enhance its national capability to deal with forest fires, as well as to share knowledge and technology on the prevention and mitigation of forest fires and establish a mechanism for cooperation in combating them.¹⁰

According to the cooperation plan, ASEAN ministers also agreed to develop a common air-quality index and a regional fire-danger rating system, while ASEAN institutions like the specialized meteorological center were asked to develop ways of predicting the spread of smoke haze. This plan also envisaged support from countries outside the region with expertise in fire-management systems, such as New Zealand and the United States, as well as from institutions like the Japan-based International Tropical Timber Organization (ITTO).

The cooperation plan is less formal than comparable treaties in regions such as Europe that deal with long-distance transboundary harm, while its principles and approach seem workable and even commendable. The plan recognizes that the region is a single ecosystem and emphasizes the need to build on both national and regional efforts, so that one complements the other, and incorporates principles of prevention, mutual assistance, and cooperation. Further, it recognizes that, although all states have a common interest in preventing or at least reducing the chances of a recurrence of the haze, they have different abilities and responsibilities in working toward a solution. In so doing, the plan reflects the principle of

common and differentiated responsibility at the regional level as recognized in the Rio Declaration.

Be that as it may, implementation of the plan has, in large part, failed. Very few of the steps envisaged were actually taken. The outbreak of fires in 1997 demonstrates the lack of follow-up to the plan in almost all areas, the sole exception having been Singapore's assistance to Indonesia in the form of satellite images of fires and hot spots. Instead of working within an agreed system of cooperation, countries reached bilateral arrangements and emergency discussions were held, especially between Indonesia and Malaysia as well as between Indonesia and Singapore.

Following the fires in 1997, the ASEAN environment ministers agreed in December of that year to a Regional Haze Action Plan to provide additional commitments and detail (ASEAN 1997). Again, the plan sets commendable objectives: the prevention of land and forest fires, establishment of operational mechanisms to monitor fires, and strengthened regional fire-fighting capabilities. It also reiterates the need for regional monitoring and identification of sources of technical assistance within ASEAN, in non-ASEAN countries, and in such international organizations as the Asian Development Bank and UNEP. This plan primarily emphasizes national plans and capabilities, and calls for the establishment of a procedure for pooling fire-fighting resources for regional fire-fighting operations.

Upon review in April 1998, the plan incorporated an agreement to create two subregional fire-fighting arrangements for Kalimantan and for the Indonesian provinces of Sumatra and Indonesia Riau (ASEAN 1998). In addition, Indonesia announced that it would set up the framework for an ASEAN Research and Training Centre for Land and Forest Fire Management in Central Kalimantan (ASEAN 1998). Discussion of joint funding within the region has, however, so far yielded no agreement.

Clearly, the action plan is a welcome attempt to kick start the stalled work of the earlier and more general cooperation plan. Doubt remains, however, as to the ability of ASEAN to fill in the omissions of the Indonesian national system. This is primarily because of the ASEAN preference for nonintervention in the domestic affairs of member states and the dominant role that Indonesia plays in the grouping. The ineffectiveness of the plan can also be traced to a lack of sufficient institutional support for the prioritization of environmental law and policy making in ASEAN, related to the ASEAN aversion to strong regional institutions.

In the face of these obstacles, ASEAN has yet to supplement Indonesia's failure to address the Southeast Asian fires. The outbreak of fires in 1998

Cross-Sectoral Partnerships in Enhancing Human Security

and 1999 suggests that the body has yet to be effective; the fact that there was no regional haze since 1999 is not due to ASEAN action to prevent fires. Rather, it is the result of unusually wet weather that has dampened the fires that started and stopped them from spreading. If and when drier climatic conditions return, a return of fires and haze must also be expected.

ASEAN Institutions and Cooperation

Various means and methods have been suggested for achieving an effective response to the problems caused by the Indonesian fires and regional haze (Tay 1999). ASEAN has agreed to a suggestion by UNEP that studies be undertaken with a view to possibly drafting a treaty on the fires. Some suggestions relating to the broader questions of ASEAN cooperation and institutions are outlined below.

Perhaps the easiest and, to some, ideal solution would be to design ASEAN efforts to deal with the fires in strict accordance with international environmental principles. Some environmentalists might, indeed, be tempted to go beyond this and suggest forward-looking principles and innovative approaches, much as has been done by the ASEAN Agreement on the Conservation of Nature and Natural Resources. But to do so would be to ignore the ASEAN way.¹¹ Moreover, while such an approach has its attractions, some may consider that it is unlikely to find acceptance, as was the case with the ASEAN nature and natural resources agreement.

By contrast, the approach to ASEAN cooperation on this important environmental issue could well be cast within the norms of the ASEAN way and so be more easily accepted. However, like the existing ASEAN cooperation and haze plans, this approach might prove ineffective precisely because of the ASEAN way it embraces.

Between the two alternatives, we can point to an approach to ASEAN cooperation on the fires that recognizes the ASEAN way and yet seeks to stretch its limits within what is both politically possible and possibly effective. But this middle path is, of course, easier to describe in broad approach than in detail. Deciding what is possible and what might be effective is a matter of individual judgment and can change over time, especially given the new Indonesian government that is a mixture of reformers and more established figures drawn from a wide political spectrum.

A possible starting point in this exercise might be to understand how even existing efforts to address the issue have stretched and changed

ASEAN practices. For while efforts to control the fires have yet to succeed, ASEAN's institutional approaches have, in the process, developed and adapted. Three developments in particular stand out.

