Testimony
Carter Roberts
President and CEO, World Wildlife Fund

Rebalance to Asia III:
Protecting the Environment and Ensuring Food and Water Security in East Asia and the Pacific

Senate Foreign Relations Committee
Subcommittee on East Asian and Pacific Affairs
July 24, 2013

Mr. Chairman, Ranking Member, and Members of the Subcommittee, thank you for the opportunity to testify before you today. My name is Carter Roberts, and I am President and CEO of World Wildlife Fund US. For 50 years, WWF has been protecting the future of nature. WWF is the world's largest private conservation organization, working in 100 countries and supported by 1.2 million members in the United States and close to 5 million globally. Our unique way of working combines global reach with a foundation in science, involves action at every level from local to global, and ensures the delivery of innovative solutions that meet the needs of both people and nature.

The issues being considered by the subcommittee today – the environmental sustainability and food and water security of countries in East Asia and the Pacific – are of critical importance, not only to the countries in those regions and their citizens, but to all of us. The Obama Administration's rebalance to Asia comes at a time of growing recognition in that region of how the long-term prosperity of most Asian and Pacific countries is tied to wise management of their "natural capital", including their forest, marine, and aquatic systems and wildlife resources.

Such recognition is in part a natural consequence of the region's rapid economic growth. It is common to see increased attention paid to environmental quality and the protection of natural areas as populations become more prosperous. But it is also a response to the increasing degradation of natural resources, which is a byproduct of a growth model that has often paid scant attention to environmental sustainability.

Examples of such degradation abound. We have recently seen another bout of severe haze pollution in Southeast Asia from the use of fire for clearing tropical forests in Indonesia. Overfishing in the marine areas surrounding the "Coral Triangle" countries has led to declining local food security and threatens the most valuable tuna fisheries in the world. In the Mekong Basin, the planned expansion of large-scale hydropower schemes threatens to severely impact Cambodia's freshwater fisheries, undermine water supplies in Lao PDR, and disrupt the rich sediment flows upon which Vietnam depends for its Mekong Delta rice production. Throughout the region, the intensifying impacts of climate change are exacerbating and adding to these challenges. How countries, including the United States, respond to these challenges now and over the next few years will shape Asia's food, water and environmental security for decades to come.

There is much to be concerned about regarding the current state and trajectory of Asia's natural resources and the environmental impact of the region's rapidly growing economies around the globe, and I touch on a number of these concerns below. But there are also many reasons for optimism. I would like to recount a recent conversation I had with President Thein Sein of Myanmar during a recent visit of the President and his cabinet to Washington. WWF had the opportunity to organize a dialogue with the President and senior staff focused on the role of sound renewable resources management in Myanmar's sustainable development. One might think that this issue would be a low priority for Myanmar's President, given the range of difficult issues facing the country. With the country's recent emergence as a fledgling democracy and still nascent integration into the global economy, were prepared to inform the President and his cabinet on the need for Myanmar to wisely manage its rivers, forests, coasts and wildlife in order to create a sustainable economy and ensure the country's food and water security. But President Thein Sein demonstrated a profound understanding of and appreciation for these concepts and expressed his desire to put Myanmar's economy on a development path that takes advantage of the country's impressive natural capital while respecting it and protecting it for the future. He characterized Myanmar's wildlife and other living natural resources as the heart and soul of his nation.

Like other Asian and Pacific leaders, President Thein Sein is seeking advice on how best to achieve truly sustainable development, actively investigating lessons to be drawn from experiences in the United States and other countries that have faced similar challenges. His willingness to devote more than 2 hours of his own time and that of his entire delegation to this subject during their short trip to Washington speaks to this desire and openness.

We have seen similar political will among the leaders of the Coral Triangle countries of Southeast Asia and the South Pacific. Known as the "Amazon of the Seas", the Coral Triangle is the most biologically and economically valuable marine ecosystem on the planet. Encompassing nearly 2.5 million square miles of coastal and oceanic waters in Southeast Asia and the Western Pacific, the region covers just 3 percent of the globe but boasts more than half of the world's reefs, 76 percent of its known coral species and the greatest remaining mangrove forests on the planet. The marine and coastal ecosystems of the Coral Triangle directly sustain the livelihoods of more than 130 million people and contribute an estimated $2.3 billion each year towards the region's economies. The health of the Coral Triangle is also important to global commerce and food security, including here in the United States. Eighty-six percent of the seafood consumed in the United States is imported, with a significant portion originating from the Coral Triangle. The region supports the nursery grounds for the planet's richest tuna fishery, worth over $1 billion annually.

