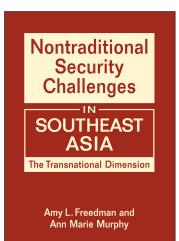
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Nontraditional Security Challenges in Southeast Asia: The Transnational Dimension

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1

Nontraditional Security Challenges in Southeast Asia: The Transnational Dimension

While humanity has succeeded in making great technological advances and life expectancy has skyrocketed over the last half-century, we may again be faced with Malthusian-type problems of food and water insecurity, calamitous consequences from climate change, the rapid spread of new and deadly diseases, and increased migration. There is a clear link between these problems. Climate change is increasing environmental stress by producing more extreme weather and creating wetter conditions in some places and drought conditions in others. This in turn decreases the amount of arable land for agriculture, reducing food availability, raising prices, and negatively impacting food security. Climate change also threatens water security, spurs the spread of conditions leading to increased incidence of disease, and causes new migration patterns. Furthermore, all of these challenges cross state borders, demonstrating that what one country does at home impacts other countries abroad. The transnational nature of these threats means that any effective solution to them requires international cooperation.

Southeast Asia currently faces escalating challenges relating to climate change, food security, water security, migration, and the spread of infectious diseases. This book focuses on these five problems. We ask: What efforts are under way in the region to address these shared concerns? Are regional or international organizations able to facilitate cooperation on these common problems? And why or why not? We find that although states recognize that cooperation would produce better policy outcomes, they often find it difficult to do so because of conflicting interests, concerns over sovereignty, and weaknesses in governance systems within and between countries.

Overview of Transnational Threats in Southeast Asia

Climate change produced by global warming is a worldwide phenomenon that has diverse impacts on countries across the world. According to the US Environmental Protection Agency (EPA), *climate change* refers to any significant change in the measures of climate lasting for an extended period of time such as major increases in temperature, precipitation, and wind patterns.¹ In recent years climate change has primarily been produced by *global warming*, which refers to the ongoing rise in global temperatures caused by increasing concentrations of greenhouse gases (GHGs) in the atmosphere as a result of human activity. The earth's average temperature has risen by 1.5 degrees F over the past century and is projected to rise another 0.5 to 8.6 degrees F over the next hundred years.² Global warming has produced changes in rainfall, droughts, more severe heat waves, melting ice caps, and changes in oceans across the globe.

All Southeast Asian countries are vulnerable to the effects of climate change and, therefore, should have a shared interest in combating it collectively. Rising sea levels threaten to submerge cities such as Bangkok and Jakarta, which are prone to four climate-related hazards: droughts, floods, landslides, and sea-level rise.³ The intrusion of saltwater into Vietnam's agricultural land is reducing productivity and negatively impacting food security. Changes in rainfall have produced droughts, such as the horrific one in the Mekong region in 2015-2016, that threaten water and food security. Rising temperatures have produced new threats from invasive insects such as the caterpillar explosion in Java and Madura in 2011 as well as loss of cultivable land that can lead to further food insecurity.⁴ A key driver of global warming in Southeast Asia is deforestation. In addition to contributing to climate change, deforestation is contributing to loss of biodiversity, which poses problems for indigenous communities who rely on these ecosystems for their livelihoods, and it is producing transboundary haze caused by forest fires on peatland. Given the magnitude of the threat that climate change poses to all Southeast Asian countries, they have a strong interest in working collectively to mitigate it; yet they do not always do so.

The World Health Organization (WHO) defines "food security" as existing "when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life." Food security is built on the three pillars of food availability, access, and use. *Food availability* means that sufficient quantities of food are consistently available. *Food access* refers to affordability, or having sufficient resources to obtain appropriate food for a nutritious diet. *Food use* means having the appropriate knowledge of basic nutrition and care, adequate water, and sanitation to ensure a healthy diet.⁵ Actions taken by governments to ensure food security for their own citizens, such as bans on exporting food, purchases of food for reserves, or incentives for farmers to plant commercial rather than food crops, can threaten the food security of people elsewhere. Finding collaborative solutions to address the basic human need of food security is a critical task.

Many factors and trends are emerging that threaten Asian and global food security. The number of people who are food insecure in Asia has been on the rise. While strong economic growth has bumped a number of states toward middle-income status, a large number of the world's undernourished live in Asia, where India accounts for 43 percent of the undernourished and China for 24 percent. The region's population is projected to increase from 3.6 billion to 4.5 billion people. Most of that growth will occur in urban areas, as the urban population is set to surpass the rural population as early as 2028.⁶ At the same time, there has been a global decline in investment in agriculture, from a 20 percent share of official development assistance for agriculture in 1979, to 5 percent in 2007.⁷ There is also a paradox: economic growth and prosperity are unquestioningly good things; however, as societies become wealthier, they consume more animal products. Thus, there is increased pressure on agriculture to produce food for livestock instead of for human consumption. This can result in increased prices for grains, which further hurts poorer citizens and areas and further strains food supplies.

Southeast Asia is a diverse region that continues to enjoy sustained economic growth and poverty reduction. Yet over 15 percent of Asia's undernourished population lives in Southeast Asia. The region has abundant natural resources and is rich agriculturally, but environmental stresses and changing demographics, lifestyles, and eating habits threaten many key ecosystems and thus pose a threat to future food production. Historically, food shortages have been a result of poor social, economic, and political policies, often combined with environmental problems of drought, floods, and blight that can exacerbate unequal allocation of resources. Today, the most probable cause of food insecurity for millions of people around the world is changing demographics coupled with the effects of climate change. The ability of societies and governments to effectively cooperate to deal with the effects of climate change on food security poses a significant challenge in Southeast Asia.

Water is fundamental to human life, and a country's water security is defined by the following benchmarks. First, household water and sanitation needs are met in all communities. Second, water supplies are sufficient to support productive economies in agriculture, industry, and energy. Third, there is ample water to develop vibrant livable cities and towns. Fourth, healthy rivers and ecosystems are restored. Fifth, communities are resilient and able to adapt to change.⁸ Water insecurity, like food insecurity, results from a combination of environmental factors coupled with poor government planning or misalignment of priorities with longer-term needs.

Despite the perception that Southeast Asia is lush, rainy, and dotted with rain forests, it is water insecure. There are a number of water-related challenges in Southeast Asia: urban flooding, the need for greater water infrastructures to provide citizens with clean drinking water and water treatment capacity, the depletion of groundwater and aquifers, and the shared used of common waterways such as oceans and rivers. Actions taken by the governments, citizens, or businesses in a country can threaten the water security of others. Governments may divert waterways to irrigate their own agricultural areas, thereby reducing the water flow to other countries. Similarly, the decision by upstream countries to build dams on rivers can negatively impact that water flow to downstream countries. Water pollution by private enterprises into lakes, oceans, and rivers can poison the water on which others depend. Finding ways to cooperate and ensure an equitable distribution of such vital resources is a critical challenge in Southeast Asia.

Emerging infectious diseases (EIDs) pose international security threats the world over. EIDs are illnesses that have the potential to inflict harm on humans, crops, and livestock. And they can do significant damage to countries' health infrastructures and overall economies, as the Zika virus demonstrated in Latin America and the Caribbean in 2016 and as the Ebola virus outbreak in West Africa had clearly done to Sierra Leone and Liberia in 2014. Other examples of this were seen with the severe acute respiratory syndrome (SARS) outbreak in Hong Kong and China in 2003, and the Influenza A virus A/HIN1, otherwise known as swine flu, impact on the Mexican economy in 2009 when it was estimated that almost 1 percent of that country's gross domestic product (GDP) was lost due to fears of the virus.⁹

Developing countries, like most of those in Southeast Asia, are more likely to suffer from rapid and deadly disease transmission because of weak public health infrastructures, outdated technology, and a lack of transparency and government accountability. Countries in the region vary greatly in their EID surveillance capabilities and treatment protocols. A highly pathogenic strain of avian influenza (H5N1) poses one of the greatest risks to human health in the region, and how well or how poorly countries have addressed this threat demonstrates the challenges of confronting EIDs in the developing world. H5N1 is spread through both wild bird flocks and farm-raised flocks, and it has a high mortality rate in people infected by it. Some countries in Southeast Asia, such as Malaysia and Singapore, have been successful at detection and prevention of human outbreaks. In contrast, other countries, such as Indonesia and Cambodia, have struggled to keep outbreaks to a minimum. Neither wild birds nor deadly pathogens respect national borders. Therefore, one country's poor response to a disease outbreak not only can threaten its own citizens, but also people in other countries. Thus, it is imperative that there be national and regional efforts to combat H5N1 in Southeast Asia.