First, regular and frequent meetings are held to review progress. Meetings of senior environment officials have taken place as often as once a month, with only some exceptions resulting from disruptions caused by Indonesia's political transition.

Second, the meetings have gone beyond an exchange of formalities to involve more open and frank discussion of the problems underlying the fires and the lack of sufficient action to address them. It is notable in this regard that ASEAN environment officials have officially referred to Indonesia's forestry and land-use policies, although such issues are matters of sovereign territorial rights. This is all the more notable given that attempts by the international community to address similar issues, in connection with the conservation of tropical rainforests, have been repeatedly rebuffed, and no internationally binding treaty on forests and land use has produced agreement. Moreover, the ASEAN norm of nonintervention has not, thus far, intruded or been used as a shield in the increasingly candid review of Indonesia's policies on this sensitive issue.

Third, ASEAN has increasingly opened its proceedings to international institutions and even to NGOs. The Asian Development Bank and UNEP regularly have been included in ASEAN discussions on the issue of the fires. Their offers of assistance and advice to the ASEAN secretariat have also largely been accepted by Indonesia and the other member states.

ASEAN environment ministers have taken the step—unusual in state-centric ASEAN—of inviting NGOs to support efforts to deal with the fires. In June 1998, the Singapore Environment Council made a presentation on the fires to the ninth meeting of the ASEAN Senior Officials on the Environment (ASOEN) after a statement had been issued following international discussion of the subject.¹² This is perhaps the first occasion on which an NGO had formally met and addressed a presentation to ASOEN, although other NGOs have since taken similar steps.

The three developments have not, however, solved the problem of the fires, nor are they revolutionary, but they do point to an increasing institutionalization of ASEAN in dealing with this environmental challenge. They may also be significant in terms of how environmental institutions in the international sphere and in other regions foster compliance.

In the international community and other regions including Europe, environmental laws and policies are not enforced by world government,

Cross-Sectoral Partnerships in Enhancing Human Security

sanctions, or courts that hold states responsible and accountable to one another. Instead, environmental institutions foster compliance by softer and more cooperative means, such as regular and close reviews of country progress reports, the provision of technical and other assistance, and by offering financial assistance from pooled resources. The reviews in a number of cases are sharpened as a result of there being a sufficient number of independent experts in the secretariat to assess and query country reports, and the proceedings and outcomes being made available to NGOs and the public.

Compliance with environment law and policy in this respect depends more on the sunshine methods of transparency and carrots of assistance, rather than hard sticks of sanctions and penalties (Brown Weiss 1997). This is true of a large number of treaties that have been successful in dealing with environmental problems, such as the European Long Range Air Pollution Treaty.

Those environmentalists who demand world government and treaties with teeth have rarely got their wish, whether in ASEAN or elsewhere, although ASEAN has come some way toward adopting international approaches in dealing with the fires. In the process, the ASEAN way has changed incrementally, but has not been abandoned, and further steps might be taken (Tay 1999).

—*Widening the review process.* The regular review of action plans and other undertakings could be widened to include relevant intergovernmental organizations—such as the secretariats for the UN Convention on Biological Diversity and for the UN Framework Convention on Climate Change (UNFCCC)—and scientists and technical experts for comment.¹³ A further step would be to allow recognized NGOs with expertise and interest to participate.¹⁴

Additionally or alternatively, the ASEAN Secretariat itself might play a role by commenting at reviews from a more impartial point of view. Such a role would, however, require that the organization be strengthened in knowledge and capacity, and be endowed with the role of providing such reviews.

—*Strengthening the ASEAN Secretariat's capacity.* ASEAN's general capacity to frame environmental policy and assist in ensuring compliance could be strengthened. Its institutional capacity has been limited because, according to the ASEAN way, supranational institutions are not considered effective, and the environment has not been emphasized within ASEAN. In addition to such shortcomings, national capacities may also have to be addressed in dealing with transboundary pollution.

ASEAN should have sufficient resources and knowledgeable personnel to assist national efforts to deal with the transboundary pollution, thereby helping to smooth matters should bilateral discussions become ruffled. The use of preventive diplomacy by the ASEAN secretary-general might also be going beyond environmental issues to cover other transboundary and regional concerns either within ASEAN, or in a broader framework such as ARF (Tay and Talib 1997). Only then could ASEAN play a sufficient role in monitoring, and ensuring the compliance of states with, plans and agreements in connection with efforts to prevent and control the fires.

—*Official recognition of costs.* The human, economic, and other costs of the fires and haze suffered by the states involved should be recognized. This is especially as the degree of cooperation proffered by states is in direct proportion to the magnitude of the damage sustained.

At present, many of the cost estimates have come from NGOs and think tanks. Were ASEAN governments to take these estimates into consideration when generating their own accounts, this may not only, for example, assist Indonesia to recognize the real cost to its own people and its economic system, but also be a basis for affected states to fund the necessary steps for the prevention and control of future fires.

This could, perhaps, lead to Malaysia and Singapore either heeding the suggestion that a multilateral revolving fund be set up or, to some degree, helping fund UNEP, which has requested US\$10 million to carry out interim fire-fighting measures.

Since cooperation will only be forthcoming if the benefits are expected to be greater than the costs, the benefits of controlling transboundary pollution must be clearly demonstrable.