Pressures due to widespread poverty, rapid development and global demands have placed enormous strains on the Coral Triangle's natural resources: over the past 40 years, more than 40 percent of the region's reefs and mangroves have disappeared, leaving many habitats and species vulnerable to extinction. Overfishing, destructive fishing practices and pollution all threaten the future of this precious seascape and its inhabitants. In response to these growing challenges, in 2009 the heads of state of Indonesia, Malaysia, Papua New Guinea, the Philippines, the Solomon Islands and Timor-Leste signed the Coral Triangle Initiative on Coral Reefs, Fisheries and Food

Security (CTI), a landmark agreement to protect the region's marine and coastal resources and manage them sustainably.

These are just a few examples demonstrating Asian and Pacific leaders' growing understanding of and receptiveness to the need to protect nature as the foundation of healthy and sustainable economic growth in their countries. Leaders of the region are looking to make smart choices as they seek to break free of unsustainable patterns of resource use and development. In many cases, they see opportunities to "leap-frog" past the technologies and management systems employed by Western countries, especially with respect to their energy, transport, and telecommunications sectors.

As they confront these sustainable development challenges they need sound advice and are actively seeking to learn from US experience and draw upon US expertise and technology. The US clearly has an important role to play in assisting the region's transition to greener economic development. There are clear opportunities for such cooperation, and there are many effective approaches available to be shared. I would now like to highlight a few key areas that WWF believe to be priorities to ensure the sustainable development of the region and the health and integrity of its environment and biodiversity.

Forests

Deforestation is one of the great environmental challenges facing East Asia, where rates of forest loss in some countries remain among the highest in the world. Pulp and paper production and conversion to agriculture, including to monocultures such as palm oil, are among the greatest threats to the region's forests and associated wildlife and water resources. Illegal logging associated with these industries remains a serious problem in many countries. Earlier this year, WWF released a report[1] on the state of the Greater Mekong Subregion (GMS), consisting of the countries of Myanmar, Thailand, Cambodia, Laos, Vietnam and the Chinese provinces of Yunnan and Guangxi. WWF's report demonstrated that the countries of the GMS (excluding China) had collectively lost nearly a third of their forest cover between 1973 and 2009, with the highest rate (43%) witnessed in Vietnam and Thailand. Large core areas of intact forest capable of supporting local communities and healthy wildlife populations declined across the GMS from roughly 70% in 1973 to only 20% in 2009. If deforestation continues at the same rate, the region risks losing more than a third of its remaining forests by 2030, with only 14 per cent of the forest areas that are left comprising habitats capable of sustaining viable populations of wildlife requiring contiguous forest habitat. On the other hand, the report also demonstrates that, were the GMS countries to adopt a "green economy" framework with a 50 per cent reduction in the annual deforestation rate and no further losses in key biodiversity areas, forest losses could be limited to 17% from 2009 to 2030, core forest patches would remain intact, and all of this alongside continued improvements in human prosperity.

The situation is a similar one in the rest of Southeast Asia. Unsustainable and illegal logging in Malaysia and Indonesia, particularly on the islands of Borneo and Sumatra, threatens the destruction of some of the world's most diverse rain forests and Southeast Asia's last intact forests, as well as the extinction of some of planet's most unique and beloved species, including

[1] Ecosystems in the Greater Mekong: Past trends, current status, possible futures. WWF. 2013.

Sumatran tigers, Javan and Sumatran rhinos, pygmy elephants and orangutans. The clearing, often through burning, of vast areas of rainforest representing huge terrestrial storehouses of carbon is also a main cause of regional air pollution and a significant driver of global climate change.