The movement of people across borders is a significant transitional issue that holds the potential for both conflict and cooperation. According to the International Organization for Migration (IOM), "migration" is the movement of people across borders or within a state and can encompass refugees, economic migrants, displaced peoples, and people moving for other purposes including family reunification.¹⁰ Southeast Asia has long been a region with a high degree of migration. Famines in China traditionally sent informal exoduses of Chinese to Southeast Asia, and in the colonial era the British imported large numbers of Chinese and Indian workers to their colonies in Burma, Malaysia, and Singapore. Since independence, transnational migration has occurred when populations have been forced from their homes because of state and nonstate violence, or when economic opportunities are vastly better elsewhere. Southeast Asian governments have been sensitive to the security ramifications of refugees and illegal migration because of the potential for racial and religious tensions in the region's multiethnic states. Migration therefore poses a threat to the efforts of political elites to forge social cohesion and political stability.11

In theory, labor migration should be an area for cooperation between states. States like Malaysia and Singapore where labor is scarce can benefit economically by permitting economic migrants from labor-rich countries like Indonesia and the Philippines to work in their countries. Indeed, the mutual benefits at the heart of this exchange form the basis for many bilateral formalized efforts to regulate migration. Capturing these benefits, however, is problematic, particularly when workers and their employers dispute an issue and governments are asked to protect both sides. Similarly, Southeast Asia is home to the Rohingya minority in Myanmar, which the United Nations (UN) has called the most persecuted people on earth. As Rohingyas flee their homeland in search of safety, they often enter other countries illegally. Finding ways to manage the flow of people across borders in a manner that treats migrants humanely without negatively impacting the economic and security interests of other states and their citizens is a key challenge.

Defining Core Concepts

The title of this book refers to transnational threats. We use the term transnational to convey the core essence of these types of problems. Climate change, food and water security, migration, and the spread of disease are all issues that transcend national boundaries. While the globe may be carved up into territories on a map that we call states and while these states may have unique properties and interests, the problems that we address in this book are ones that do not respect state borders. They are issues whose management and resolution require states to act independently at home and collectively abroad. Terms such as nontraditional security, transnational threats, transboundary issues, and human security are often used in reference with climate change, disease, food and water security, and migration. While sometimes used interchangeably, it is important to point out the significant differences between them, and to illustrate why the terms transnational and transboundary best capture the key analytical issue at the heart of this book: the cross-border aspect of these issues that generates the need for international cooperation as well as domestic policy action to effectively respond to them.

Some scholars have argued that the nature of new security threats requires new theories to explain them. We disagree. Our analysis is rooted in core concepts and theories from the discipline of political science, particularly international relations. From the realist perspective, our analysis focuses on national interests, threats, and security to illustrate not only the differences between traditional security threats and transnational challenges, but also the commonalities between them. Liberalism would posit that international institutions should be able to create incentives and opportunities for states to cooperate on common problems. Our study examines why this doesn't always happen and why, instead of seeing states act to provide public goods, we find states acting on behalf of private interests. As part of our discussion of international institutions, we also examine concepts of hybrid and fragmented governance. Hybrid governance refers to public-private partnerships that help promote collaborative solutions to collective action problems while *fragmented governance* recognizes that responding effectively to transnational security issues requires cooperation between many state and nonstate actors. It is not enough to understand how well or how poorly organizations help facilitate cooperation; it is also important to understand relationships among institutions, different layers of government, and nongovernment actors. Involvement of such a multiplicity of players can provide both opportunities and obstacles to cooperation, so we assess the reasons that lead states, institutions, and substate and private actors to work collaboratively on transnational security issues as well as the factors that produce conflict instead. We believe that a rigorous analysis of nontraditional security challenges in Southeast Asia that employs concepts in political science is the most fruitful way to address the key questions posed in this book.

National Interests and Security: Differentiating Traditional from Transnational Threats

All states have national interests that can be divided into three broad categories. First is the physical security of the state, which means protection against externally caused destruction of life and property within the territory of the state.¹² Second is its economic security, which means the economic prosperity and well-being of a country and its people. Third is the state's interest in the preservation of its values, civic culture, and forms of government.¹³ All three of these national interests can be challenged by traditional military action undertaken by other states as well as by the transnational challenges discussed above. Migration, for example, can upset a state's physical security if the people crossing borders are combatants who carry the fighting across state boundaries or seek sanctuary from which to launch cross-border attacks. By imposing costs on receiving countries to house and feed people, migration threatens the economic security of states. Migration can also threaten a country's values and culture when migrants differ from local inhabitants in terms of race, ethnicity, or ideology and challenge the state's social stability, its governing ideology, or both.

In traditional security studies, threats are perceived as emanating from other states and take the form of military violence. Threats are therefore a product of an adversary's capabilities and its intentions. In the Asia Pacific region, North Korea is perceived as the region's most significant traditional security threat because its possession of nuclear weapons, combined with its growing ballistic missile technology, is raising its capacity at the same time that Kim Jong Un's aggressive rhetoric appears to signal that he fully intends to use his power projection capacity.

In this book, threats are considered from the perspective of the state being threatened.¹⁴ Threats have a number of important characteristics that can help us understand the imperative for government leaders to combat them domestically and cooperate with other states to combat them collectively. First is the magnitude of the threat and, second, the probability that the threat will materialize. These two characteristics are often inversely related: the most severe threats can be those least likely to materialize, and leaders must therefore choose whether to respond to potent threats that may not ever occur or to more moderate ones that are more likely to happen. A third characteristic that influences policy is the imminence or timing of projected threats. Government leaders are more likely to respond to eventualities that are forecast to occur in the near term than to ones projected to materialize in the distant future. A fourth characteristic of threats is their tractability; that is, the degree to which they can be managed or eradicated effectively. Threats that are likely to materialize in the near term, and are easily dealt with, are more likely to be the object of government policy than those that are projected to occur in the future and for which there are no easy solutions.

Climate change, water and food scarcity, migration, and pandemic disease all pose significant challenges to Southeast Asian countries, but many of their negative consequences will happen in the longer term, which can reduce the incentives of states to respond to them now. Pandemics from EIDs have a low probability of occurring, but could pose extremely high levels of threat to a state's security and economic and social interests. Finally, many of the challenges posed by these transitional issues are fairly intractable since there are no easy solutions to global warming or threats posed from infectious diseases. All of these factors often make it difficult for governments to respond effectively to transboundary threats in the near term.

Transnational challenges do not pose the same degree of danger to all of the Southeast Asian states. Danger is the product of threat plus *vulnerability*, which can be defined as a susceptibility to injury or loss.¹⁵ The degree of danger that each Southeast Asian state faces from nontraditional security challenges therefore is a function of the magnitude and probability of a threat and the state's vulnerability. Singapore may not be self-sufficient in food, but its wealth enables it to purchase food through trade on the international market. As long as Singapore has access to foreign-produced food, it is not vulnerable to food scarcity, even in times of rising prices or scarcity of basic staples such as rice. In contrast, states with significantly higher rates of poverty are much more vulnerable to food scarcity. Sharp price fluctuations in the rice market or decreases in the availability of basic commodities therefore may pose a danger to Cambodia or Myanmar, but not to Singapore.

The requirement that both threat and vulnerability be present for danger to exist points to two very different ways that states can respond to it. States who feel endangered may respond offensively by attempting to reduce or eliminate the threat itself. With regard to refugees such as the Rohingyas, Southeast Asian countries—in concert with other international actors—are attempting to pressure the government of Myanmar to treat the Rohingyas more humanely in an effort to reduce their incentives to leave Myanmar. If the Rohingyas stop fleeing their homeland, the challenges faced by Thailand and Malaysia will be eliminated. In contrast, states can respond defensively by attempting to mitigate the vulnerability that the threat seeks to exploit. For example, states threatened by sea-level rise produced by climate change can build levies to protect their cities from rising waters.

As Terry Deibel argues with respect to traditional security, "The relationship between interests, on the one hand, and threats and opportunities on the other, is one of the closest and most critical in all strategic thought."¹⁶ We contend that studying the relationship between interests and threats is equally, if not more, important in the study of transitional issues. Recent decades have witnessed a broadening of the phenomena that threaten security beyond traditional military force as well as a deepening below the level of the nation-state to the actors who are negatively impacted. As James H. Mittleman argues,

Nontraditional threats, including climate change, pandemics, transnational crime, and cross-border terror emanate from above and below the nation-state. Thus, there cannot be a neat separation between national and global security. Nor is there a sharp division between internal and external security. Sundry threats at home have extraterritorial dimensions ... national security and global security, often regarded as counterpoints, are becoming a single stream.¹⁷

We agree that capturing the complex dynamics described by Mittleman are important. Too often, however, scholars have simply used adjectives to modify the term *security*, so that terms such as *nontraditional security* are defined in terms of what they are not rather than their core analytical features.