—*Linking environment and economic policy.* The possibility of linking environmental and economic concerns within ASEAN might be considered. Initiatives such as the SIJORI Growth Triangle—between Singapore, Johor of Malaysia, and the Riau Islands and Sumatran provinces of Indonesia—have increased economic interdependence, as have ASEAN-wide programs (Toh and Low 1993; Chen and Kwan 1997; Low and Tay 1996), the ASEAN Free Trade Area (AFTA) agreement, and the ASEAN Investment Area (AIA) agreement (Imada and Naya 1992). Moreover, environmental standards have an economic impact on traders and, especially, investors. Thus, since higher standards might exact higher costs for businesses and, therefore, attract investment, and because countries may lower or be loathe to increase environmental protection (Revesz 1992),¹⁵ it would

Cross-Sectoral Partnerships in Enhancing Human Security

make economic sense to connect ASEAN's economic agenda to its environmental concerns.¹⁶

Certainly, a link to economics would help prioritize the environment and help ASEAN members take steps toward sustainable development. As noted earlier, ASEAN has rejected the idea of sanctions and environmental conditionality for trade and aid, but the links between environment and economics among ASEAN members could be positive and cooperative: carrots rather than sticks.

None of the above suggestions would require a binding treaty to be concluded on the fires, which may be best given that treaties still remain the exception in ASEAN. Were a treaty on the fires desired, however, there are a number of ways in which it could be made more amenable to the ASEAN way, while still borrowing from international practices and standards that have proved effective. Two suggestions come to mind (Tay 1999).

—*Specific targets and national standards.* While in theory ASEAN plans or a treaty could evolve toward setting specific targets for atmospheric pollution resulting from fires and haze, this might well be difficult given the members' different environmental priorities, stages of industrial development, administrative and technical capacities, and even different measuring systems for air-borne pollutants. Harmonizing limits, as has been done by the European Community (Bennet 1992; Gerardin 1996), might not be possible.

An alternative could be to require states to set their own national laws and limits and to hold them to these through an intergovernmental panel, an approach seen in a number of agreements on transboundary pollution.¹⁷ This would be easier than deciding on common limits to be agreed on by all and avoids the unilateral imposition by any one country of its own standards. Instead, each country would be held to do to others what it would do domestically for itself (Merrill 1997).

—*Privatizing conflict.* The idea of one member suing another or seeking to hold it legally responsible may be seen by some as contrary to the ASEAN way and solidarity, although such a judicial approach would be in keeping with ASEAN's emphasis on the peaceful settlement of disputes.

Should there be considerable concern among ASEAN members, a treaty could be drawn up that might still allow wrongdoers to be held responsible for the fires, thereby privatizing environmental conflicts. Such a concept would aim to devolve disputes and suits from the interstate level to that of municipal laws. Such proceedings could be instituted against the

polluter as private claims in civil or public-interest suits. The advantage of such suits, as opposed to interstate mechanisms, is that governments would not file suits against each other, but merely create the framework for private suits.¹⁸

Suits outside Indonesia have been considered by Indonesian officials, in connection with foreign investors who might be implicated in the fires, and in Singapore they have been publicly suggested against Indonesian corporations (*Straits Times* 25 July 1998). Such steps could be taken either within a special framework, created by the consent of the different countries, or without it, depending on each country's jurisdictional rules. The countries involved could provide a treaty framework to allow access to their national courts as with the 1974 Nordic convention among Denmark, Finland, Norway, and Sweden. It provides citizens in each of these countries the right to file suit in the court of another country for compensation for transboundary pollution (Broms 1986). As applied to the Southeast Asian fires, such a treaty approach could, for example, provide Singaporeans automatic access to the courts of Indonesia.¹⁹

The six above suggestions might be considered excessive by those who believe ASEAN is not ready to take on such measures, and insufficient by those who do not believe such measures would be effective in challenging the fires.

Ideas regarding what is possible and what might be effective are matters of judgment and may differ among states. But it should not be forgotten that this section of the study only hopes to describe an approach to ASEAN cooperation on the fires that recognizes the ASEAN way in order that ASEAN cooperation on the environment might evolve and the necessary institutions for such cooperation might be developed.

We shall now consider additional possibilities for Asia Pacific community cooperation on the issue of haze pollution and more general aspects of the environment.

Possible Responses from Asia Pacific

Asia Pacific is a broad and diverse region that only relatively recently has come to appreciate its interdependencies and the potential for cooperation, as a result of which it became increasingly common to speak of an Asia Pacific century. But the Asian financial crisis that began in mid-1997 has changed that.

Cross-Sectoral Partnerships in Enhancing Human Security

Even today, while a number of ASEAN and Asian economies are showing some encouraging signs, many commentators suggest that a sustained recovery cannot be taken for granted. Neither can a return to the spectacular growth rates of the early 1990s be assumed. Some suggest a need for more fundamental reforms that would have an impact on not only the financial and economic systems, but also the corporate sector, as well as the underpinning social and political norms and institutions.

This reevaluation is of greater importance to the states in ASEAN than to those that have been unaffected by the crisis to date and have continued to grow—such as the United States or even China. But while ASEAN has been particularly affected, broader Asia Pacific institutions have not been completely immune. The APEC process has been seen by some as having slowed or proven ineffective, particularly since the 1998 APEC summit in Kuala Lumpur. ARF, too, has not proceeded as quickly or strongly as some might have hoped, in spite of the fact that there is greater security-related tension and more associated issues seem to have arisen.

But, while the halo may have disappeared from the region and its institutions, regional interdependencies remain. Economically, the crisis in ASEAN countries was affected by Japan's continuing doldrums and the retreat of Japanese demand and capital. But some assistance came from the buoyant growth in the United States, which was the main export market. In terms of security, too, the region continues to depend on the U.S. presence in Asia, with a great deal hinging on the triangle of U.S.-China-Japan relations. Regional security is, and should continue to be seen as, interwoven and interdependent.