Borneo and Sumatra (the world's third and sixth largest islands respectively) support diverse ecoregions that house thousands of unique species and massive rivers, which cut across the landscapes and provide freshwater and transportation for the islands' people. Borneo's forests alone are home to more than 600 bird species and 15,000 types of plants, as well as hundreds of indigenous communities that depend on the forests for food and shelter. Only half of Borneo's original forest cover remains due to increased production of palm oil – used in many products purchased every day by consumers around the world, from snack foods to soaps – and unsustainable logging for timber, paper, and pulp. Borneo's rainforests are being rapidly exported and turned into flooring, furniture, and plywood products found on store shelves in the U.S. and elsewhere.

Economic development in Borneo is essential for poverty alleviation, but local communities fail to benefit when major companies clear their rainforests and ignore traditional land rights. Through efforts such as our Heart of Borneo Program, WWF is working with communities, companies and governments to support smart decisions that redirect the expansion of oil palm plantations onto degraded lands, enforce restrictions on the use of fire for land clearing, and set aside forest reserves to maintain local watersheds, support water security and forest livelihoods for surrounding communities, protect Borneo's unique wildlife species and secure the global carbon benefits of that the island's forests provide. All of this can be done while improving land tenure, so that local communities have a clear stake in sustainably managing their forests.

Reducing illegality in the timber trade is essential to ensuring that Asia's forests can survive in the future as both a bastion of biodiversity and the basis of sustainable development. This is an area where the US government has played a critical leading role, both in its leadership with the 2008 Amendments to the Lacey Act and development investments such as through Responsible Asia Forestry and Trade (RAFT), a six-year program funded by USAID and the Department of State designed to improve forest management and bring transparency to the timber trade in Asia while also reducing deforestation and forest degradation. The program spans eight countries in Asia and the Pacific – Cambodia, China, Indonesia, Lao PDR, Malaysia, Papua New Guinea, Thailand and Vietnam – and works with government, industry, inter-governmental organizations, international conservation NGOs (including WWF) and academic institutions to influence public policies and corporate practices. RAFT partners have helped bring nearly 3.2 million acres of tropical forest in Asia and the Pacific under Forest Stewardship Council (FSC) certification, with 4.9 million additional acres on the way. Since 2006, the number of timber concessions has grown from 5 to 59. The program has introduced nearly 1,000 wood manufacturers in six countries to new legality requirements for products exported to the US and EU and helped 20 factories achieve FSC chain of custody certification.

Freshwater

To get a sense of the critical importance of balancing development and conservation in Southeast Asia, one need only look at the Mekong River, the basin which contains one of the most productive and diverse river systems on Earth. Its connectivity and natural variability of flows support exceptional productivity, while sediments and nutrients sustain the landforms, agriculture, and marine fisheries of the Mekong Delta. The Mekong river system supports the world's largest and most productive inland fishery, at least 35 per cent of which depends on migratory species. Despite long-term intensive human use of freshwater resources in the Mekong basin, the system has maintained connectivity throughout most of its area as well as much of its original ecological patterns and processes.

However, the growing need for energy in the Greater Mekong Subregion has led to an unprecedented rate of dam building, with impacts on freshwater ecosystems, the Mekong River's connectivity and flow, and the people that rely on these. Eleven dams are currently planned on the Mekong main stem, and one key concern is the lack of appropriately coordinated planning among decision-makers for the different portions of the basin. Recent controversy has centered on the disputed Xayaburi dam in Laos, which is not the largest dam planned on the main stem, but the approval of which would set a precedent for countries, undermine the Mekong River Commission and herald even more disruptive developments. Models indicate that although the loss of connectivity from existing dams has negatively affected fisheries production in various Mekong sub-basins, declines in productivity to date have not substantially affected overall fisheries output. This will change if planned developments go ahead, with major impacts downstream and on major freshwater resources, including: threatening the rich fisheries of Tonle Sap Lake in Cambodia upon which millions depend for their protein; undermining the water supplies to Lao PDR; and fundamentally altering the nutrient rich sediment flows southward to the Mekong Delta, which support Vietnam's southern rice bowl and recharge the delta to prevent land subsistence.

