

Creating Mechanisms for Conservation Finance in Southeast Asia

Financial Innovations Lab® Report



September 2015



MILKEN INSTITUTE



Financial Innovations Lab[®] Report

Creating Mechanisms for Conservation Finance in Southeast Asia

September 2015



Financial Innovations Lab® Report

Financial Innovations Labs® bring together researchers, policymakers, and business, financial, and professional practitioners to create market-based solutions to business and public-policy challenges. Using real and simulated case studies, participants consider and design alternative capital structures and then apply appropriate financial technologies to them.

Acknowledgments

We are grateful to those who participated in the Financial Innovations Lab for their contributions to the ideas and recommendations summarized in this report. We would especially like to thank Deloitte for hosting us for the Lab session. Additionally, we would like to thank Milken Institute colleagues Laura Deal Lacey, Heng Wing Chan, Katie Olderman, Belinda Chng, and Nassia Shams for their work on the project. Finally, we would like to thank editor Dinah McNichols for her work on the report.

This report was prepared by Caitlin MacLean.

About the Milken Institute

A nonprofit, nonpartisan economic think tank, the Milken Institute believes in the power of finance to shape the future. The Milken Institute produces rigorous, independent economic research—and maximizes its impact by convening global leaders from the worlds of business, finance, policy, academia, and philanthropy. By fostering collaboration between the public and private sectors, we transform great ideas into action.

©2015 Milken Institute

This work is made available under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License, available at <http://creativecommons.org/licenses/by-nc-nd/3.0/>

TABLE OF CONTENTS

| | |
|---|----|
| INTRODUCTION..... | 1 |
| ISSUES AND PERSPECTIVES | 3 |
| FINANCIAL AND POLICY SOLUTIONS..... | 11 |
| Models to Attract New Funding for Conservation in Southeast Asia | 11 |
| Community Investment Notes (Calvert model)..... | 11 |
| Social/development impact bonds..... | 11 |
| Green/conservation bonds (sponsor or project)..... | 12 |
| Risk-sharing products specifically tailored to conservation | 13 |
| New Policies to Stimulate Investment Into Conservation in Asia..... | 14 |
| Trainings and educational platforms to help bridge the communication gap between the conservation industry and the financial community | 14 |
| Update ESG standards to better incorporate conservation efforts..... | 14 |
| CONSERVATION FINANCE MANUAL | 16 |
| CONCLUSION..... | 19 |
| APPENDIX | 21 |
| ENDNOTES..... | 23 |



Introduction

Conservation of natural resources is one of today's most significant global challenges. Our decisions affect the environment, our communities, and our health. This is especially important in Southeast Asia, where development and growth have contributed to significant habitat destruction, species endangerment and extinction, and the pollution of natural resources.

To address conservation needs, from more sustainable forestry practices to protections for elephants and rhinos, an estimated \$300 billion to \$400 billion must be invested globally each year. Unfortunately, that leaves on average, a shortfall of \$250 billion to \$300 billion, or about 80 percent of the necessary funding.¹ It will take more than traditional donors and governments to bridge this gap—a major shift in funding has to include new potential sources of capital.

Some industry experts suggest that these new investors—such as high net worth individuals (HNWIs), pension funds, endowments, family offices, and mainstream retail investors—could provide \$200 billion to \$300 billion for conservation activities each year.² Unlike traditional grant funding, however, such new investments would be expected to generate returns for their investors. To meet this need, cash flows from generated from investable conservation projects would have to exceed current levels by 20 percent to 30 percent, according to a recent report by NatureVest and EKO Management.³

Conservation finance represents one of the most underdeveloped private-sector investment opportunities for an emerging asset class. Linking together the two sides—the need for conservation funding (demand) and the availability of investments with conservation impact (supply) is critical to enable scalability of both the investment vehicles offered to financial markets and the projects that deliver quantifiable and verifiable financial and conservation impacts.

To this end, the Milken Institute's Asia Center convened a Financial Innovations Lab[®] on February 3, 2015, in Singapore with industry stakeholders, donors, and investors to discuss potential conservation finance models for Southeast Asia. During the daylong workshop, participants reviewed current and potential financing mechanisms, and discussed the barriers to implementing these models in the region.

The discussion led to the prioritization of applicable financing models in order to map out opportunities to engage the widest variety of investors. Social impact bonds, risk mitigation products, fixed-income products, and impact investing funds were all discussed. Participants also outlined recommendations to improve the education and awareness of conservation finance, including technical assistance programs for nongovernmental organizations (NGOs) and improved application of environmental, social, and governance (ESG) screens for investors.



Issues and Perspectives

An inherent tension exists between human development and the use, and often overuse, of the world's natural resources. As societies grow and expand, they build roads and dams, they mine and plant, they establish new industries—often with dire consequences for a region's flora, fauna, and waterways—and to human health.