Meanwhile, in terms of the environment, there are regional interdependencies relating to the fires and haze in terms of the effects on climate change and biodiversity loss, their root causes, and opportunities presented for cooperation to address them.

Effects on Climate Change and Biodiversity

The haze may not have visibly affected countries outside ASEAN, but it is a major source of climate change-related gases. One study estimates that the six months of fires in 1997–1998 added one billion tonnes of carbon dioxide (CO₂) gases, surpassing projected emissions from all of Western Europe for the same period and exacerbating global warming.

Asia Pacific has many small island states and low-lying areas that stand to be affected by climate change and the possible rise in sea level. Scientists also currently believe that climate change will accelerate and worsen weather pattern changes accompanying the destructive El Niño/Southern Oscillation (ENSO) along the Pacific rim. The coastal regions of Asia and the United States stand to be considerably affected, as the 1997 El Niño-related drought and 1998 La Niña-related flooding have shown. Such weather changes can have a considerable impact on agriculture and food security.

It is also notable that other Asia Pacific countries are struggling in their response to the issues raised as a result of concern over climate change. Japan and the United States are among the major industrialized countries that have had an interest in dealing with the issue of climate change, and are under pressure to reduce their emissions while remaining economically productive and competitive. Meanwhile, the region's developing countries, such as China, are increasing their output of climate-changing gases.

The fires might, thus, be an opportunity for Asia Pacific to recognize the interdependence of its member states and address climate change as an issue of common concern. The most significant process for doing so is the Kyoto Protocol to the UNFCCC, with its concept of a Clean Development Mechanism that builds on the idea of joint implementation in the UNFCCC to provide a basis for cooperation between developed and developing countries. Developed countries might, thus, assist their developing counterparts to reduce emissions of climate-changing gases, and in exchange have their efforts recognized when their own emissions are considered.

A similar approach might be suggested for regional cooperation under the rubric of the Convention on Biological Diversity or of the Convention on Climate Change. A significant part of the haze is attributed to land clearing associated with logging. The fires have, additionally, devastated a number of national parks and important environmental habitats, and affected endangered species. Given the concern expressed by many in the United States and other countries regarding these issues, assistance and cooperation might again be fostered and debt-for-nature swaps, if implemented effectively, might be one possible solution that would assist both Indonesia's recovery from the crisis as well as the conservation of nature and the prevention of haze.

Cross-Sectoral Partnerships in Enhancing Human Security

The Root Causes of the Fires

Although the fires were made worse by the El Niño weather phenomenon, they are not a natural disaster but, rather, the result of human actions and bad policies associated with damaging and unsustainable forestry and plantation development, particularly as related to the production of timber products, such as plywood and pulp, and palm oil. Indonesian companies direct the production of such products and many resort to using fires to reduce costs. Yet these industries do not provide goods for Indonesia's own consumption, but for regional and world markets. Investors, traders, and consumers in ASEAN and the wider Asia Pacific are, thus, implicated in the fires and haze. The impact of Japanese demand for wood and other timber products, for example, is well documented (Dauvergne 1997). So, while sanctions and consumer boycotts may not be welcome, there needs to be greater coherence between economic and environmental policies.

Other causes of the fires include development projects and policies. For example, many of the fires are related to a megaproject to establish rice production in Kalimantan by draining a vast area of peat. This attempt has been criticized as unnecessary, unworkable, and flying in the face of the value of the biodiversity of wetlands. This project led to the drying up of the peat area, which made it more vulnerable to the fires, which, in turn, produced a particularly great deal of smoke haze and climate-changing gases compared to other areas of lighter vegetation or forest.

Development projects are often carried out with assistance from bilateral or multilateral donors. The World Bank has instituted environmental impact assessments for projects that it finances, with some limited success, and has also recently been firm in putting environmental issues on the table in Indonesia's discussions with its donors in the Coordinating Group on Indonesia (CGI). In the interests of putting an end to the fires, a similar approach might well be taken by Japan and the United States prior to extending bilateral assistance to Indonesia.

Opportunities for Cooperation

The ASEAN Cooperation Plan on Transboundary Pollution, as earlier noted, envisages support from such countries outside the region with

expertise in fire management systems as New Zealand and the United States, as well as from institutions like the Japan-based ITTO.

Much of the assistance offered to date, however, has been piecemeal and of doubtful effectiveness, especially in fire-fighting. Moreover, it has been based simply on donor largesse rather than on mutual concern and benefit. A more coordinated approach under the umbrella of the UNFCCC and the Clean Development Mechanism might be of benefit, as might greater environmental awareness in bilateral assistance in the CGI.

But, while there are opportunities for cooperation in Asia Pacific, there is no regional institution to take on a central role. ARF and APEC have, to date, avoided the issue, which they tend to see as outside their respective mandates. Although the environment has figured in APEC statements, there has been a relatively narrow cast to the issues that does not accommodate the fires and haze, and very little follow-up on the environmental issues to which it has given priority.²⁰

In this regard, Asia Pacific is even less well placed to deal with the issue than is ASEAN, for all its limitations. It may well be that a formal Asia Pacific institution or process for the environment in general, or the haze and fires in particular, is not desirable or achievable. The issue and environmental protection as a whole remain relatively sensitive issues for Indonesia and, indeed, most developing countries in the region. There are, therefore, good reasons for Asia Pacific neighbors to defer to ASEAN and Indonesia. Still, support and attention are important and, at the very least, Asia Pacific institutions such as APEC should provide opportunities for semiformal dialogue. The 1999 APEC meeting in New Zealand is a good example of this having occurred, with talks held on the sidelines of the meeting concerning the then-unfolding events in East Timor. Although not part of the formal APEC process, the occasion served as a venue for significant discussions among the assembled leaders.