Decision-makers in the Mekong river basin face a difficult dilemma: Expansion of hydropower in the Mekong River Basin presents enormous economic potential, and could also reduce the sub-region's carbon footprint, but how can countries that share the freshwater resources of the Mekong River profit from a renewable energy source such as hydroelectric power without at the same time degrading the fisheries and ecological services that support at least 60 million people? To produce energy through hydropower, up to 11 new dams are planned for the main stem of the Lower Mekong River alone. Their construction will negatively impact both wild fish populations and the many people who rely on wild fish as their major source of protein. For example, once built, a main stem dam would hinder movements of eggs and young fish downstream to the Lower Mekong floodplains to grow and those of adult fish moving upstream to spawn; harm wild fisheries in Laos, Thailand and Cambodia by flooding upstream spawning grounds and altering nutrient input and replenishment of downstream habitats; reduce sediments and nutrients that build and feed the Mekong Delta's productivity; and degrade the functionality of the whole, interconnected ecosystem and risk exceeding thresholds that could lead to very large and rapid negative impacts. Although dams would bring substantial additional income to the region, they could negatively impact fisheries, increase inequality, contribute to poverty, and have long-term and detrimental environmental impacts.

The question of hydropower on the Mekong is thus a representative microcosm of the larger dilemma facing East Asia and the Pacific – how to accommodate rapid development and support a rising standard of living without fundamentally undermining the environmental systems that are needed ensure the continued health, security and prosperity of the region's people. Other major river systems in the region face similar challenges, and there are opportunities to benefit from lessons learned from experience in the Mekong Basin.

Global Resources and Asian Demand

While these field-based and policy measures are essential, they will not be sufficient on their own. Attention also must be paid to demand-side pressures from these fast growing economies, which are creating environmental challenges not just in the Asia and Pacific region, but globally. Rising wealth and urbanization – particularly in China, Vietnam and Thailand – means that millions are being lifted out of poverty. It also means that these countries have an increasing desire for natural resources from abroad, which can lead to major impacts on ecosystems found far beyond Asia. China's expansion into Africa is well known, and its footprint there is significant and growing. Therefore, China's approach to development and whether or not it chooses to encourage or require that resource extraction be done in a legal and sustainable manner can have a significant bearing on the health of forests and rivers in Africa and around the world.

Rising wealth and a growing middle class in Asia are also putting new and unsustainable pressure on a range of wildlife species, including many that are increasingly threatened with extinction. There is a growing appetite in East Asia for traditional wildlife products, such as carved elephant ivory, rhino horn powder, shark fin soup and tiger bone wine, access to which had until recently been limited primarily to a smaller elite class. Consumption or possession of these products is inherently a sign of status, and as the economic status of millions of Chinese and Vietnamese rapidly increases, many are turning to the purchase of ivory statues and trinkets and fad drugs made from ground rhino horn as a demonstration of their newfound prosperity.

Unfortunately, the effect on these species has been dramatic and swift. In 2011, WWF officially declared Javan rhinos extinct in Vietnam, when the last surviving individual was found killed with its horn removed. With rhino populations critically endangered throughout Southeast Asia, the illegal trade in rhino horn has found its way to South Africa, which is home to 90% of the planets remaining rhinos. In the past five years, the number of rhinos killed illegally in South Africa has risen a shocking 5000% - from just 13 animals in 2007 to 668 in 2012. This dramatic spike has been driven primarily by new demand in Vietnam, where the ground up horn is being sold as a powder that is marketed to the rich and the desperate as variously a fad drug that can prevent hangovers or a miracle cancer cure. Pound for pound, rhino horn powder is selling for more on the market than heroin or gold. There is no medical evidence to support either claim, but that has not stopped those who traffic in these endangered wildlife products from creating a lucrative illegal market for these snake oil cures: pound for pound, the price of rhino horn has now eclipsed the price of gold and heroin on the black market.

In China, it is the demand for ivory has that has risen along with the middle class, with a legal internal market for ivory products (based on previous sanctioned sales of ivory stockpiles) now providing a smokescreen for the laundering of large quantities of illegally poached African elephant ivory. In 2012, the elephant population in Africa was conservatively estimated at 425,000 individuals, a reduction of at least 50,000 since 2007. In 2011 alone, the Convention on International Trade in Endangered Species (CITES) Monitoring the Illegal Killing of Elephants (MIKE) program estimated that 17,000 elephants were illegally killed across the sites that they monitor and extrapolated that this number was likely closer to 25,000 on a continent-wide basis.