This is particularly devastating for Southeast Asian communities that have seen massive economic growth over the past few decades, in large part due to industrialization. The region still relies heavily on its natural resources for this growth, and as such, the lack of conservation could translate into stunted economies as those resources dwindle. According to a report by the Asian Development Bank, by the end of this century, South Asia (Bangladesh, Bhutan, India, the Maldives, Nepal and Sri Lanka) may lose 8.8 percent of its GDP from the effects of climate change, including deforestation, pollution, and resource depletion.⁴

The Greater Mekong River basin, for example, which includes area in Myanmar, Thailand, Cambodia, Laos, Vietnam, and China, provides food, water, and in some cases jobs, for nearly 70 million people.⁵ Unfortunately, this massive reliance translates into the destruction of plants, trees, and wildlife. During the 40 years between 1973 and 2009, for example, Vietnam and Thailand each lost 43 percent of their forest area.⁶ In 2014, Indonesia overtook Brazil for the lead in destruction of tropical forests.⁷ Southeast Asia's wildlife have also felt the consequences of development. The region's elephant population has declined by 50 percent; tigers have seen a 70 percent reduction.⁸

To ensure the region's continued economic, social, and environmental growth, efforts are under way from local governments, industry, and international NGOs to conserve natural resources. Conservation activities range from monitoring protected areas and policing against poaching to education, advocacy, training, and field work. Creating industries that complement environmental goals, including sustainable forestry and agriculture, ecotourism, and renewable power generation, has also helped.

Creating a wind turbine farm, however, involves different stakeholders than do efforts to increase the Asian tiger population. Ecotourism has a different market than do sustainable timber products. Because natural resources are involved in so many human activities, their conservation crosses sectors and industries. This diversity also makes it difficult to map out current spending and funding gaps. Many organizations have sought to call the funding of activities "conservation finance." Others use terms like "green investment" or "environmental finance." For the purpose of this report, we will use "conservation finance," defining it as "financial support for the conservation of the world's natural habitats and species."

WHAT'S IN A NAME?

Conservation finance, green investment, environmental finance, sustainable investment

Conservation efforts involve a wide diversity of activities financed through different capital sources. Industry terms for this type of investment also vary. So what is conservation finance? In 2014 the term was defined as follows, according to the sources noted in parentheses:

"... a form of impact investment directly or indirectly into an ecosystem—defined in this case as a collection of habitats and living species—for the long-term conservation of that ecosystem's biodiversity and services" (Association for Sustainable & Responsible Investment in Asia).

"... investments intended to return principal or generate profit while also driving a positive impact on natural resources and ecosystems—specifically, decreased pressure on a critical ecological resource and/or the preservation or enhancement of critical habitat" (NatureVest and EKO Asset Management).

"... a mechanism through which a financial investment into an ecosystem is made—directly or indirectly through an intermediary—that aims to conserve the values of the ecosystem for the long term." (Credit Suisse, World Wildlife Fund, and McKinsey & Company).

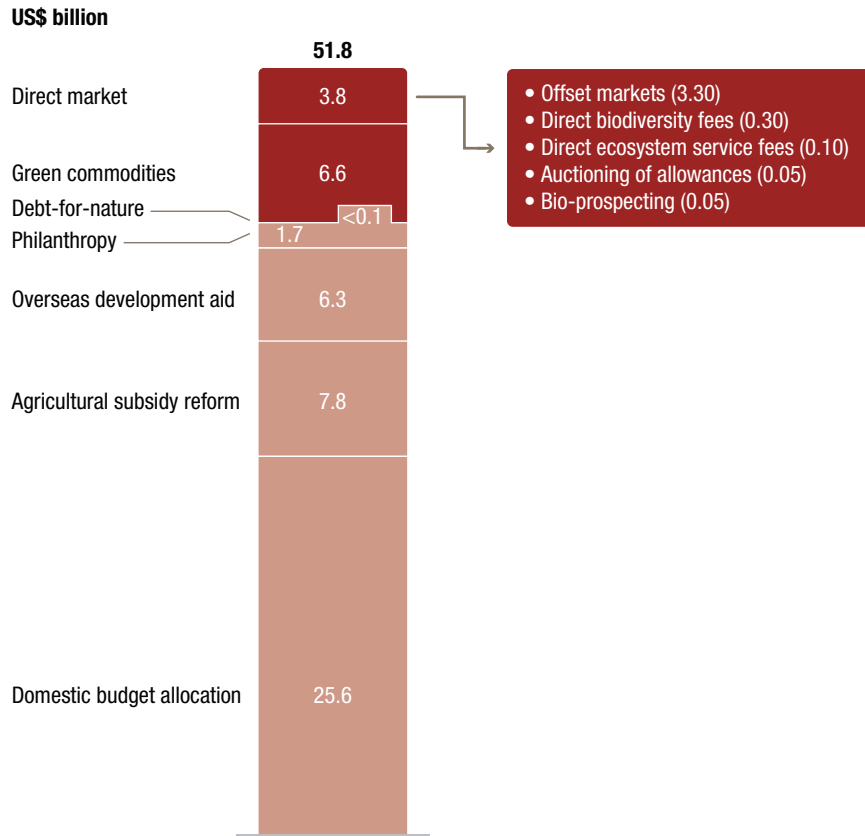
Broadly speaking, the primary funding sources for conservation in Southeast Asia include national and local governments, private corporations, multilateral and bilateral donor agencies, nongovernmental organizations (NGOs), foundations, and payments from fees and concessions. The largest percentage of capital comes from the public sector; governments contribute nearly 75 percent of the total funding for conservation of protected lands.⁹ Multilateral agencies, such as the Global Environment Facility, the United Nations Development Programme (UNDP), the UN Environment Programme (UNEP), and the World Bank, provide grants, investments, and technical assistance to conservation organizations.

Foundations and other private donors, such as the Hewlett Foundation and the Moore Foundation, also contribute grants and investments. Private corporations are often involved in the more market-based activities, such as sustainable agriculture, but corporate philanthropy also supports conservation.