We believe that a close analysis of how the different transnational issues pose threats to the security, economic, and value interests of states and the people living within them best helps us understand the conditions under which governments adopt policies to respond to them at home and engage in efforts to promote strategic cooperation abroad. One of the key contributions of this book is to specify how the five transnational issues that it covers threaten the key interests of the state, its citizens, and the global community. The following analysis of the source and nature of the threats posed by transnational issues and the object being threatened is a step toward achieving this goal.

Comparing Threats and Security: Threats from What and Security for Whom?

When differentiating the transnational issues discussed in this book from traditional security, it is useful to compare them on two key dimensions that yield four distinct categories of security as illustrated in Figure 1.1: (1) the source of the threat, particularly whether it is military in nature; and (2) the object of the threat, particularly whether the state or the people living within it will suffer harm. Traditionally, national security has been defined in terms of external military threats to the state as in Cell 1 of Figure 1.1. Traditional security threats take the form of mobilized violence by one state against another state, as in the Vietnam War. This category of security is the core of realist security studies that equate national security with an absence of war.

In contrast, the source of threats can be military in nature but their object is not the state itself, but societies, groups, or individuals living within them as in Cell 3 of Figure 1.1. Intrastate conflicts, such as civil wars and ethnic conflict, that have grown increasingly common in recent years fall into this category. In the case of both traditional security and intrastate security, the nature of the threat is organized violence

	What Is the Source o		
	Military	Nonmilitary	
	Compreher	nsive Security	
	<u>Cell 1</u>	Cell 2	t
States	National security	Nontraditional security	
	(conventional realist approach to security studies)	(e.g., environmental, health, and economic security)	
Security for Whom?	<u>Cell 3</u>	<u>Cell 4</u>	Degree of Securitization
Societies	Intrastate security	Human security	
Societies, Groups, and Individuals	(e.g., civil war, ethnic conflict, and genocide)	(e.g., environmental and economic threats to the survival of societies, groups, and individuals)	
	<u> </u>	maividuaisj	

Figure 1.1 Types of Security Threats

or military force. However, in contrast to realist notions of security that assume that the security of the state is coterminous with that of the individual, in Cell 3 we recognize that the physical territorial integrity of states and the security of the people living within them are different. In some cases, state rulers may be the principal threat to their citizens, as was the case in the Khmer Rouge in Cambodia and the current attempt by the Myanmar government to cleanse its state of the Rohingyas.

In contrast to military threats, in this book we focus on how nonmilitary or nontraditional threats such as climate change, disease, and water and food security impact national security. Here, the source of the threat is different, but the state remains the salient object of security as in Cell 2 of Figure 1.1. The term *comprehensive security* is often used in recognition that true national security requires protection from both the traditional military threats in Cell 1 and the nontraditional security issues in Cell 2. As Mutiah Alagappa observes, "Comprehensive security implied that the security of a state goes beyond (but does not exclude) the military to embrace the political, economic and social dimensions," all of which can be threatened by transnational security issues.¹⁸ Comprehensive security has also been described in the following terms:

Comprehensive security has two intertwined components: political security on the one hand (with its military, economic and social/humanitarian subcomponents): and environmental security on the other (with its protection-oriented and utilization-oriented subcomponents). To achieve comprehensive human security requires the satisfaction of both the political and the environmental sub-components—neither of these two major sub-components being either attainable or sustainable unless the other is satisfied as well.¹⁹

In Southeast Asia, the term *comprehensive security* has long been used by the region's postcolonial states and the Association of Southeast Asian Nations (ASEAN) in recognition that national security is not only a function of a lack of military conflict, but also socioeconomic development.²⁰ As the Indonesian government stated in 1973, comprehensive security "is an inward-looking concept, based on the proposition that national security lies not in military alliances but in self-reliance deriving from domestic factors such as economic and social development, political stability and a sense of nationalism."²¹ These perceptions were shared by Malaysian prime minister Mahathir Mohamad who stated that "national security is inseparable from political stability, economic success and social harmony," and they have become embedded in ASEAN statements that recognize "that the concept of comprehensive security includes not only military aspects but also political, economic, social and other issues."²²

When we look at issues of food and water security, climate change, the spread of infectious diseases, and migration, we believe (normatively) that states should view these problems as core elements of comprehensive security and engage with them seriously.

If state leaders perceive security in a fully comprehensive manner, then both the traditional and nontraditional issues in Cells 1 and 2 in Figure 1.1 will be perceived as national security threats. Despite the widespread use of the term *comprehensive security* in Southeast Asia, however, we find that states often fail to respond to transnational challenges as if they are threats to national security. Outside of efforts to promote food security when prices of staple goods soar or respond to an EID such as avian influenza, states have not acted as if these issues present challenges to state power and human well-being. A greater focus on comprehensive security can develop through shifting norms and priorities and this can be driven by international organizations.

Cell 4 of Figure 1.1 focuses on how transnational environmental, health, and other threats impact substate actors such as societies and individuals. Recent years have witnessed an increased focus on human security, or threats to the well-being of individuals and groups rather than the political unit to which they belong. In contrast to realist conceptions of security that assume that the security of the state is coterminous with the individual, the concept of human security is rooted in a traditional liberal concern with the rights and welfare of individuals. *Human security* is defined by the UN Development Programme (UNDP) in two parts: "first, safety from such chronic threats as hunger, disease and repression. And second, it means protection from sudden and harmful disruptions in the patterns of daily life—whether in homes, jobs, or in communities."²³ Food and water security, climate change, migration, and the spread of diseases are all problems that pose significant risks for human security across Southeast Asia.

The field of human security has expanded dramatically in recent years as scholars and policymakers have emphasized the welfare of ordinary people and formulated policies to enhance it. Indeed, a human security network among governments and nongovernmental organizations (NGOs) has arisen and many of the UN Sustainable Development Goals are focused on enhancing human security. Proponents of human security argue that the concept of security "has for too long been interpreted narrowly: as security of territory from external aggression, or as protection of nationalist interests in foreign policy or as a global security from the threat of nuclear holocaust. . . . Forgotten were the legitimate concerns of ordinary people who sought security in their daily lives."²⁴ Many scholars working on transnational issues in Southeast Asia have framed their studies in terms of human security. Mely Caballero-Anthony and Alistair D. B. Cook's groundbreaking book, Non-traditional Security in Asia: Issues, Challenges, and Framework for Action, offers a comprehensive discussion of the human security dimensions of climate change, the spread of disease, food security, and transnational issues. All of the examples we discuss here are threats to human security; however, they are not as clearly threats to national security. Government officials may perceive transnational issues as important problems and Caballero-Anthony and Cook's work offers a useful way of thinking about how problems become "securitized." "Securitization" involves several aspects: first, recognizing that an issue poses a significant threat to human well-being; second, according the problem a higher priority among resource imperatives; and, third, acting swiftly and with enough resources to address the problem. Caballero-Anthony and Cook find that, since these problems are transnational in nature, states have attempted to draw closer together to establish institutional and procedural arrangements to respond to these challenges. And they find that there is an increase in engagement between state and nonstate actors across local, national, and regional levels to address the problem.²⁵ We agree that transnational and nontraditional security threats do require these dynamics to take place; however, we find that cooperation is actually quite weak in addressing the problems and that cooperation among different actors within states happens when the more powerful actors (e.g., commercial rice exporters or commercial chicken farmers) want that cooperation to happen. Although countries in Southeast Asia talk a good game when it comes to diplomatic discussions about addressing nontraditional security issues, it is not always evident that governments see these threats as reaching the level of a security threat.

We recognize that the transnational issues examined in this book impact human security and we agree that efforts must be made to improve it. However, the definition of *human security* is broad, and some of the threats included in the definition, including "repression" and "sudden disruptions in the patterns of daily life" can emanate from states rather than the transnational issues at the heart of this book. In terms of our categories, therefore, transnational issues can indeed threaten human security, but so can other states and substate actors.