Broken down on a regional basis, the situation is even more acute, with Central Africa experiencing the worst declines. Central Africa's forest elephant populations, including those in protected areas, have experienced reductions of more than 80 percent in the last 25 years, and 62 percent in just the past ten years. Between 2004 and 2012, an estimated 11,000 elephants were killed in Gabon's Minkébé National Park alone, representing a population loss of 44 to 77 percent. In early 2012, we saw the worst single massacre on record of African elephants, when at least 350 elephants were slaughtered by gangs of heavily armed ivory poachers in Cameroon's Bouba N'Djida National Park in just a few weeks, reducing the park's population by more than half. And just this past May, a poaching gang managed to infiltrate the Dzanga-Sangha National Park in the Central African Republic, part of the Sangha Trinational World Heritage Site, where they killed at least two dozen elephants.

As would be expected, the rise in illegal killings is mirrored by the rise in seizures of ivory, most of which is intercepted en route from Africa to Asia. From 1996 to 2011, nearly 300 tons of ivory were seized, representing only a small proportion of the total illegal ivory being trafficked. From 2000 to 2011, there were 54 large-scale ivory seizures, and over half of these have occurred in the past three years, pointing to a surge in demand and a harbinger of the expanding participation in the illegal ivory trade by highly organized crime syndicates who see in the illegal trade in endangered species products the promise of vast profits and limited risks, given the dearth of enforcement and the meager penalties associated with it.

The impact on African countries of the Asian demand for wildlife products is not just the rapid extirpation of Africa's unique wildlife. Heavily armed poachers working to feed to the demand for ivory, rhino horn and other wildlife products will frequently kill park rangers tasked with protecting their countries' wildlife, and flourishing wildlife tourism industries, which contribute significantly to the economies of many African countries, are being put at increasing risk by the surge in wildlife poaching as tourist areas become unsafe and the wildlife they have come to see become more and more scarce.

A similar dynamic is playing out in other parts of the world: in wetlands and forests, emptied of rare reptiles and mammals that have wound up as delicacies on Asian dinner plates; and in the world's oceans, where shark species are in rapid decline, largely due to the growing trade in shark fins used to make shark fin soup. The latest research suggests that around 100 million sharks may be killed annually, often targeted for their fins.

The United States has taken a leading role in pressuring countries such as China and Vietnam to curb demand for endangered species products, both through international fora such as the

Convention on International Trade in Endangered Species (CITES) and APEC, as well as through bilateral discussions, including the US-China Strategic and Economic Dialogue and State Department support for technical exchanges between Vietnam and South Africa. The heightened attention recently culminated in the President's newly announced Executive Order on Combatting Wildlife Trafficking, which came as extremely welcome news to us and demonstrates the seriousness with which the illegal wildlife trade is now being taken given the multi-billion dollar criminal market it supports and its strong connections to transnational organized crime, corruption and financing for groups that pose security threats to the US.

We also need to work with individual countries in East Asia and the Pacific to strengthen policies and institutional capacities to address increasing demand pressures on their resources. There are emerging examples, such as China's experimentation with market-based incentives and other policies to encourage use of renewable energy. And in Thailand, Prime Minister Yingluck Shinawatra has shown bold leadership on wildlife conservation with her recent pledge to end ivory trafficking in her country. We need to do more to encourage these smart choices and ensure that Asian and Pacific leaders take a broad and constructive view of how their future development impacts global resources and environmental quality, as well as that in their own countries.

Climate Change

Of course, overlaying all of the environmental and resource challenges facing the Asia and Pacific region is the growing threat of climate change and its impacts on food and water security and essential environmental systems. The Greater Mekong Subregion provides a powerful case study of how climate change will increasingly affect development in East Asia and the Pacific, with impacts on food, water and regional security. The plight of Small Island States in the Pacific captures global sympathy. Several are already actively contemplating future refugee status for their citizens, facing the very real prospect that rising seas will inundate or make uninhabitable their islands in the near future, erasing their cultural heritage and making them stateless peoples. But mainland Asia also faces significant, imminent risks due to climate change.