Much of the philanthropic capital for Southeast Asia conservation comes from international organizations and foundations, as opposed to region-based philanthropic entities. Philanthropy in Asia has historically been a challenge because the tax codes in many countries are not as conducive to charitable giving as those in Western countries. Many countries now have philanthropic tax codes, but there are extremely stringent guidelines that vary greatly from country to country. In Bhutan, for example, philanthropic donations are only tax deductible if the donation is made for relief funds for natural disasters, the preservation and promotion of religion and culture, or the promotion of domestic sporting, educational, and scientific activities.¹⁰ Elsewhere, strict regulatory and legal guidelines deter charitable giving. In Bangladesh, the National Board of Revenue must approve all donations, which makes for a lengthy and bureaucratic process.¹¹ China imposes steep mandatory fees (currently \$330,000) for the establishment of a local private foundation.¹²

Today just under \$52 billion per year flows to conservation projects around the globe, although this figure does not include the amount invested directly into ecotourism companies, as this number has proved difficult for researchers to quantify—another instance of the challenges of the conservation market.¹³ For Asia and Oceania (excluding Australia and New Zealand), a mere \$16 billion is spent protecting habitats and waterways.¹⁴ The bulk of this funding comes in the form of grants and government subsidies. Very little of the capital comes through more market-based approaches, such as debt and equity investments. As shown in figure 1, for the global aggregate, only \$6.6 billion comes from investments in green commodities, such as sustainable timber or fisheries. Another \$3.8 billion comes from direct market payments, such as carbon offsets or biodiversity and ecosystem fees. This private-sector participation in conservation is promising, given how new some of the financing mechanisms are. However, it also highlights how much more could be done to achieve equal balance between the public- and private-sector funding.

FIGURE 1 || Global sources of conservation finance



Note: This does not include direct investment into ecotourism companies.
 Source: Global Canopy Program, 2012.

Creating more market-based approaches for conservation finance could open projects and activities to new types of capital beyond traditional government grants or corporate philanthropy. However, not all projects generate revenues, which adds to the challenge of packaging them as opportunities to attract capital sources. For example, education and advocacy to end poaching will never fit into a cash-flow-positive business model and will have to be grant-funded. Another challenge is that the ecosystems, species, and genes that constitute the planet's biodiversity, that make up the world's life-force, are rarely valued for the full set of environmental benefits they provide, but rather for the goods that they supply (eg timber, fish). While valuing an ecosystem's "services" and translating that value into financing have grown in popularity, in large part because of carbon sequestration and carbon credit trading platforms, the economics go well beyond carbon offsets. They also include everything from how species diversification affects agriculture to how genetic variability benefits the pharmaceutical industry, as seen in table 1.

TABLE 1 Valuing ecosystem services

| Biodiversity | Ecosystem goods & services (examples) | Economic values (examples) |
|--------------------------------------|--|--|
| Ecosystems (variety and extent/area) | Recreation Water regulation Carbon storage | Avoiding greenhouse gas emissions by conserving forests: US\$ 3.7 trillion |
| Species (diversity and abundance) | Food, fiber, fuel Design inspiration Pollination | Contribution of insect pollinators to agricultural output: ~ US\$ 190 billion/year |
| Genes (variability and population) | Medicinal discovery Disease resistance Adaptive capacity | 25%-50% of the US\$ 640 billion pharmaceutical market is derived from genetic resources. |

Source: *The Economics of Ecosystems and Biodiversity in Business and Enterprise*. (executive summary), 2010.

If these assets were priced more in line with their underlying value, more market-based financing mechanisms could be created around the potential revenue. Lab participants agreed that payments for ecosystem services could actually revolutionize conservation finance. They also agreed that unlocking this potential valuation could take many years, depending on country and region. Thus, in the interim, it was prudent to map conservation activities that currently have potential in various world markets.

As table 2 illustrates, many of these activities, such as sustainable agriculture and ecotourism, are already effectively priced and structured as investment opportunities within commercial markets. Others, including policy reform, scientific research, and education outreach, will always rely on funding from grants. However, there is significant borderline market that has the potential to produce revenue and reward investors, if the pricing and structuring of the investments more appropriately valued the opportunities.

TABLE 2 | Mapping market potential

| Commercial market | Borderline market | No market |
|--|---|---|
| <ul style="list-style-type: none"> ■ Sustainable agriculture ■ Sustainable forestry ■ Sustainable fisheries ■ Freshwater protection ■ Ecotourism ■ Renewable power generation ■ Restoration of wetlands (from deforestation and forest degradation) ■ Cutting carbon emissions ■ Freshwater export ■ Investing in green businesses ■ Management of supply chains ■ Threatened tree projects (baobabs, lansan tree, rhododendron in China) ■ Conservation consulting for the extractives industries ■ More effective waste management | <ul style="list-style-type: none"> ■ Maintaining and restoring critical habitat (including marshes and swamps, mangrove forests, grasslands, forests, and rainforests) ■ Maintaining and restoring critical habitat for endangered species (rhinos, tigers, lions, vultures, polar bears, penguins, elephants, leopards, wolves) ■ Maintaining and restoring critical habitat for endangered marine species (whales, sharks, manatees, dolphins, fish, etc.) ■ Restoration of wetlands ■ Creation and management of national parks ■ Training to establish protection of endangered species against poaching/trading/trophy hunting ■ Monitoring and evaluation of marine and terrestrial ecosystems | <ul style="list-style-type: none"> ■ Federal and local governmental policy reforms to ban hunting, establish marine/terrestrial reserves, global action plan for conservation ■ Educational outreach to communities ■ Scientific research on existing and newly discovered flora and fauna ■ Promotion of responsible business practices ■ Promoting the reduction of pollution and wasteful consumption |

Source: Milken Institute.