Furthermore, issues such as food scarcity and climate change do not impact all citizens of a country equally. Instead, people vary in their vulnerability to these threats. Wealthy individuals and groups will be much more immune from food scarcity than those living in poverty, just as the groups living in proximity to forests will be more vulnerable to the impact of deforestation and forest fires than those living far way. Therefore, one of the key questions we ask in this book is: In whose interest does the state act? This is a critical question for analyzing the domestic responses to transnational security issues as well as the prospects for international cooperation to address them.

In countries with governments that do value the security of their citizens, human and national security should be perceived as one and the same. The arrow in Figure 1.1 rising from Cell 4, human security, to Cell 3, nontraditional security, illustrates the extent to which governments equate human security with national security. If governments value the security of their citizens, then we would expect a high level of political will to meet transnational challenges and an investment in public resources to build the capacity to mount robust domestic responses to them. Countries adopting sound policies to respond to EIDs or climate change, in turn, will presumably be good partners for international cooperative efforts to address these challenges. Since transnational issues by definition cross borders, countries have an interest in what their neighbors and the global community more generally do to combat these dangers.

Not all governments act in the broad interests of their citizens. Since transnational issues may threaten some segments of society more profoundly than others, governments must choose in whose interests they will devote government resources and direct government policy. In the case of EIDs and avian influenza specifically, while all citizens may have an interest in freedom from infection, it is the poultry producers who must cull their flocks to reduce the risk of the disease that will suffer the economic costs. These private actors may therefore seek to influence government policy on this issue so as to reduce the costs to them. If such lobbying succeeds, then the poultry producers will have hijacked the national interest in favor of their private interests. If they are unable to influence government policy, the poultry producers may simply fail to comply with regulations that negatively impact them, forcing governments to adopt robust surveillance mechanisms.

Similarly, in the case of climate change, all citizens have an interest in reducing global warming, but those whose livelihoods depend on the forests may oppose efforts to limit deforestation. In such cases, governments must choose whether to act in the broad national (and regional or global) interests or in the interests of smaller segments of society. When efforts to combat a transnational issue require powerful interests to forgo profitable activities, they may be able to pressure governments to refrain from adopting comprehensive policies to respond to transnational issues or frustrate the implementation of those policies. When countries fail to adopt sound domestic policies in the face of transnational threats, they typically are poor partners for international collaborative efforts. To better explicate the conditions under which effective responses to transnational issues may arise, and how they are related to effective international cooperation, we now turn to a discussion of public and private goods.

Transnational Threats and Domestic Politics: Public Versus Private Goods

One of the central functions of government is to provide citizens with public goods that are necessary to promote broad national interests. *Public goods* are defined by two main characteristics: their consumption is nonrival and nonexcludable. The *nonrivalry* characteristic means that one's consumption of a public good does not detract from another person's consumption of the same good. The *nonexcludable* characteristic means that once the good is provided, it is open to consumption by everyone and people cannot be prevented from consuming it even if they did not contribute to the costs of providing it. A classic example of a pure public good is clean air: everyone can breathe it and there is no way to exclude someone from doing so. Another example of a public good is national defense. Public goods are often said to produce positive externalities, which are benefits that accrue to the entire community not simply those who pay for them.

In addition to pure public goods, there are many goods that have been termed *social goods* because, although they provide broad social benefits, they are not fully characterized by nonrivalry or nonexcludability. In the field of public health, for example, all citizens benefit when governments take steps to drain swamps to reduce the mosquito population and therefore reduce the risk of infection from mosquito-borne diseases such as malaria, dengue fever, or the Zika virus. An effort to reduce the mosquito population therefore is a social good, because it is something that all citizens consume. However, because the government must choose which swamps to drain, and in what order, there is a degree of rivalry because those living near swamps designated for draining presumably will benefit more than those living farther away.

In contrast, a country with limited resources may not be able to vaccinate all of its citizens to reduce their vulnerability to contagious diseases or to care for them once infected. In this case, access to vaccination is rivalrous because one's consumption negatively impacts the ability of others to consume that good. In contrast, some goods are rivalrous, but it is difficult to exclude individuals from consuming them in unsustainable amounts. For example, farmers may all benefit from large healthy grazing land but, since it is difficult to build fences around it, herders may overgraze on the land and thereby lead to its overexploitation. Such goods are often called *open pool resources*, and the collective dilemma here is often referred to as the *tragedy of the commons*: everyone would benefit from some limitations on consumption in the short term to ensure the sustainability of the land in the long term, but no private actor has an incentive or the authority to do so.

Public goods differ from *private goods*, which are those produced by individual actors for their own benefit. A farmer's rice is an example of a private good: a farmer can exclude others from consuming it and, once it has been consumed, it cannot be used again. In contrast to public goods from which positive externalities or benefits accrue, the actions of private actors may produce negative externalities, which are the unintended consequences or side effects of actions that are borne by others. A manufacturing plant, for example, may pollute the air or water, thereby reducing the quality of fresh air and clean water of others. A key function of governments, therefore, is to ensure that private actors refrain from imposing negative social costs on the broader community.

Ensuring that public goods are provided in sufficient quantities can be difficult because public goods are those that individual private actors or groups of private actors do not have incentives to provide for themselves. This is often referred to as the *collective action problem*. Everyone has an interest in efforts to eradicate mosquitoes or ensure clean air, but who pays the cost to ensure that these goods are provided? Since individuals, firms, and other private actors cannot be excluded from sharing in the benefits of clean air, they have an incentive to free ride on the willingness of others to provide them. If everyone free rides, then the goods will not be provided in sufficient quantities, even though it is in everyone's interest that this be done. A key responsibility of governments, therefore, is to act in the broad national or public interest and help ensure that collective action problems are overcome.²⁶

Doing so, however, requires that governments define the national interest in ways consistent with the public interest, as in the classic liberal formulation where the national security interest is simply the sum of the individual interests of its citizens. It also requires that governments have the capacity to provide public goods. On key transnational issues in many Southeast Asian states, however, these two conditions may not be met.

In wealthy democratic states, governments have access to resources to provide public goods and there is normally a lively political discussion about how much should be spent on public goods and how the costs of these goods should be apportioned.²⁷ In developing states, the government's willingness and ability to overcome the collective action problem to provide these goods to citizens may be more problematic. Governments often have conflicting priorities. In many countries, powerful private actors may lobby the government to act not in the broad national interest, but in their private interests. Manufacturing firms may oppose government efforts to limit and regulate the pollution-producing activities from which they profit. Governments dependent on powerful private actors for political support may choose to reward their supporters rather than adopt policies consistent with the broad national interest. Similarly, governments in many developing countries have fewer resources to spend on public goods and governments may have weaker capacity to deliver or implement public works projects. In other words, developing countries are often less successful at solving collective action problems.

Food and water security, climate change, the spread of new and deadly diseases, and migration flows all require us to think about public goods in two ways. First, it is the role of government to provide for the well-being of its citizens. This includes the ability of people to be able to feed themselves and their families. It also includes access to water for personal use such as drinking water, sanitation, and agriculture, since in many developing countries rural populations rely on growing crops for at least part of the household's dietary needs. It includes the responsibility of the state to respond to natural disasters such as flooding, drought, and pandemic disease. Many of these needs represent policy choices relating to the provision of public goods where governments have the ability to take action on their own to meet citizens' needs domestically.

Many of the transnational issues discussed in this book, however, create problems that states cannot solve on their own. Governments cannot ensure the water supply for their own citizens living along the Mekong River if a different country upstream builds a dam that changes the water flow, silt, and salinity, which adversely affect the amount and quality of water available in their country. Governments cannot ensure access to staple food crops such as rice if they are beholden to export conditions from other countries; neither can they always protect citizens from the effects of environmental degradation taking place in other countries, or from the spread of a disease outbreak that begins outside their borders.

Just as the actions of private actors may produce negative externalities or public "bads" that require government action at the domestic level, actions taken by public or private sector actors in one country can create negative externalities for other countries. Thus, states need to cooperate with each other to be able to provide these larger public goods and overcome the collective action problem at the international level. International organizations (in this book we use the terms *international organization* and *international institution* interchangeably), have been created, in part, to help provide public goods that states cannot necessarily provide on their own. Thus, the problems discussed in this book need to be understood as part of a larger discussion about the role of international or regional organizations to solve these kinds of collective action problems and to help states improve their ability to provide public goods to their own citizens.