The Intergovernmental Panel on Climate Change has identified the Mekong Delta as one of the 3 most vulnerable deltas on the planet to climate change impacts, including sea level rise, saline intrusion and increasingly severe storms that promise to erode coastlines and undermine coastal ecosystems. Changes to average temperatures and water availability from precipitation and runoff are also likely to have adverse impacts on the Mekong River and its ecosystems. Temperature changes can affect rates of growth and reproduction for individual species and can also alter species distribution and ecosystem processes, such as nutrient cycling. WWF predicts that climate change impacts will accelerate the extinction of some species, given the high rate of endemism and habitat fragmentation found in the Mekong basin. Changes in the seasonal flow pattern in the Mekong River basin will strongly influence future species composition and ecosystem productivity. Changes in temperature and precipitation in the basin may also affect the very nature of the region's wetlands—vital freshwater systems that are used for rice cultivation and freshwater fisheries, and which help to mitigate floods and erosion.

Sea level rise will have significant negative impacts in the Mekong Delta region because of the delta's high population density, which is supported by productive wetlands and estuaries that are in turn maintained by naturally fluctuating water levels and input of fresh water from the river. These upstream inputs of freshwater deliver much needed nutrients and sediments, which are critical for wetland soils to accumulate and prevent plants from being inundated[2]. Sea level rise and saltwater intrusion threaten to upset this natural balance and undermine the Delta ecosystem. If hydropower development proceeds on the Mekong's main-stem, dams will block sediment that flows southward and rebuilds the delta. As sediment is trapped by dams, the reduction in the amount reaching the river mouth will decrease the capacity of the delta to replenish itself, making it even more vulnerable to sea level rise, saline intrusion and erosion. With nearly a quarter of Vietnam's population located in the Mekong Delta, the combined impacts of the proposed main-stem dams and climate change will pose significant social and economic challenges.

The human consequences of unmitigated climate change on the Mekong are hard to imagine. Projections across the Mekong basin show an array of climate change effects, including a potential sea level rise of a meter by the end of the century. If unaddressed, a meter rise in sea level could submerge more than a third of the Mekong delta, home to 17 million people and source of nearly half of Vietnam's rice.[3] Already, we are witnessing erratic changes in flood patterns in the Mekong and other rivers of the region. Thailand's 2012 growth was all but wiped out by costs associated with its devastating flood. Combined with sea level rise, we can anticipate breakdowns of roads and other infrastructure, leading to the increasing likelihood of economic and social instability. Even the more modest predictions of how the region and its communities, ecosystems and economies may be altered suggest that, without significant steps to reverse course, the humanitarian impacts of accelerating climate change in the Mekong are likely to present new security challenges for both GMS countries and the international community in the 21st century.

Environment and Security

Climate change is the most obvious threat to security of a region that is highly vulnerable to rising seas and extreme weather – Asia has 6 of the 10 countries most vulnerable to natural disasters, with four of them in Southeast Asia, however there are numerous other connections between environmental degradation and regional security. Competition over declining fisheries contributes to resource conflicts in the South China Sea. Much of East Asia's population lives in coastal areas, and Pacific countries fear for their very existence in the face of increasing sea levels, as well as rising temperatures and acidity, which can exacerbate typhoons and droughts and threaten to undermine the marine food chain that supports the regions fisheries. Countries of the region need help to build their climate change resiliency, lest they risk even greater economic losses from disasters and the creation of environmental migrants who could spill across national borders. Improving environmental management also links closely with the promotion of democratic principles such as transparency, vibrant civil societies, and human rights, including access to water supply and indigenous peoples' use of forests.

[2] Mekong River Commission. 2010 "State of the Basin Report: 2010". Mekong River Commission, Vientiane, Lao PDR.
[3] Institute of Strategy and Policy on Natural Resources and Environment (Viet Nam) 2009 "Vietnam Assessment Report on Climate Change (VARCC)"

US Role and Opportunities

All of this reinforces the importance of enhancing US support to leaders in the region seeking to make smart decisions about the management of their environment for local and global benefit. Bilateral programs – through USAID, Millennium Challenge Corporation, State Department, or under targeted partnerships, such as the Comprehensive Partnership with Indonesia, or the Strategic and Economic Dialogue with China – offer good opportunities to cooperatively identify and agree on ways to effectively address environmental considerations in national development. As noted, there is a great receptiveness to and opportunity for US cooperation with Myanmar to ensure that the country finds and follows a green economy path. Bilateral cooperation is complemented by legislative provisions under the Lacey Act and the Tropical Forest Conservation Act, which respectively enhance control of the global illegal wildlife and timber trade, and encourage innovative approaches to financing forest conservation.