What can be done to better package the commercial market and borderline commercial market activities to meet the needs of investors? If, as has been reported, institutional investors could reasonably deploy \$200 billion-\$300 billion more in capital per year to conservation financing, what is stopping them?¹⁵ Unfortunately, investors respond, there is a shortage of investable projects and opportunities. Green commodities, green bonds, and carbon offsets have been able to attract pension funds, sovereign funds, and insurance companies for three reasons: transaction size, volume, and returns. But given the undervalued economics behind conservation and the lack of revenue potential, it is difficult to create market-driven opportunities from small projects that lack commercially viable business models. A 2014 survey of investors reveals, as shown in table 3, that lack of appropriate risk/return profiles and management experience have significant impacts on investment activity, as do transaction size and concern about exit opportunities.

TABLE 3 || Barriers to investment

| Barriers | Total scores |
|---|--------------|
| Lack of deals with appropriate risk/return profile | 80 |
| Lack of deals with management track record | 36 |
| Difficulty exiting investments | 28 |
| Lack of research and data on products and financial performance | 23 |
| Transaction sizes are too small | 20 |
| Other | 19 |
| Inadequate support from the government (eg subsidies, tax breaks) | 13 |
| Inadequate impact measures | 8 |

Source: NatureVest, EKO Asset Management, 2014.

Additionally, most investors have limited knowledge and understanding of the conservation market, and therefore have few resources with which to vet potential deals. At the same time, biodiversity-rich regions are often areas of political and social turmoil, with high levels of poverty, poor governance, and systemic corruption that can pose significant political and regulatory challenges.

Even so, NGOs and industry leaders that understand the barriers have begun to begin to structure new projects that have greater revenue-generating potential. Conservation finance as an emerging asset class can encompass various forms of commercialization, from ecotourism to sustainable fisheries.

At the same time, many NGOs have been exploring not just capital-market focused models but also hybrid philanthropic-investment models. As table 4 illustrates, these include impact investment funds (funds that look for both financial and social returns) on a relatively small scale, from \$30,000 to \$500,000, as well as social impact bonds, which create commitments between the “outcomes” payer (a government or donor) and private investors who provide upfront capital to fund projects. Both models have resulted in public-sector savings. Unfortunately, these models are uncommon in Southeast Asia. For example, mitigation banking plans, which trade credits for land development and have seen success in the United States, have only recently been developed in Indonesia, and Malaysia.¹⁶

TABLE 4 Existing mechanisms for conservation finance

| Mechanism | Organization | Description |
|----------------------------------|--|--|
| Debt-for-nature swaps | World Wildlife Fund | Created (1987) to relieve the foreign debt burden of developing countries while generating funds in local currency to support tropical forest conservation activities. Capital raised through debt-for-nature swaps can be applied through trust funds or foundations specifically set up to channel funding to local biodiversity conservation. ¹⁷ |
| Impact investment funds | Conservation International | The Verde Ventures investment fund was established (2002) to provide debt financing, from \$30,000 to \$500,000, to small- to medium-sized enterprises with a triple bottom line: environmental, social, and financial. ¹⁸ |
| Conservation notes | The Nature Conservancy | Conservation notes (2012) are an innovative fixed-income financial product for impact investors looking for socially responsible, interest-bearing investment opportunities. ¹⁹ |
| REDD+ and interim forest finance | Fauna & Flora International | The finance facility uses public-sector support to catalyze and scale up private-sector demand for its REDD+ project, Reducing Emissions from Deforestation and Forest Degradation. ²⁰ REDD+ is a market mechanism (2005) that places a financial value on the carbon stored in intact forests, offering incentives for developing countries. |
| Biodiversity/mitigation banking | Various | Biodiversity banking (introduced in the U.S. in the 1970s), similar to REDD+ and other carbon-offset programs, trades credits based on value put on protected land and species. Investors can allocate capital to mitigation banking credit funds, which trade the funds at a higher volume. |
| Rainforest Impact Bonds | Fauna & Flora International, and ADM Capital | Rainforest Impact Bonds (RIBs, 2015) provide a financial structure to direct commercial private-sector investment to finance forest conservation projects where repayment of the capital is tied to the achievement of specified social and environmental outcomes. The bonds would use donor funding to repay the principal once set objectives are delivered, guaranteeing the effectiveness of the donor finance. ²¹ |

Source: Milken Institute

Apart from funding solutions, NGOs have also begun to create incubators and offer other technical assistance programs to help social entrepreneurs create creditworthy business models. At the same time, organizations are exploring metrics that can assess investment-ready projects, both in terms of financial and social impact.



Financial and Policy Solutions

After reviewing the existing mechanisms, as well as the policy reform and capacity building that is improving the field more broadly, Lab participants prioritized the models most relevant for work in Southeast Asia—primarily those that would help NGOs, social enterprises, and small businesses, rather than those that have purely commercial business models, such as sustainable forestry or agriculture.

MODELS TO ATTRACT NEW FUNDING FOR CONSERVATION IN SOUTHEAST ASIA

The new models and potential policy solutions included the following.

Community Investment Notes (Calvert model)

There is nothing new about investing in small businesses that provide services but don't generate substantial revenue. This takes various forms, including venture capital and private equity funds. These types of funds, however, attract qualified investors, that is to say, institutional investors, such as pension funds and insurance companies. Other models can support private business at a more retail level, meaning they attract investors with smaller amounts of money to give.