International Institutions, Global Governance, and Cooperation

Questions about cooperation are not new in international relations, but the literature on Southeast Asia and nontraditional security threats is marked by an absence of comprehensive and theoretically grounded work. Addressing transnational threats requires states to overcome the collective action problem which holds that, even when states share common interests in collaboration, they will attempt to free ride on the efforts of others to avoid paying the costs. States therefore have mixed interests, or incentives to cooperate and not cooperate. All states can benefit from *cooperation*, which is defined as "goal directed behavior that entails mutual policy adjustments so that all sides end up better off than they would otherwise be."²⁸ The key question is how to structure incentives so that states perceive that their interests are better served by making the policy adjustments necessary to capture those gains from cooperation.

Institutions play an important role in promoting cooperation between states. The literature on international institutions is voluminous due to their proliferation in recent years.²⁹ For the purpose of analyzing transnational security issues, in this section we focus on identifying the different types of international institutions, the mechanisms by which they help promote cooperation, and how they work with other actors in global governance to overcome the collective action problem.

There is no common definition of institution in the literature.³⁰ Traditionally, international organizations have been conceived as formal institutions whose members are states, which are sometimes referred to as international intergovernmental organizations. An *international organization* can be defined as a formal continuous structure founded by an authoritative instrument of agreement between member states.³¹ Elaborating on this definition, the requirement that an international institution be formal and have continuous structures means that institutions must have a headquarters or international secretariat responsible to the organization, a formal set of rules, decisionmaking procedures, and consultative organizations that meet regularly. This distinguishes institutions from conferences or meetings seeking one-time solutions to immediate problems such as those that produced the agreement between the United States and Japan to release rice at the height of the 2007–2008 rice shortage, which helped resolve the food security crisis at that time.

Authoritative instruments of agreement can take a number of forms, but they are often international treaties ratified by states. Governments of states voluntarily join, contribute financing, and make decisions within the institution. International organizations are identifiable because their purpose, structure, rules, and decisionmaking procedures are clearly specified in a charter or treaty. International institutions can be categorized by the openness of their rule of membership as well as the scope of their purpose. The United Nations is a universal organization because all states can join. In contrast, many organizations restrict membership based on geographic membership, wealth, or other criteria. Membership in ASEAN is open only to the states in Southeast Asia, although it has created offshoots such as the ASEAN Regional Forum (ARF) and the East Asia Summit (EAS) to engage outside actors.

Institutions can also be categorized according to their mission, or the specific issue area they were created to address. Both the UN and ASEAN are comprehensive multipurpose organizations with broad mandates that were originally created to help promote peace. In contrast, the WHO is responsible for addressing international health issues while the Food and Agriculture Organization (FAO) is dedicated to helping ensure sufficient food supplies to combat hunger and food insecurity for a growing global population. Both the WHO and the FAO were created under the auspices of the UN and function as UN specialized agencies, illustrating how existing institutions can help create new ones as well as the recognition that helping to resolve specific transnational issues such as health and food security often requires more focused international collaboration than multipurpose efforts can provide.

Institutions help states cooperate in a number of ways. First, by "extending the shadow of the future," or ensuring that states will interact with one another over time rather than in single transactions, they create prospects for future cooperation and, thereby, help to promote reciprocity and expectations of increasing potential gains from cooperation. They also reward states that develop a reputation for compliance with institutional agreements and penalize those that break them. Second, institutions can increase the amount of information available to states participating in international agreements by creating a framework for the sharing of information. Transparency about the preferences of other actors and more accurate information about the transnational issue at hand makes it easier to identify the benefits of cooperation. In addition, increased information and transparency also make better monitoring possible. Third, institutions can lower transaction costs. By helping to disseminate information, negotiate agreements, and monitor compliance with their rules, institutions enhance the efficiency of cooperation, which makes it more attractive for states.

The extent to which institutions can compel states to act in accordance with the rules and norms of the organization varies tremendously. Countries in the European Union (EU) have ceded sovereignty to the EU in many issue areas, enabling the EU to enforce its laws and rules and compel its member states to uphold their commitments. In contrast, Southeast Asian states guard their sovereignty jealously and have not ceded any supranational authority to ASEAN. ASEAN, therefore, is a much weaker regional organization than the EU. It lacks an effective compliance mechanism which, as this book illustrates, has hampered effective cooperation on transnational security issues in Southeast Asia.

Countries therefore cooperate more successfully when there are robust international or regional institutions to lower transaction costs, create incentives for states to cooperate, and impose penalties for noncompliance. And institutions are more able to do this if there is strong leadership within them. Ideas about what best promotes leadership in international organizations has changed over time. Hegemonic stability theory argues that a single predominant power or hegemon may have the capacity for, interest in, and commitment to a set of ordering principles to shoulder most of the costs involved in solving an international problem.³² Viewing international economic and financial stability as a global public good, Charles P. Kindleberger argues that a hegemon was necessary to ensure financial stability because only a predominant power like Great Britain or the United States had the economic resources, commitment to a liberal international order, and willingness to act as a lender of last resort during financial crises.³³ Similarly, many scholars contend that US hegemony was necessary for the creation of many post-World War II institutions such as the World Bank, International Monetary Fund (IMF), and World Trade Organization (WTO) that promote economic cooperation.

Today, globalization has led to the diffusion of power in the international system as evidenced by the emergence of new powers like China and the relative decline of the United States. Thus, Kindleberger and others argue that institutions could survive after hegemony and the cooperation they foster could persist in the absence of a predominant power.³⁴ As long as countries with an interest in supporting the institution's mission and the capacity to do so work together, cooperation could continue in a more decentralized manner. Consequently, effective institutional leadership is typically a result of the active participation by countries with an interest in collaborative solutions, the capacity to adopt effective policies, and a stake in the issue sufficiently large that their actions can alter outcomes.

In Southeast Asia, Indonesia is the region's predominant power and, consistent with the literature on hegemons and pivotal states, it has played an important leadership role in ASEAN on traditional security and diplomatic issues promoting regional peace and stability.³⁵ On transnational issues such as climate change, migration, and disease, however, Indonesia is often perceived by its neighbors as a source of threat rather than a source of leadership. The haze caused by forest fires threatens regional health security, Indonesian migrant workers in Malaysia are viewed as threats to social stability, and its poor responses to outbreaks of avian influenza threaten regional health security. ASEAN, like the UN, is an intergovernmental organization that has spawned a host of working groups, committees, and expert panels to discuss transnational challenges, develop best practices, and at times outline regional treaties and agreements on them. Indonesia, however, signed the ASEAN Agreement on Transboundary Haze Pollution a decade after other members, and halted some cooperation with the WHO during the height of the avian influenza outbreak. Indonesia has taken a leadership role in pushing for an ASEAN agreement on migrant workers, but its efforts have been opposed by other members. In Southeast Asia, the disconnect between leadership in political organizations like ASEAN and that on transnational security issues hampers regional cooperation.

Changes in the global distribution of power, combined with the rise of new global challenges such as the transnational security issues analyzed here, have meant that promoting cooperation has required states and institutions to collaborate with a broader array of actors to solve global challenges. A key role of international institutions therefore is to foster cooperation among all relevant actors in global governance. Global governance is fundamentally about problem-solving arrangements and activities that states and other actors engage in to address common problems. The Commission on Global Governance defines *governance* as "the sum of the many ways individuals and institutions, public and private, manage their common affairs. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action may be taken. It includes formal . . . as well as informal arrangements that people and institutions have agreed to or perceive to be in their interest."³⁶

International governance is not the same as international government. Domestically, governments have the ability to coerce compliance. Governments have police and courts to enforce laws made by a legislative body. In contrast, global governance, as Emmanuel Adler and Steven Bernstein note, decouples coercive force from legitimate rule making. Institutions and networks may make rules and create norms of behavior, but without the same enforcement power of a state.³⁷ A key challenge in addressing transnational threats such as climate change, food and water security, disease, and migration is finding ways to ensure that states and other actors comply with policies designed to redress them.