A more ambitious and potentially more effective mechanism for regional cooperation would be the creation of a regular dialogue on the environment and sustainable development, along the lines of the China Council for International Cooperation on Environment and Development (CCICED). Initiated by Canada and other countries and hosted by China, the CCICED provides a regular forum for dialogue and joint policy research by Chinese and other experts on environmental issues. The results of the work are then given over to high-level Chinese leaders, as high up as the vice premier (Drake 1998). Such political endorsement and focus is valuable since environmental issues often cut across both economic and social policies.

Cross-Sectoral Partnerships in Enhancing Human Security

Following this example, an Indonesian or Southeast Asian international council for the environment and sustainable development might be a useful focal point for discussion, dialogue, and political attention. Like the CCICED, it could aim to bring environmental issues to the attention of the vice-president or even the president. This would serve to raise important concerns above the level of the environment ministry, which is a relatively junior ministry in relation to the powerful financial, agricultural, and forestry ministries.

It is important, perhaps, to note that such a forum would primarily review the needs of environmental protection, and issues such as the haze and actions taken to meet these challenges. It could potentially serve to make best practices and success stories better known, as well as to help better coordinate bilateral and multilateral assistance and other programs. It would be analogous to a CGI, with a particular focus on efforts to promote environmental protection and sustainable development. Such a forum would not necessarily be a conduit for undeserved or harsh criticism, especially since, following CCICED precedent, Indonesia would host the meeting.

Conclusion: Evolving Cooperation in ASEAN and Asia Pacific

The fires and haze in Indonesia affect that country most directly and immediately and so the primary focal point for any solution must be with that country. ASEAN cooperation should supplement actions at the national level. Asia Pacific, standing at a further remove from the problem, might be a tertiary level of assistance and commitment.

Indonesia, ASEAN, and Asia Pacific must, however, be made to support each other. In view of Indonesia's inability and lack of will and capacity to take effective action on the issue, ASEAN has come into greater focus, while the lack of continued attention and concerted effort in the wider Asia Pacific have also increased the burden on ASEAN. Meanwhile, the continuation of the problem has tended to put ASEAN under critical scrutiny, and it has not helped that the issue has come to ASEAN amidst the deepest economic crisis it has known. Discussion of ASEAN and the ASEAN way has become polarized and perhaps simplified, and some suggest that ASEAN will always be what it is today and nothing needs changing. Others stand for radical change and a complete abandonment of the ASEAN norms of the past.

This study argues that, in the field of environmental cooperation, ASEAN is changing and the pace of change is accelerating in response to the crisis of the fires and haze. But the changes are far from radical, being neither widely recognized, nor having a predetermined and agreed end goal and road map. Nor is it certain that the existing changes are sufficient to be effective in addressing the immediate problems of the fires and haze.

Whether one believes these changes to be true to the ASEAN way or to be increasingly taking on board influences, principles, and approaches from the international community and other regions depends on one's interpretation of the ASEAN way and the norms of the environmental community. Some hold that other regions and the international community should prescribe sanctions and strict state accountability for environmental pollution. If so, then what we see in ASEAN today and for the foreseeable future is indeed different, for there are few who believe that ASEAN's cooperation will take on such ideas at the risk of damaging interstate relations; this is especially as, to many, the environment continues to be a peripheral issue, notwithstanding the fires.

Yet, when we look closer at the norms of other regions and international environmental regimes, we see little evidence of such approaches. Instead, we see an increasing emphasis on cooperative measures: carrots instead of sticks. We also see environmental institutions that foster compliance with assistance and reporting mechanisms, rather than penalties and sanctions. From this perspective, the international norms and those of other regions are not so far removed from the ASEAN way. The distance that remains is, however, still significant. An attempt has, therefore, been made in this study to suggest what some of the steps in between might be for ASEAN to adapt—not adopt—international approaches and evolve the ASEAN way toward greater effectiveness in environmental cooperation.

Such cooperation would be expected to evolve first to meet the crisis of the fires, and then might, further down the road, be used to address the fundamental issues of fostering cooperation for environmental protection and sustainable development in the region. A similar hope might be expressed for the wider Asia Pacific: May it evolve its own norms and processes for dialogue.

The international regime for environmental law and policy is still relatively young and evolving. Its modern development can be traced back only to the 1972 Stockholm Declaration. Its international prominence was signified only by the 1992 Earth Summit and, in their development to

Cross-Sectoral Partnerships in Enhancing Human Security

date, environmental law and policy have given hope to many by the principles and approaches they have initiated and often pioneered. The environmental cause has also known considerable frustration, particularly at the slow pace of progress and gaps in implementation.

ASEAN and the ASEAN way are not so old or so fixed. While the association is thirty-four years old, many of its members and initiatives are very recent. There is, therefore, a real need for ASEAN, its norms, and its institutions to change so as to be relevant to the times and their needs. The mode of ASEAN cooperation—the ASEAN way—does not work well in dealing with environmental challenges such as the fires. Yet, efforts to foist international approaches and principles onto ASEAN have so far failed. Perhaps the best hope is that the ASEAN way can evolve and change. Such metamorphosis would have implications not only for the environment, but also for the future shape of ASEAN and cooperation throughout the wider Asia Pacific.