The Calvert Foundation, founded in 1988, is a U.S.-based grant-making organization. In 1995, with capital given by such foundations as Heron and Rockefeller, it created a retail investment product, the Community Investment Note. The note is a debt product sold in the retail (secondary) market for as little as \$20 and as much as \$1,000. Its rates vary, with a term of one to ten years and a targeted return of somewhere between 0.5 percent and 3.0 percent. More than \$1 billion has been channeled to various small businesses and social enterprises in such areas as affordable housing, female empowerment, and community development.

The Nature Conservancy issued its first conservation notes in 2012. The notes are similar to the Calvert notes in that they are interest-bearing products that, depending on the terms, generate up to 2 percent returns for investors.²² The notes were seeded by foundations like the Packard Foundation and provide loans to programs that focus on conservation of natural resources.²³ The minimum investment is \$25,000, which is substantially higher than the Calvert notes'.

Possible Application to Southeast Asia

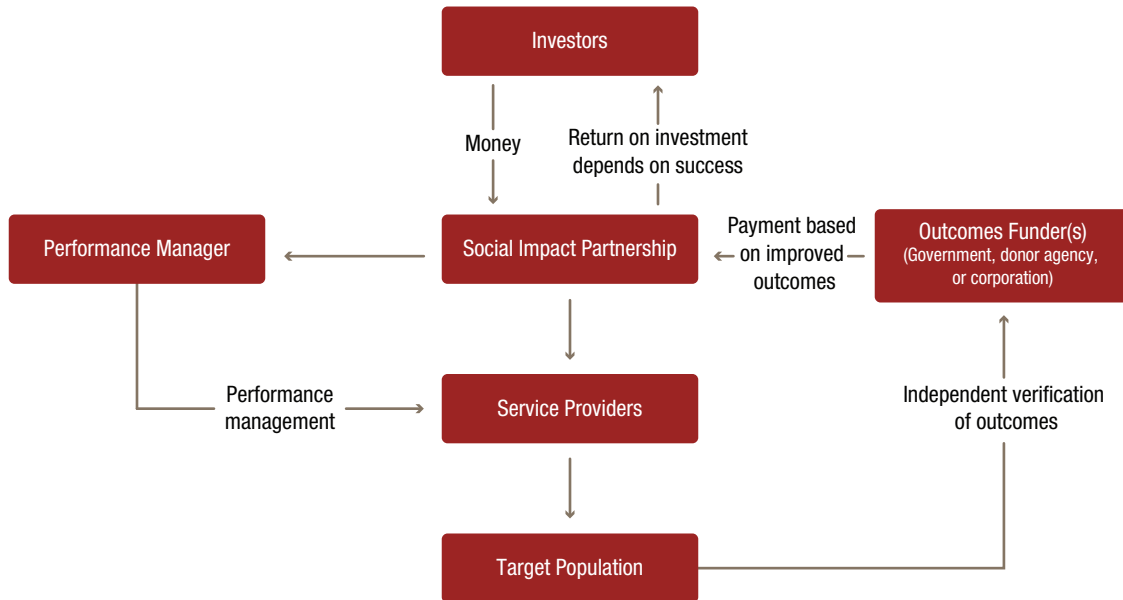
A Southeast Asian foundation could provide seed funding to originate conservation notes to support small businesses that are achieving goals related to the conservation of species or land. This could work with country-specific foundations, if available, or for the region, expanding to all foundations that support Southeast Asian conservation.

Social/development impact bonds

Financing social services has long been the domain of the public sector. However, given fiscal budgetary limitations, there remain gaps in funding. Working with this constraint, in 2010 the U.K.-based organization Social Finance created a financing contract that would shift the upfront cost burden to the private sector, to be repaid by the government or other interested agency. The first social impact bond (SIB) was implemented to help prevent recidivism around a specific U.K. prison. There was a clear linkage between a lower rate of return prisoners and cost savings to the government. Yet organizations that could help meet the recidivism goals were capital-constrained. The bond was sold to the private sector and repaid through the cost savings to the government. However, as seen in figure 2, the government would only pay based on the success of the social organizations. Thus the risk of failure to meet the defined goals was transferred to the private sector. The investors would receive their principal and a designated

level of return, based on the success of the program. In emerging markets, governments may not be able to function as the outcomes payer, given budgetary constraints. As such, a new type of “development impact bond” (DIB) has emerged which could broaden the role of the payer to foundations, aid agencies, or other donors.

FIGURE 2 || A development impact bond model



Source: Social Finance.

NGOs have already begun to create these types of pay-for-performance contracts for conservation projects, including those pertaining to protection of rain forests and certain species. However, its application could work for a wider variety of projects throughout Southeast Asia. Using the economic data regarding paying for ecosystem services (as mentioned in table 1), the development impact bond concept could lend itself easily to various conservation outcomes, especially those that are in the borderline market category (as seen in table 2) because the DIB model does not require cash flows to repay investors, but rather impact measurements and costs savings to the outcome payer.

Application to Southeast Asia

For the conservation of the Indian elephant, a local government could undertake a study to map out the benefits of having a certain population of elephants in its community to drive tourism revenue. The bond could be sold to HNWI, investors and foundations. Foundations could also provide a guarantee of the principal. For example, the Ocean Park Conservation Foundation, based in Hong Kong, could agree to repay a certain part of the principal to investors, to incentivize them to invest. In this scenario, the contracted NGOs and social organizations would have to guarantee the protection of the community’s residents through a variety of interventions, from guarding and security to local education.