Governance therefore requires participation by, and cooperation between, states to meet collective challenges. Effective global or regional governance is predicated on changes in state behavior. This is often a difficult and contested occurrence because it may mean that a state not only must change its own behavior, but also must attempt to enforce changes on private actors. When responding to transnational threats, states often face the dilemma that the most effective collective responses will require them to give up a measure of sovereignty. State sovereignty is an enduring and powerful norm in international relations. As noted earlier, European countries have ceded significant elements of sovereignty to the EU, but Asian states have not been willing to do so. Organizations in Asia such as ASEAN and its many offshoots are profoundly weaker institutions than the EU because Asian states have agreed to participate in these organizations with the express understanding that their sovereignty will be respected, not compromised. Indeed, respect for state sovereignty and noninterference in the domestic affairs of member states are cardinal ASEAN rules. These norms may secure the participation of regional states in organizations like ASEAN but they ultimately may conflict with attempts to create greater governance mechanisms, particularly those requiring compliance mechanisms.³⁸

States may still be the primary actors but promoting collaborative solutions toward transnational security issues increasingly also involves nonstate actors in what scholars term hybrid governance. Hybrid governance occurs when "non-state actors co-govern along with state actors for the provision of collective goods, and adopt governance functions that have formally been the sole authority of sovereign nation-states."39 The increasing participation of nongovernmental actors at the global level is a reflection of the ongoing reconfiguration of world politics as well as the rise of new transnational issues such as climate change. International nongovernmental organizations (INGOs) are key actors in many of the transnational issues analyzed in this book. INGOs are private nonprofit organizations engaged in a variety of activities. Like their state counterparts, they can have a comprehensive multipurpose agenda or a more specific one. They help promote cooperation by defining goals, providing information, and giving advice. They also can pressure governments through direct or indirect lobbying.

Private for-profit actors such as transnational corporations (TNCs), sometimes referred to as multinational corporations (MNCs), also play a role in governance. TNCs are business organizations that have subsidiaries in at least two states and engage in transnational production or extraction activities involving the movement of goods and services across state boundaries. Global pharmaceutical companies that have the technology, funding, and production capacity to produce vaccines can play a critical role in helping to respond to outbreaks of EIDs if they help to develop and produce the necessary vaccines in a timely fashion and distribute them to the countries and people who are most negatively impacted by the EIDs. In contrast, they can engage in beggar-thy-neighbor policies if they demand high profits or otherwise impede the production and distribution of medication to those most directly affected by an outbreak of an EID. Often, states and international organizations work with INGOs, such as the International Red Cross and Red Crescent Movement and Doctors Without Borders, to help meet the challenge of responding to EIDs.40

Effective responses to all of the transnational issues discussed in this book require cooperation between different types of actors-international institutions, states, NGOs, and private actors-at the global, regional, national, and substate levels. Efficacy therefore requires both horizontal and vertical collaboration. In the case of climate change, for example, horizontal collaboration at the global level occurs when states come together under the auspices of the UN Framework Convention on Climate Change (UNFCC) to be apprised of the latest scientific data by the Intergovernmental Panel on Climate Change (IPCC), a group of scientists who provide policymakers with assessments of climate change, its impacts, and its future risks. Based on projections of the negative impacts of rising temperatures, a consensus was reached to aim to limit the rise in global warming to 2 degrees C over the twenty-first century, a goal enshrined in the 2015 Paris Agreement. To induce developing countries to ratify the agreement, which requires all states to submit national climate action plans, richer countries agreed to provide funding to help them implement the action plans. Many nonstate actors were also involved in these negotiations, ranging from INGOs such as the World Wildlife Fund (WWF) and Rainforest Alliance to hundreds of TNCs, many of whom made commitments to lower their carbon footprint.

Once global agreements to combat climate change are made, they must be implemented effectively on the ground and this requires coordination vertically across multiple layers of government. Implementing Indonesia's commitment under the Paris Agreement not only requires national-level policies such as a moratorium on the conversion of forests to agriculture and mining use, but also that this moratorium be implemented by provincial and local-level officials on the ground. Reformist local officials often work with NGOs to monitor activities on forestland by powerful actors such as logging and mining companies that have an interest in evading the moratorium. These NGOs, in turn, often receive training, funding, and equipment such as drones from INGOs with which they are affiliated.

The term *fragmented governance* is often used in recognition of the fact that effective solutions to transnational security threats require vertical and horizontal cooperation between a multiplicity of state and nonstate actors.⁴¹ Fragmented governance refers to the diverse, sometimes overlapping or competing institutions, agreements, and agencies tasked with resolving a specific problem.⁴² Continuing with the climate change example, Indonesia signed a bilateral memorandum with Norway that will provide up to \$1 billion for verifiable reductions in GHGs that produce global warming, it is a member of the multilateral Forest Carbon Partnership Facility, and it recently merged its Ministry of the Environment with the Ministry of Forestry in effort to enhance efficiency and coordination between these two ministries that often had conflicting goals. All of these agreements, institutions, and agencies, and the processes they oversee, must then be coordinated or networked to be effective. Fragmented and networked governance, therefore, are two sides to the same coin.43

Referring to these dynamics as fragmented implies looking at smaller units of analysis or parts of a whole. Attempting to ensure that all commitments Indonesia has made to combat climate change and that the actions taken by the government, NGOs, and private actors work together to reduce GHGs illustrate the need for these activities to be networked or coordinated. The problems that we examine in this book are ripe for looking at fragmented forms of governance and, in each chapter, we do examine how different actors and sets of actors work to cooperate or stymie cooperation on shared problems.⁴⁴

There is no consensus on the consequences of fragmentation for global governance. Fragmentation is a matter of degree and varies among issue areas. In some instances there are positive outcomes, in others negative ones, and in some we find mixed results. Frank Biermann, Philipp Pattberg, Harro van Asselt, and Fariborz Zelli develop a typology of three types of fragmentation: (1) synergistic (when different institutions and actors have overlapping, complementary, and coordinated approaches to solving a problem); (2) cooperative (when institutions and actors work well and cooperate on shared problems); and (3) conflictive (when institutions and actors are hardly connected and have different decisionmaking procedures, conflicting principles, norms, and rules, and different memberships and priorities).⁴⁵ This typology helps differentiate between positive and negative dynamics and their sources.

Examining the impacts of fragmented governance on cooperative efforts on river basins, a key to enhancing water security for riparian states, Neda A. Zawahri and Sara McLaughlin Mitchell find that different factors influence the rise of bilateral versus multilateral agreements on shared (multilateral) river basins.⁴⁶ States are more likely to sign bilateral agreements on shared water, yet the basins are multilateral and an integrated management approached is advocated by environmentalists, international organization theorists, engineers, and water experts. Zawahri and Mitchell also find that treaty types are a product of state interests, transaction costs, and distribution of power of upstream and downstream states.⁴⁷ In a work on cooperation over the Ganges River, the authors find that "the riparians' failure to coordinate their development of the river through a multilateral effort has minimized the gains from cooperation, contributed to inefficient resource use, and resulted in environmental degradation of the basin."48 We reach the same conclusion regarding the impact of fragmentation on efforts to govern the Mekong: there are multilateral frameworks in place for cooperation over the Mekong, but little cooperation exists on water rights and usage. Instead, we find that fragmentation produces conflictive outcomes rather than cooperative ones on the issue of water security.

The strength of the governance networks in each issue area varies tremendously. International organizations, as discussed above, do not always succeed in getting states to cooperate on common problems. Organizations function most effectively when they have strong leadership. Strong leadership, in turn, depends largely on whether the interests of powerful actors are affected by these issues and whether they are willing to devote the time, diplomatic effort, and material resources to formulating solutions to the challenges posed by transnational threats. The extent to which the interests of powerful states are impacted, in turn, depends in part on the extent to which these issues threaten global public goods.

Of the five transnational issues covered here, global warming produced by climate change and the spread of infectious disease are the threats that most clearly impact the interests of powerful actors. Global warming is changing weather patterns throughout the world, producing sea-level rise, changes in rainfall, and extreme weather events that impact all countries, albeit in different ways. Similarly, diseases spread indiscriminately across borders. Wealthy countries with healthy populations, well-developed heath care systems, and an indigenous pharmaceuticalproducing capacity will be better able to respond to threats of pandemic disease, but they are not immune from the threat itself as outbreaks illustrate. The environment and global public health are two issues that most closely approximate global public goods, and we would therefore expect to see robust global governance to promote efforts to overcome the collective action problem and manage them.

Indeed, it is the case that institutions and governance at the global level are strongest in these areas. The UN, as discussed above, is a broad multipurpose organization that has developed many specialized institutions over the decades to help coordinate global governance on all of the issues discussed in this book. Under UN auspices, the UNFCCC has coordinated the response to climate change, which involves not only states but panels of scientific experts, NGOs, and private actors. Similarly, the WHO has promulgated international health protocols that outline the responsibilities of states to report cases of infectious diseases to help monitor their spread and it coordinates activities of national health agencies, private health care providers, and NGOs to help prevent, and if necessary respond to, outbreaks of infectious disease.