Notes

1. Only the admission of Cambodia was postponed, pending elections to resolve the leadership dispute between rival factions.
2. The right to development is controversial and the declaration was not widely supported among developed donor countries, with the United States among those who voted against the resolution. Principle 3 of the Rio Declaration on Environment and Development is notable for being the first document containing this right, to which both developed and developing countries have agreed.
3. The one treaty that was negotiated among ASEAN members, the Agreement on the Conservation of Nature and Natural Resources, has not been ratified by a sufficient number of members and so is not yet in force. Signed by all six of the then-ASEAN members in Kuala Lumpur, Malaysia, on July 9, 1985, it has only been ratified by three countries, one less than is required to bring the treaty into force.
4. An example of institutional weakness is the fact that the first ASEAN State of the Environment Report was produced largely by the UN Environment Programme, with minimal input from ASEAN.
5. Founded soon after the Second World War, the IUCN has state as well as individual members, making it something between a nongovernmental organization and an intergovernmental institution. It has advised many governments on conservation issues and successfully pushed forward initiatives such as the Convention on International Trade in Endangered

- Species of World Fauna and Flora (CITES), which is one of the most successful international environmental agreements.
6. The agreement was negotiated in 1985 and limited to the six then-members of ASEAN. Newer members have neither negotiated nor signed the agreement.
 7. This section of the chapter draws considerably on the writer's other essays on the fires and haze (notably Tay 1999).
 8. In 1997, fires also broke out in Brunei and parts of eastern Malaysia.
 9. The ASEAN cooperation plan traces its development to ASEAN resolutions, meetings, and strategic plans on transboundary pollution that commenced in 1990. Notably, immediately prior to the adoption of the plan, the Informal Ministerial Meeting on the Environment held in Kuching, Malaysia, on October 21, 1994, recognized the need to control transboundary pollution within the region by treating it as "one eco-system."
 10. As a result of the 1997 fires, Malaysia and Indonesia concluded a bilateral memorandum of understanding for joint operations to deal with disasters of mutual concern, including fires. In 1997, significant numbers of Malaysian fire-fighters were deployed on Indonesian territory. It was, however, reported that they were often underutilized. No similar deployment was arranged in response to the 1998 fires.
 11. While it is too early to prejudge the result, there is a danger that UNEP's offer to outline a treaty on the fires might fall prey to this danger. The study has largely been given over to regional environmental academics with no strong record of understanding other areas of ASEAN activity and cooperation.
 12. The author chaired the international dialogue for NGOs and made the presentation to ASOEN.
 13. The UNFCCC sets an example with its panel of scientific experts.
 14. Following the Singapore Environment Council International Policy Dialogue, the chairman made an official presentation of its recommendations to ASOEN and the Regional Haze Task Force. It was reported that "the NGO's concerns were presented to the ASEAN environment ministers who met here last week to discuss the smoke haze problem. It was the first time NGOs were allowed to participate in an ASEAN meeting" (*Straits Times* 25 July 1998). The policy dialogue had earlier recommended that ASEAN be asked to "institutionalize review of actions taken on the fires by all concerned government officials and, further, to invite expert and concerned international organizations, scientists and academics and non-government organizations for dialogue and review" (University of Freiburg 2001). It also called on ASEAN "to strengthen the capacity of the ASEAN Secretariat, especially in matters concerning the environment and sustainable development" (University of Freiburg 2001).
 15. The literature on the environmental effects of economic investment and industry migration is mixed. Many theorize that there is a race to the

Cross-Sectoral Partnerships in Enhancing Human Security

- bottom in standards to attract foreign investment and trade. Others argue that the actual cost increase resulting from the imposition of environmental standards is small and does not determine investment decisions, which are based on the broader consideration of competitiveness.
16. Both the EU and the North American Free Trade Agreement (NAFTA)—which groups Canada, Mexico, and the United States—have taken environmental factors into consideration in different ways when moving toward greater economic integration.
 17. NAFTA takes a similar approach, thereby avoiding the need to harmonize limits. The OECD Council Recommendations on Principles Concerning Transfrontier Pollution uses a principle of nondiscrimination, according to which states control their transboundary pollution to the same standards as applicable to similar pollution within their borders, and allow private plaintiffs access to their courts for redress, no matter where the damage is suffered.
 18. The normal recourse would be to bring the suit where the damage was done; that is, in the case of the fires, in Indonesia. However, given the difficulty in effectively prosecuting or filing civil suits against polluting companies in Indonesia, there is the temptation to file suit before courts of other jurisdictions.
 19. A different approach would be to allow suits to be filed by Singaporeans in Singapore's courts, notwithstanding the *forum conveniens* rules. This, however, would be adventurous litigation. Such cases would face considerable problems in terms of the jurisdiction of the courts over the defendants, the civil or penal laws invoked, and the proof of illegal acts and causation. Even if successful, there might well be difficulty in effectively enforcing the judgment. At best, filing suit in Singapore would provide an avenue to focus public attention on defendants (Tay 1999).
 20. The declared APEC areas of environmental concern are cities, coastal areas, and environment-related technology.