Green/conservation bonds (sponsor or project)

The green bond model has been successful in attracting institutional capital to support infrastructure projects considered environmentally positive, including wind and solar power sources. The bond is a “sponsor bond” because its credit rating is based on the issuing institution, not the project it supports. However, this model is limited by the balance sheets of the development banks that are offering credit.

An alternative form of project financing is the project bond, which can be issued by a development bank or a commercial bank, but is based on the specific deal or pool of deals receiving the financing. Therefore, the attractiveness of the bond is based on the creditworthiness or bankability of the project.

Lab participants discussed a hybrid model that would have the principal of the bond guaranteed by the balance sheet of a development finance institution (DFI) but the interest earned based on the success of the project. Similar to a pay-for-performance contract or social impact bond, the return premium would be determined by outcome metrics. Thus, the bondholders would be guaranteed their principal, but not the interest. More work is needed to understand how this would affect the credit rating of such an instrument, given that rating agencies would have to take into account the potential for a default on the interest.²⁴

Application to Southeast Asia

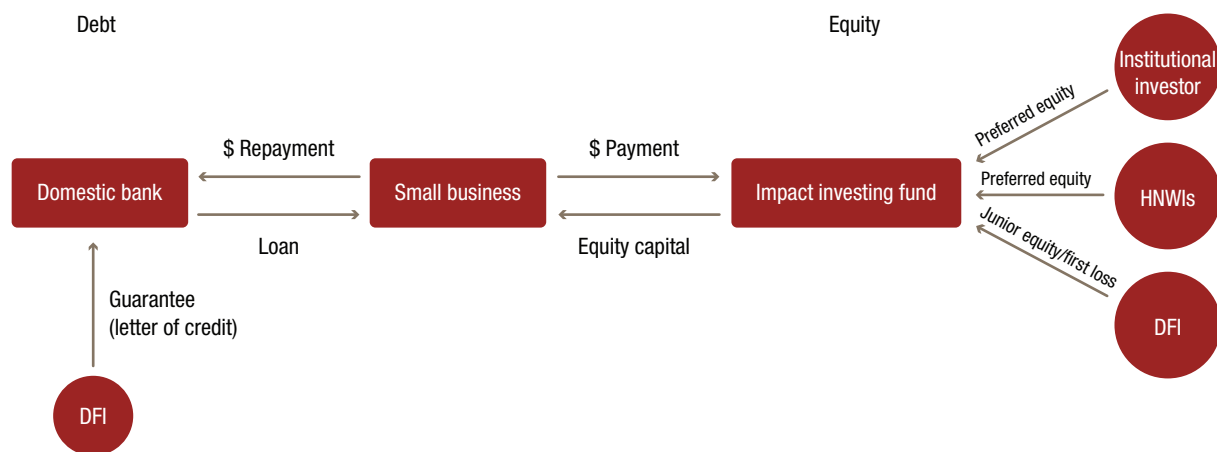
The Asian Development Bank could work with a portfolio of conservation companies and organizations to create performance metrics that would become the basis of the interest repayment for bonds the bank issued. These could focus on a specific country or region, or on a specific conservation goal, for example protecting the water resources of the Mekong River.

Risk-sharing products specifically tailored to conservation

Development finance institutions offer a variety of products to companies and investors working in emerging markets to help facilitate capital flows. These include political risk insurance, credit guarantees, and first-loss funds, all of which can help lower capital costs for projects that would otherwise be considered too risky to attract global institutional investors. However, lab participants noted that these tools have only been used for the larger-scale, more commercial activities within conservation, such as sustainable timber, carbon sequestration, and renewable energy. Once the pipeline of investable projects is more robust (and includes many of the small businesses that work in the borderline market area), donor agencies or foundations could potentially create risk-sharing products for funds that pool the investments to reach the scale needed to qualify for such a guarantee.

As seen in figure 3, the guarantees could either provide banks with letters of credit to provide discounted debt capital or first-loss, or junior, equity capital in impact investing private equity funds.

FIGURE 3 || Debt and equity guarantees



Source: Milken Institute.

Application to Southeast Asia

The Asian Development Bank could create a guarantee program for loans or investments targeting conservation. This could include credit guarantees for loans to small businesses, or first-loss capital for equity funds that invest in conservation activities.

NEW POLICIES TO STIMULATE INVESTMENT IN CONSERVATION IN ASIA

Many of the financial models listed above would only be successful with certain market-shaping policies and programs in place. Lab participants agreed that the activities currently outside the commercial market must be further developed to create a more robust pipeline of investable projects, whether at a micro or larger scale. Many of the recommendations coming from the lab, therefore, are focused on better integrating finance into the conservation community and vice versa.

Trainings and educational platforms to help bridge the communication gap between the conservation industry and the financial community

One of the major challenges with transitioning conservation organizations from a grant-based to investment-based model is the lack of financial literacy. Even when an organization or project has the potential to generate profit, internal capacity issues often hinder the development of a business model that can explain the opportunity to investors in their language.

Lab participants discussed potential options for training programs that could be funded by donors, such as foundations or development banks. They could also become part of a collaboration with commercial banks or corporate partners, as part of their philanthropy. Participants mentioned fellowship programs, or sponsored degree and certificate programs, to better integrate finance into the work teams within NGOs.