There are some international treaties, conventions, and UN agencies responsible for governance on migration and water and food security, but global governance in these areas is not as robust as in climate change and disease because these issues have localized effects rather than standardized ones across the world. With regard to migration, the UN has conventions on refugees and migrant workers, a UN High Commissioner for Refugees (UNHCR), and a well-established set of protocols governing the treatment of refugees. While migration is rising globally, it does not impact all countries equally. Refugees fleeing conflicts and economic migrants seeking opportunities disproportionately impact neighboring countries. As the UNHCR global trend report illustrates, while the influx of migration to Europe from people fleeing conflict in the Middle East and North Africa has garnered global attention, Syria's neighbors harbor far more refugees. The UNHCR has complex rules governing the rights of refugees and a large network of states, NGOs, and private actors assisting them, but the global regime is breaking down in part due to a growing unwillingness of states to offer permanent resettlement to refugees when it is unsafe for them to return to their homelands. Germany took a leadership role on migration by offering to take in 1 million refugees in 2015, but this generated a backlash at home and abroad. Labor migration, in contrast, is typically governed by bilateral agreements between sending and receiving states, with the international conventions playing a small role. Governance on migration is therefore extremely fragmented.

Threats to food and water security pose the most localized impacts and, therefore, have the least developed global governance structures. The UN created the FAO, but efforts to grapple with the threats posed by sharp shifts in the supply and price of staple foods to food insecure countries butt up against the market mechanism and the profits it generates for countries and private actors. With respect to water, the world's oceans are indeed a global public good, and therefore the UN Convention on the Law of the Sea (UNCLOS) is a well-developed body of international laws to govern this part of the global commons. International conventions on transboundary rivers attempt to lay out the rights and responsibilities of upstream and downstream countries, but regional mechanisms to govern water are often more robust. In the case of the Mekong, the Mekong River Commission (MRC) has existed for decades, but its capacity to govern the Mekong has diminished over time as upstream counties build dams that negatively impact downstream countries and China refuses to join. China, as the region's hegemon or predominant power, has the capacity to play a leadership role in forging a cooperative solution to ensure fair distribution of the Mekong's water, but it instead has chosen to promote its own water security by damming the Mekong.

Too often national policies on transboundary security issues, such as the damming of the Mekong by upstream countries, exemplify beggarthy-neighbor policies where countries enact measures to protect their own producers, companies, and citizens at the expense of those outside their borders. The larger effect of these policies can sometimes be a worsening of conditions regionally. While these actions are at times understandable, they illustrate a fundamental problem of international relations. What one country does impacts other countries. For example, when a food exporter decides to reduce or stop exporting that product, it can have dire consequences elsewhere for those who rely on importing that food commodity. Similarly, the burning of forests to clear land for agriculture or commercial plantations not only exacerbates global warming, but pollution from the fires can negatively impact the health and well-being of its neighbors. Cooperation often could make countries better off, but states find it difficult. Cooperation is hindered by a lack of leadership, imperfect information, a lack of regular mechanisms for designing agreements, and variation in the level of interest from states in cooperating on any given issue.

One of the reasons we do not see greater international cooperation is that powerful groups within countries have been able to assert and protect their narrow interests, which are often at odds with efforts for greater cooperation. When powerful political or economic actors favor protectionist policies, or noncooperative behavior, then it is more likely that cooperative efforts will fail. In contrast, when interest groups stand to gain from international cooperation on issues ranging from trade agreements, environmental agreements, transboundary cooperation, or research on emerging infectious diseases, we are more likely to see implementation of policies that will lead to cooperation.⁴⁹

The Plan of the Book

In this book, we analyze each of the five transnational security issues discussed earlier to assess the extent to which there are common or competing interests among the countries and the extent to which there is cooperation or conflict. Each chapter focuses on a key topic within the broader transnational issue and outlines the relevant international, regional, and bilateral institutions, conventions, or protocols that attempt to govern the issue. At the same time, we examine the domestic policy context to assess whether government policy is made in the broad national interests or in more particular ones. We also discuss whether powerful political and economic actors have an interest in cooperation or conflict, and assess the capacity of states to respond effectively to these transnational challenges.

Chapter 2 examines the problem of climate change. In Southeast Asia, deforestation is the largest contributing factor for the region's GHG emissions and Indonesia is by far the largest regional emitter. In this chapter, we therefore focus on Indonesia's efforts to reduce its rates of deforestation and the related issue of preventing and responding to the transboundary haze caused by forest fires on peatland. We begin by examining Indonesia's role in the UNFCCC to illustrate that it has played a key mediatory role between developed and developing countries in climate change diplomacy and has made significant commitments under the UNFCCC. Indonesia's ability to meet its international commitments, however, has been hampered by a lack of technical capacity, poor governance in the forestry and land sectors, and efforts by powerful private actors who benefit from the current system to thwart efforts to improve governance. We analyze these issues by focusing on the government's efforts to implement Reducing Emissions from Deforestation and Forest Degradation (REDD and REDD+), restructure the chaotic governance structure, and enact a strong moratorium on forest conversion. We illustrate that despite significant international support and the threat climate change poses to Indonesia's broad national interest, powerful private actors have been able to stymie effective action, as was made abundantly clear by the 2015 haze. Fragmented governance has been a significant obstacle to better implementation of bilateral and multilateral agreements to address the problem.

Chapter 2 also analyzes efforts to halt the transboundary haze that threatens the public health of Indonesia's own citizens as well as those in neighboring countries, particularly Singapore and Malaysia. The haze is an extreme case of negative externalities, in which the actions of private actors in Indonesia impose tremendous health, social, and economic costs on neighboring countries. In this chapter, we examine the regional conventions created to address the haze, such as the ASEAN Agreement on Transboundary Haze Pollution, which have failed to have an impact on reducing the fires or responding effectively to them. We discuss Singapore's efforts to hold Indonesian plantation owners accountable for their actions, which has triggered only conflict, rather than cooperation, among Southeast Asian states. We then discuss the new and potentially significant measures adopted by the Joko Widodo (aka Jokowi) administration in 2016 in response to the recent haze that, if implemented, could be potential game changers in Indonesian climate change efforts.

Chapter 3 turns our attention to problems of food security. In the chapter, we focus on the rice trade in Southeast Asia to demonstrate how access to food requires cross-boundary cooperation. Rice is a critical crop in Southeast Asia, and an analysis of the problems and possible cooperation over the rice trade demonstrates the larger questions and problems inherent to food security more generally. Malaysia, Singapore, and the Philippines are rice importers.⁵⁰ For Malaysia and the Philippines in particular, rice security is a matter of national security. Both countries are instituting national policies to bolster national production,⁵¹ but they are still reliant on rice imports to fulfill consumer demand. Thailand, Vietnam, and Cambodia are rice exporters. In all three countries, governments are seeking to protect both their own producers from price fluctuations and their own citizens from potential global shortages. In theory, a region characterized by some of the world's largest rice importers and exporters would seem ripe for collaborate efforts to promote food security.

Partly in response to the sharp increase in international food prices in 2007–2008, leaders in Southeast Asia pledged to embrace food security as a matter of permanent and high priority. They adopted a "Statement on Food Security in the ASEAN Region," which commits, among other actions, to the implementation of the ASEAN Integrated Food Security Framework (AIFS) and the Strategic Plan of Action on Food Security in the ASEAN Region (SPA-FS) (2009–2013). This was a five-year strategic plan to assure long-term food security in the region through increased cooperation and mutual help.⁵² These measures could move the region toward greater cooperation on the rice trade, but few steps have been undertaken to operationalize these mechanisms due to the competing interests of rice importers and rice exporters.

Exporters Vietnam and Thailand are contemplating greater cooperation on creating a rice cartel under the umbrella of a regional federation for rice among ASEAN rice-producing nations. The hope is that rice exporters will be able to command higher prices for their farmers if they work together as a group to set prices and control supply.⁵³ Creating a cartel-like situation would benefit suppliers over consumers because of their ability to control prices. Importing countries, such as Malaysia, the Philippines, and Singapore, would like to see as open, transparent, and competitive a market as possible for rice. Since the priorities and preferences are so divergent for importers and exporters, it is hard to envision a situation where greater coordination of rice trade policies will be possible. Cooperation and competition on the rice trade reflect the phenomenon of networked governance. We do see a patchwork of efforts from private and public actors to tackle pieces of this problem. We see bilateral agreements, powerful interest group efforts, some regional cooperation on sharing of information and stockpiling some rice for emergencies, but as of yet no comprehensive collective effort to make sure that there is no repeat of the rice crisis. No comprehensive set of rules and procedures have been developed for exporters. In this case, the fragmented nature of interests and efforts has stymied prospects for greater regional cooperation on food security.