Bibliography

- Acharya, Amitav. 1999. "Realism, Institutionalism and the Asian Economic Crisis." *Contemporary Southeast Asia* 21(1).
- Acharya, Amitav, and Richard Stubbs, eds. 1995. *New Challenges for ASEAN: Emerging Policy Issues*. Vancouver: University of British Columbia Press.
- Antolik, Michael. 1990. *ASEAN and the Diplomacy of Accommodation*. Armonk, N.Y.: M. E. Sharpe.
- Arogyaswamy, Bernard. 1998. *The Asian Miracle, Myth and Mirage: The Economic Slowdown is Here to Stay*. Westport, Conn.: Quorum Books
- ASEAN. 1995. Cooperation Plan on Transboundary Pollution. <<http://>

- www.aseansec.org/function/env/plan.htm>. (30 January 1999).
- . 1997. Regional Haze Action Plan. <http://www.asean.or.id/function/pa_haze.htm> (5 April 2001).
- . 1998. Joint Press Statement, Third ASEAN Ministerial Meeting on Haze, Brunei, 4 April. <<http://www.aseansec.org/function/prhaze3.htm>.>
- Asian Development Bank. 1997. *Emerging Asia: Changes and Challenges*. Manila: Asian Development Bank.
- Ball, Desmond, ed. 1996. *The Transformation of Security in the Asia/Pacific region*. Portland, Or.: Frank Cass.
- Bennet, Graham, ed. 1992. "Air Pollution Control in the European Community: Implementation of the EC Directives in the Twelve Member States." London: Graham and Trotman.
- Boer, Ben, Ross Ramsay, and Donald R. Rothwell. 1998. *International Environmental Law in the Asia Pacific*. London: Kluwer Law International
- Bora, Bijit, and Christopher Findlay. 1996. *Regional Integration and the Asia-Pacific*. New York, N.Y.: Oxford University Press.
- "Boycott of Haze Fire Firms Next?" 1998. *The Straits Times* (25 July).
- Bragdon, S. H. 1992. "National Sovereignty and Global Environmental Responsibility: Can the Tension Be Reconciled for the Conservation of Biological Diversity?" *Harvard International Law Journal*.
- Broms, Bengt. 1986. "The Nordic Convention on the Protection of the Environment." In C. Flinterman, Barbara Kwiatkowska, Johan G. Lammers, eds. *Transboundary Air Pollution: International Legal Aspects of the Cooperation of States*. Hingham, Mass.: Kluwer Academic Publishers.
- Brown, Frederick Z., and David G. Timberman, eds. 1998. *Cambodia and the International Community: The Quest for Peace, Development, and Democracy*. New York: Asia Society; Singapore: Institute of Southeast Asian Studies.
- Brown Weiss, Edith, ed. 1997. "International Compliance with Nonbinding Accords." *Studies in Transnational Legal Policy*, no. 29.
- Brown Weiss, Edith, and Harold K. Jacobson, eds. 1998. *Engaging Countries: Strengthening Compliance with International Accords*. Cambridge, Mass.: MIT Press.
- Bryant, Raymond L., and Michael J. G. Parnwell, eds. 1996. *Environmental Change in South-East Asia: People, Politics and Sustainable Development*. New York, N.Y.: Routledge.
- Chase, Brian. 1994. "Tropical Forests and Trade Policy: The Legality of Unilateral Attempts to Promote Sustainable Development under the GATT." *Hastings International Comparative Law Review* 349: 374–379.
- Chen, Edward K. Y., and C. H. Kwan, eds. 1997. *Asia's Borderless Economy: The Emergence of Subregional Economic Zones*. St. Leonards, N.S.W.: Allen & Unwin.
- Chia Siow Yue, ed. 1994. *APEC: Challenges and Opportunities*. Singapore:

Cross-Sectoral Partnerships in Enhancing Human Security

- ASEAN Economic Research Unit, Institute of Southeast Asian Studies.
Chin Kin Wah. 1998. "ASEAN Institution Building." In Stephen Leong, ed. *ASEAN Towards 2020*. London: ASEAN Academic Press.
- Churchill, Robin. 1995. "The Contribution of Existing Agreements for the Conservation of Terrestrial Species and Habitats to the Maintenance of Biodiversity." In *International Law and the Conservation of Biological Diversity*. London: Kluwer Law International.
- Da Cunha, Derek, ed. 1996. *The Evolving Pacific Power Structure*. Singapore: Institute of Southeast Asian Studies.
- Dauvergne, Peter. 1997. *Shadows in the Forest: Japan and the Politics of Timber in Southeast Asia*. Cambridge, Mass.: MIT Press.
- Drake, Earl. 1998. "What Can Be Done About the Haze: Possible Lessons from the CICED Experience." Asia-Pacific Roundtable proceedings, ISIS-Malaysia.
- Dudley, Nigel. 1997. "The Year the World Caught Fire." Gland, Switzerland: World Wide Fund for Nature.
- Furmston, John. 1998. "Is ASEAN Out of Its Depth?" *Contemporary South-east Asia* 20(1).
- Gerardin, Damien. 1996. "Lessons from the European Community." In Simon S. C. Tay and Daniel C. Esty, eds. *Asian Dragons and Green Trade: Environment, Economics and International Law*. Singapore: Times Academic Press; Asia-Pacific Centre for Environmental Law.
- Gillespie, Alexander. 1996. "The Malaysian Agenda and Influence on the International Tropical Deforestation Debate." *Asia Pacific Journal of Environmental Law* 25: 40–44.
- Haas, Michael. 1989. *The Asian Way to Peace: A Story of Regional Cooperation*. New York, N.Y.: Praeger.
- Huxley, Tim. 1985. *ASEAN and Indochina: A Study of Political Responses, 1975–81*. Canberra: Department of International Relations, Australian National University.
- Imada, Pearl, and Seiji Naya, eds. 1992. *AFTA: The Way Ahead*. Singapore: ASEAN Economic Research Unit, Institute of Southeast Asian Studies.
- Kao Kim Hourn and Jeffrey A. Kaplan, eds. 1999. *Dynamo or Dynamite? Cambodia's Future in ASEAN*. London: ASEAN Academic Press.
- Keck, Margaret E., and Kathryn Sikkink. 1998. *Activists Beyond Borders*. Ithaca and London: Cornell University Press.
- Koh Kheng Lian. 1995. "ASEAN Agreement on the Conservation of Nature and Natural Resources 1985: A Question of Ratification and Implementation." Conference paper presented at the conference on Environmental Treaties: The Asia Pacific Dimension, Darwin, Australia, 21–22 July.
- , ed. 1996. *Selected ASEAN Documents on the Environment*. Singapore: Asia-Pacific Centre for Environmental Law, National University of Singapore.