Update ESG standards to better incorporate conservation efforts

Many banks and investors use environmental, social, and governance (ESG) standards when conducting business. What constitutes ESG principles is subjective to different investors, but the concept is increasingly attractive. To formalize the effort, the United Nations created the Principles for Responsible Investment (PRI), which support the use of ESG in investment strategies for major institutional investors and investment banks. The initiative currently has nearly 1,400 signatories, including Goldman Sachs and the California State Public Employee Pension Fund, which agree to incorporate ESG into their strategy.²⁵ And yet the ESG standards, which grew in popularity after the 1970s and the 1980s, when investors began to divest their portfolios of companies that were ethically suspect, could be updated to bring more attention to conservation and the areas that are directly related, such as agriculture. This is especially challenging for the “E” of ESG, because the environmental challenges continue to evolve as human activities affect the world’s natural resources. Lab participants suggested a new update to the ESG protocols, to better integrate conservation efforts into the metrics.

As seen in table 5, the ESG guidelines currently incorporate various activities that could impact the environment. However, they do not rank companies against considerations such as species extinction.

TABLE 5 ESG guidelines

| Area of focus | Activity | Potential impact on financial performance |
|-----------------------------|--|--|
| Environment | | |
| | Resource management and pollution prevention | Avoid or minimize environmental liabilities |
| | Reduced emissions and climate impact | Lower costs/increase profitability through energy and other efficiencies |
| | Environmental reporting/disclosure | Reduce regulatory, litigation, and reputational risk Indicator of well-governed company |
| Social | | |
| | Workplace | Workplace |
| | Diversity | Improved productivity and morale |
| | Health and safety | Reduce turnover and absenteeism |
| | Labor-management relations | Openness to new ideas and innovation |
| | Human rights | Reduce potential for litigation and reputational risk |
| | Product integrity | Product integrity |
| | Safety | Create brand loyalty |
| | Product quality | Increase sales based on product safety and excellence |
| | Emerging technology issues | Reduce potential for litigation Reduce reputational risk |
| | Community Impact | Community Impact |
| | Community relations | Improve brand loyalty |
| | Responsible lending | Protect license to operate |
| | Corporate philanthropy | |
| Corporate governance | | |
| | Executive compensation | Align interests of shareowners and management |
| | Board accountability | Avoid negative financial surprises or “blowups” |
| | Shareholder rights | Reduce reputational risk |
| | Reporting and disclosure | |

Source: ESG Managers.

Various conservation NGOs, including the World Wildlife Fund and the Wildlife Conservation Society, have worked with banks and institutional investors to improve programs for ESG monitoring. However, Lab participants agreed that an update to the standards and their governance is needed to include more sophisticated conservation outcome metrics—to not just address climate change, but to better represent all resource depletion.

Conservation Finance Manual

At the conclusion of the Lab, participants agreed that in addition to better education and metrics, conservation finance could also benefit from a “how-to manual” that would present the opportunities to potential investors in a simple and easy format. The manual might look something like the following:

■ return ■ possible return ■ no return



Corporations

- Grants
- Invest in or become an outcome payer for a SIB
- Participate and trade biodiversity/mitigation banking credits



Foundations

- Grants
- Program Related Investments (for U.S. foundations) for impact investing funds, risk-mitigation products
- Invest in or become an outcome payer within a social impact bond
- Seed fund a conservation investment note



Governments

- Grants
- First-loss capital
- Work with development finance institutions to issue local bonds
- Become an outcome payer for a social impact bond



Development Finance Institutions

- Issue project bonds
- First-loss capital
- Issue green bonds



High Net Worth Individuals

- Impact investing funds
- Invest in a social impact bond
- Purchase project bonds
- Purchase green bonds
- Purchase conservation notes
- Biodiversity/mitigation funds



For Institutional Investors

- Impact investing funds
- Purchase project bonds
- Purchase green bonds
- Biodiversity/mitigation banking funds



Conclusion

As global development continues, there is an urgent need to better conserve the world's natural resources. While the ideal balance of consumption and conservation may be unclear, it is certain that the current pace of development is unsustainable.

The ecosystem is not appropriately valued to justify investment in, and not just consumption of, its assets. Until there is a shift in how land, water, and species are priced in comparison to other “commodities,” investors will need alternative opportunities to allocate capital toward conservation.

Fortunately, the menu of options for conservation finance is expanding. From development impact bonds and investment notes to impact investing funds and ESG strategies, there are models that can help bridge the multibillion-dollar funding gap to meet conservation needs.

In Southeast Asia, this need is critical to the economic growth of the region. Consequently, more must be done to integrate new conservation finance opportunities into the continent's approach to funding natural resource preservation. Conserving the Mekong region and preventing the extinction of the Asian elephant may seem insignificant in the grand march of human development. Yet their survival is intertwined with our own. And that is an investment worth making.



APPENDIX

Financial Innovations Lab Participants

(Affiliations at time of Lab)

Sabine Chalopin
Armstrong Asset Management
 ESG Officer

Heng Wing Chan
Milken Institute
 Chairman, Asia Center

Agnes Chew
Singapore Economic Development Board
 Senior Officer, Corporate Planning

Belinda Chng
Milken Institute
 Associate Director, Innovative Finance and
 Program Development

Helen Chou
Singapore Economic Development Board
 Acting Head, International Organisations Programme Office