The focus of Chapter 4 on water security moves beyond failures to provide citizens with public goods such as clean water and sanitation delivery, and examines regional efforts to cooperate on shared resources like the Mekong River. Shared by China, Myanmar, Laos, Cambodia, Thailand, and Vietnam, the Mekong is one of the world's greatest waterways. It is used by 60 million citizens (just along the lower Mekong) as their main source of water for drinking, bathing, transportation, and economic livelihoods in the form of water for irrigating crops and for industry. It is increasingly also being used as a source of hydropower with the construction of dam projects in several of the upstream riparian states. The damming of the Mekong by upstream countries such as China and Laos is negatively impacting downstream countries in classic beggar-thyneighbor fashion.

Over the years, a number of international organizations have been created to attempt to govern the Mekong. In 1995, the Mekong River Commission was created to help provide oversight and cooperation on issues ranging from drought and flood management, to agricultural and irrigation needs, to fisheries and the environment, and to hydropower and navigation. At its core, MRC is charged with ensuring the reasonable and equitable utilization of the Mekong's water.⁵⁴ While MRC had some success in studying, mapping, and surveying the river's resources, it is currently facing significant challenges.

First, the MRC members are Thailand, Cambodia, Laos, and Vietnam, with China and Myanmar participating as observers. No organization that fails to include China, the source of the Mekong and hence the country with the largest degree of control over its waters, could alleviate key collective action problems. More critically, dam building by China and Laos on the upper reaches of the Mekong have significantly changed the river's flow and silt. At the 2014 ASEAN-China summit meeting, Chinese premier Li Keqiang proposed the establishment of the Lancang-Mekong River Cooperation Mechanism (LMRC). The organization came into existence quickly, and its stated aims are to promote cooperation and consensus on political security, economics, and sustainable development surrounding the river and its use. However, China has resisted the idea of codifying rules for water use, dam construction, and the like. China did release water in 2016 to alleviate some of the worst effects of the drought in Southeast Asia, but this was a unilateral action and downstream countries have no assurances that water will be forthcoming in the future. Governance of the Mekong has been characterized much more by conflict than cooperation. This may be by design. As work on fragmented governance suggests, when a great power like China prefers to negotiate bilateral deals and the organizations they spearhead tend to be focused on China's trade preferences and weak on enforcement mechanisms and provision of public goods, we are unlikely to see multilateral cooperative results. Biermann, Pattberg, van Asselt, and Zelli's description of conflict arising from disharmonious organizations and priorities match Chinese efforts on the Mekong.55 China has not proposed any agreements on shared water rights and has not offered any codified assurances to downstream states about its intentions for the Mekong.

Chapter 5 looks at the issue of disease and health security through an analysis of efforts to address the emergence of avian influenza in Southeast Asia. Outbreaks in China, Vietnam, Cambodia, Thailand, and Indonesia have triggered concerns about a global health crisis that could start in the region. H5N1 is largely spread through bird flocks, and it is carried and transmitted by both wild birds and livestock flocks. Humans almost always contract the virus from handling sick or infected birds. Effective protocols for preventing disease outbreaks in humans include: quarantining both new birds when introducing them to existing flocks, and quarantining and culling infected birds; sanitary rearing and handling practices, as well as guidelines for safe food handling techniques and preventing consumption of sick birds. While some countries in the region have been effective at instituting and applying such measures (e.g., Malaysia and China have seen rates of transmission fall since 2003), Cambodia, Indonesia, and Vietnam struggled to fully address outbreaks of larger numbers of human cases of H5N1.56

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Reasons for the difficulty in either eradicating the incidence of H5N1 or reducing its frequency are numerous. First, in countries that are not well-off, it is prohibitively expensive to adequately pay farmers to cull sick flocks and to pay them well enough to incentivize them to carry out accepted international protocols for cutting down the transmission of the disease. Second, corruption and local-level political dynamics make it harder to successfully implement national programs in places where local officials may have significant power as in Indonesia and Cambodia. Third, there are domestic political factors such as bureaucratic disagreements on policy and jurisdiction as well as the potential political costs to elected leaders of advocating unpopular policies like flock culling ahead of elections.⁵⁷ In short, failures of political will and capacity hamper effective responses. What we find in looking at how states have addressed H5N1 are examples both of successful networked governance architecture and of failures arising from fragmentation. In Vietnam and Thailand, coordinated efforts and shared priorities from national and local government bodies and nongovernmental actors like poultry farmers and agribusiness interests have produced successful results. In Cambodia and Indonesia, we find conflicting interests and poor coordination among such groups.

Most international work on EIDs is conducted through the auspices of the WHO. The US Centers for Disease Control (CDC) in Atlanta works closely with the WHO around the world in helping to identify and track global pandemics. ASEAN is also working to address EIDs. There are a myriad of existing ASEAN bodies already in operation to address the threat of pandemics, but ASEAN's difficulty in being able to do so lies with the wide capacity gaps in health systems among member states,⁵⁸ and perhaps the lack of willingness to create a regional fund to help poorer countries follow accepted protocols for culling diseased flocks. Chapter 5 demonstrates that ASEAN seems to be making the most progress on the least controversial of these measures such as establishing websites to share information on EIDs (maintained by Indonesia). Countries have not always been forthcoming in sharing information, and compliance with best practices has been spotty at best.

Chapter 6 examines the issue of migration through an analysis of Indonesian migrant workers in Malaysia and the Rohingya refugees. Labor migration should be a source of regional cooperation as laborscarce countries (e.g., Malaysia and Singapore) import workers from countries with surplus labor (e.g., Indonesia and the Philippines). However, in this chapter we find that labor migration triggers conflict when it shifts from being perceived as an economic issue that produces gains for both countries involved to one that becomes defined as a political and security issue in which the interests of sending and receiving states are viewed as threats to one another. Indeed, the issue of migrant workers has become so politically contentious that Indonesia and Malaysia have taken steps to stop it: Indonesia by issuing a ban on female citizens migrating to work as domestic workers and Malaysia by issuing decrees to ban its employers from hiring migrant workers. We find that better domestic governance of migrant workers in both countries could help ameliorate conflict in the relationship, but neither side has been willing to take on powerful vested interests to do so.

Chapter 6 also examines the Myanmar government's persecution of the Rohingyas, which has produced an exodus of people and triggered conflict in Southeast Asia. According to the UNHRC, in 2015—a year which witnessed a record number of stateless people, refugees, and displaced persons—Myanmar ranked as the eighth-largest source country of refugees, with 451,800.⁵⁹ The Rohingyas are viewed as refugees, and should therefore be granted temporary refuge and protection by receiving states under the Convention Related to the Status of Refugees, also known as the UN Refugee Convention. Instead, many Southeast Asian states have adopted beggar-thy-neighbor policies of pushing the Rohingyas back to sea and attempting to avoid paying the social and economic costs of hosting them. The Rohingya issue, therefore, is triggering conflict not only between Myanmar and its neighbors, but also among the Southeast Asian states to which the Rohingyas are fleeing.

In Chapter 6, we ask why countries have had little success in cooperating on issues of migration. There are few regionally specific efforts to address migration, but there are international treaties that aim to impact state behavior. A large number of UN conventions provide guidelines for how various types of migrants—refugees, stateless people, economic migrants—should be treated. However, while refugees and migrant workers may be a global phenomenon, the costs and benefits of migration are much more localized than other transnational issues. Migrant workers from Indonesia and Rohingya refugees from Myanmar have few direct material impacts on these issues outside of humanitarian appeals. As a result, while UN conventions provide statements regarding the universal rights of migrants at the global level, most substantive efforts to address these issues occur at the regional level, whether multilateral or bilateral.

The book's conclusion, Chapter 7, summarizes our findings regarding the relative lack of effective cooperation on transnational security threats in Southeast Asia and offers some explanations on why this is the case. At a basic level, we argue that states find it difficult to cooperate when they are plagued by problems of poor governance domestically that make it difficult to carry out policies to address these problems, when interest groups are more concerned with their own private gain rather than the broader public good, and when regional or international organizations are too weak to promote effective cooperation from member states.

Notes

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14. There is a large body of literature on how states that want to get others to comply with their demands can issue effective threats, but that is outside the scope of this book.

15. Clearly, both threats and vulnerability are necessary to produce danger: vulnerability without a threat cannot create danger, but without vulnerability threats cannot impose costs, and therefore governments have few incentives to respond to it.

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