- Low, Linda, and Simon S. C. Tay. 1996. "Growth Triangles and Labor in Southeast Asia." In Rajah Rasiah and Norbert von Hofmann, eds. *Liberalization and Labor*. Singapore: Friedrich Ebert Stiftung.
- Mauil, Hanns et al., eds. 1998. *Europe and the Asia Pacific*. London: Routledge.
- Merrill, Thomas W. 1997. "Golden Rules for Transboundary Pollution." *Duke Law Journal* 46: 93–1019.
- Nayar, R. Jayakumar, and David Mohan Ong. 1996. "Developing Countries, 'Development' and the Conservation of Biological Diversity." In Michael Bowman and Catherine Redgwell, eds. *International Law and the Conservation of Biological Diversity* 235. London: Kluwer Law International.
- Revesz, Richard. 1992. "Rehabilitating Interstate Competition: Rethinking the 'Race to the Bottom' Rationale for Federal Environmental Regulation." *New York University Law Review* 67.
- Sandhu, Kernial Singh et al., eds. 1992. *The ASEAN Reader*. Singapore: Institute of Southeast Asian Studies.
- Sik Ko Swan, M. C. W. Pinto, and J. J. G. Syatauw, eds. 1991. *Asian Year Book International Law*, vol. 1. Dordrecht, Netherlands: Martinus Nijhoff Publishers.
- Soesastro, Hadi. ed. 1995. *ASEAN in a Changed Regional and International Political Economy*. Jakarta: Centre for Strategic and International Studies.
- Sucharitkul, Somphong. 1994. "ASEAN Activities with Respect to the Environment." *Asian Year Book of International Law* 3: 317–338.
- Tadem, Eduardo. 1990. "Conflict over Land-Based Natural Resources in the ASEAN Countries." In *Conflict over Natural Resources in South-east Asia and the Pacific*. Singapore: United Nations University Press.
- Taib, Fauziah Mohd. 1997. *Malaysia and UNCED: An Analysis of a Diplomatic Process 1989–1992*. London: Kluwer Law International.
- Tay, Simon S. C. 1997. "Trade and Environment: Perspectives from the Asia-Pacific." *The World Bulletin* 13.
- . 1999. "The Southeast Asian Fires: The Challenge to International Law and Development." *Georgetown International Environmental Law Review* (Winter).
- Tay, Simon S. C., and Obood Talib. 1997. "The ASEAN Regional Forum: Preparing for Preventive Diplomacy." *Contemporary Southeast Asia* 19(3): 252.
- Tay, Simon S. C., and Yeo Lay Hwee. 1999. "Institutionalizing ASEAN and the Asia-Pacific." Paper presented at the ASEAN-ISIS ASEAN 2020 conference (July).
- "The Fires are Back." 1998. *Asiaweek* (18 March): 46.
- Toh Mun Heng and Linda Low, eds. 1993. *Regional Cooperation and Growth Triangles in ASEAN*. Singapore: Times Academic Press.
- United Nations. 1963. *Resolution on Permanent Sovereignty Over Natural Resources*. G. A. Res. 1803, U.N. GAOR, 17th Session, supplement no.17. U.N. Doc. A/5215. New York, N.Y.: United Nations.

Cross-Sectoral Partnerships in Enhancing Human Security

- . 1986. *Declaration on the Right to Development*. G. A. Res. 41/128, U.N. GAOR, 41st Session, supplement no. 53. U.N. Doc. A/41/53.
- United Nations Economic and Social Commission for Asia and the Pacific. 1990. *Report on the State of the Environment in the Asia Pacific*. New York, N.Y.: United Nations Economic and Social Commission for Asia and the Pacific.
- . 1995a. “Trade Prospects for the Year 2000 and Beyond for the Asian and Pacific Region.” *Studies in Trade and Investment*, no. 12.
- . 1995b. *Report on the State of the Environment in the Asia Pacific*. New York, N.Y.: United Nations Economic and Social Commission for Asia and the Pacific.
- University of Freiburg. 2001. “Singapore Environment Council: International Policy Dialogue on the Southeast Asian Fires.” IFFNz No. 19–September 1998. <http://www.uni_freiburg.de/fireglobe/iffn/country/sg/sg_3.htm> (6 April 2001).
- Weatherbee, Donald E. 1989. *ASEAN After Cambodia: Reordering Southeast Asia*. New York, N.Y.: Asia Society.
- World Bank 1993. *The East Asian Miracle*. New York, N.Y.: Oxford University Press.
- World Trade Organization. 1998. *Report of the Panel on United States Import Prohibition of Certain Shrimp and Shrimp Products*. 37 I.L.M. 832.