Beyond bilateral cooperation, the rebalance to Asia should include increased attention to leveraging regional partnerships and organizations as well as making good use of multilateral mechanisms. Through the Lower Mekong Initiative – and in cooperation with others working to assist countries of mainland Southeast Asia in their development – we need to help ensure that smart choices are made on how to best use and conserve freshwater resources, including through integrated river basin analysis and planning, encouraging ecosystem-based approaches to hydropower development, incorporating schemes to value and monetize the services provided by upstream forests and watershed ecosystems, and factoring in adaptation and resilience strategies for freshwater systems in the face of advancing climate change. Elsewhere in Southeast Asia and the Pacific, the US government – alongside WWF, the Global Environment Facility, the Asian Development Bank, and other partners – has backed the Coral Triangle Initiative through the Coral Triangle Support Partnership (CTSP), a unique consortium of US government agencies and the world's leading conservation NGOs, including WWF. CTI governments are now developing a regional framework for sustainable fisheries management, enforcement and improved management of Marine Protected Areas across the region. CTSP is winding down, and CTI countries are making smart choices regarding management of their marine resources. They continue to need US support. Similarly, the tri-national Heart of Borneo Initiative offers opportunities for improved management of the region's largest remaining rainforest. APEC and ASEAN hold tremendous potential for improving understanding of and cooperation on the greening of economies. Activities supported by multilateral organizations and mechanisms – such as the Global Environment Facility, Climate Investment Funds, and Asian Development Bank – also contribute strongly.

Finally, there remain unrealized opportunities to incorporate environmental provisions into the framework of the Trans-Pacific Partnership (TPP), which just concluded today in Malaysia its 18th round of negotiations. As part of the Executive Order on Wildlife Crime, the President declared that "the United States shall seek to reduce the demand for illegally traded wildlife, both at home and abroad, while allowing legal and legitimate commerce involving wildlife." As implied in this statement, there is an important legal trade in wildlife products – including commodity products such as timber and fish – and this legal trade, which is of great economic value to many countries, including the US, is undermined by illegality throughout the supply

chain. This is why it is critical that international trade agreements, such as the emerging TPP, incorporate strong conservation provisions to ensure that natural resources are legally harvested and traded and developed sustainably in source countries.

Renewable resources and wildlife are highly traded among the twelve TPP partner countries, which represent major producers, exporters and importers of seafood, wood and other goods derived from natural resources. The TPP countries represent eight of the world's top 20 fishing nations, contributing over 28% of the global marine catch, with almost 33% of global fish product imports and 24% of exports. They account for 17% of global shark imports and 28% of global exports by value. They account for 34% of global timber and pulp production and 24% of total trade value worldwide. They also represent significant importing, exporting and transit countries for legal and illegal wildlife products, and some countries, such as Vietnam, are the major global markets for CITES-listed species.

Where natural resources are poorly managed, the demand generated by TPP markets can drive illegal activities and unsustainable practices. This is why the TPP presents the participating countries, including the US, with a unique and important opportunity to promote economic growth in the context of a far-reaching and ambitious 21st Century trade agreement, while also recognizing the fundamental need to sustainably manage natural resources and protect wildlife from illegal trade. If executed along these lines, it can also serve as a strong model for future such agreements.

Conclusion

Mr. Chairman, Ranking Member, and Members of the Subcommittee, I believe that the East Asia and Pacific region – in fact all of Asia – is at a critical juncture with respect to incorporation of environmental considerations into future development. It will be in neither US nor Asian interests for the region to continue with the current model, which has led to severe environmental degradation and depleted natural capital. There is widespread understanding of this among the region's leaders, who strive to make smart decisions regarding sustainable use of their natural assets for the benefit of their people and the planet.

While much is known regarding the principles behind this transition to a more sustainable development path, each country must define its own way. This will require strong engagement from civil society, academia, the private sector, and public sector programs such as those supported by the US Government to ensure that smart choices are made and resources wisely used. It is strongly in the US interest to see that this scenario is realized. If we act together now, the region can lock in a new development model which will lead to continued expansion of its prosperity based in large measure on protecting and enhancing the value of natural capital.