Patti Chu
Asian Venture Philanthropy Network
 Member Services Manager

Laura Deal Lacey
Milken Institute
 Managing Director, Asia Center

David Emmett
Conservation International
 Senior Vice President, Asia

Romas Garbaliuskas
Conservation International
 Senior Legal Advisor

Lisa Genasci
ADM Capital Foundation
 CEO

MaryKate Hanlon
New Forests
 Manager – Sustainability & Communications

Paul Herbertson
Fauna & Flora International
 Director, Environmental Markets

Caitlin MacLean
Milken Institute
 Director, Innovative Finance

Benjamin McCarron
Asia Research & Engagement
 Managing Director

Genevieve Ng
Singapore Economic Development Board
 Senior Officer

Lyn Ng
Singapore Economic Development Board
 Assistant Head, International Organisations Programme Office

Katie Olderman
Milken Institute
 Associate, Innovative Finance

Celine Santillan
BirdLife International
 Programme Development Manager, Asia

Nassia Shams
Milken Institute
 Manager, Operations and Administration

Naina Subberwal Batra
Asian Venture Philanthropy Network
 CEO

Susan Sy
UBS Philanthropy & Values
 Executive Director

Michelle Tan
Singapore Economic Development Board
 Head, International Organisations Programme Office

Lynn Tang
Conservation International
 Senior Manager, Partnerships and Development,
 Asia Pacific Field Division

James Tolisano
Wildlife Conservation Society
 Sustainable Finance Lead

Anson Wong
Conservation International, Hong Kong
 Senior Director, Corporate Partnerships



ENDNOTES

1. Fabian Huwyler, Juerg Kaeppli, Katharina Serafimova, Eric Swanson, and John Tobin, "Making Conservation Finance Investable," *Stanford Social Innovation Review*, January 21, 2014. http://www.ssireview.org/up_for_debate/article/making_conservation_finance_investable. Accessed May 27, 2015.
2. "Investing in Conservation: A *Landscape Assessment of an Emerging Market*," NatureVest, EKO Asset Management, November 2014. <http://conservationfinance.org/upload/library/arquivo20141218104408.pdf>. Accessed May 27, 2015.
3. Ibid.
4. "Climate Change to 'Severely Impact' Growth in South Asia," Deutsche Welle, August 20, 2014. Accessed March 26, 2015, <http://www.dw.de/climate-change-to-severely-impact-growth-in-south-asia/a-17867698>.
5. "Ecosystems in the Greater Mekong: Past Trends, Current Status, Possible Futures," World Wildlife Fund, May 2013. <http://www.worldwildlife.org/publications/ecosystems-in-the-greater-mekong-past-trends-current-status-possible-futures>.
6. Drolette, Daniel, "A Plague of Deforestation Sweeps Across Southeast Asia," *Yale Environment* 360, May 20, 2013.
7. "Indonesia surpasses Brazil in deforestation rate," BBC News, Asia, June 30, 2014. Accessed March 25, 2015, <http://www.bbc.com/news/world-asia-28084389>.
8. World Wildlife Fund.
9. Castillo, Gem B., "Fiscal Gap and Financing of Southeast Asia's Protected Areas: A Cross-country Analysis," International Conference on Conservation Financing in Southeast Asia, March 3–4, 2015. https://www.scribd.com/fullscreen/257500701?access_key=key-220DdOHdDq3uWHXOI3tO&allow_share=true&escape=false&view_mode=scroll. Accessed May 15, 2015.
10. Income Tax Act of the Kingdom of Bhutan (2001), available at <http://oag.gov.bt/wp-content/uploads/2010/05/Income-Tax-Act-of-theKingdom-of-Bhutan-2001English-version.pdf> (as cited in Quick, Elaine; Kruse, Toni Ann; Pickering, Adam. "Rules to Give By: A Global Philanthropy Legal Environment Index." Nexus and McDermott Will & Emery LLP. 2012.)
11. Quick, Elaine; Kruse, Toni Ann; Pickering, Adam. 2012.
12. Huang, Yanzhong. "Why Has Philanthropy Failed to Take Off in China?" Council on Foreign Relations. May 30, 2014. http://blogs.cfr.org/asia/2014/05/30/why-has-philanthropy-failed-to-take-off-in-china/?cid=otr-partner_site-diplomat
13. "Conservation Finance: Moving *Beyond Donor Funding Toward an Investor-Driven Approach*," Credit Suisse, McKinsey & Company, and World Wildlife Fund, 2014. <https://www.credit-suisse.com/media/cc/docs/responsibility/conservation-finance-en.pdf>. Accessed May 27, 2015.
14. NatureVest, EKO Asset Management, November, 2014.

15. Credit Suisse, McKinsey & Company, and World Wildlife Fund, 2014.
16. “Program Snapshot” Species Banking, <http://www.speciesbanking.com/programs.php>, accessed May 27, 2015.
17. “Conservation Finance,” World Wildlife Fund, <https://www.worldwildlife.org/initiatives/conservation-finance>. Accessed on May 27, 2015.
18. “Verde Ventures: Investing in Sustainable Business,” Conservation International, <http://www.conservation.org/projects/Pages/Verde-Ventures.aspx>. Accessed May 27, 2015.
19. “The Conservation Note,” Nature Conservancy, <http://www.nature.org/about-us/conservation-note.xml>, Accessed on May 27, 2015.
20. Kempinski, Josh, “Reducing Emissions from Deforestation and Forest Degradation (REDD+),” Fauna & Flora International, <http://www.fauna-flora.org/initiatives/redd/>. Accessed May 27, 2015.
21. “Innovative Rainforest Bond Structure Unveiled at Indonesia Tropical Landscapes Summit,” Marketwired, April 28, 2015. <http://www.sys-con.com/node/3329574>. Accessed May 27, 2015.
22. “Conservation Note,” The Nature Conservancy, <http://www.nature.org/gift-planning/conservation-note-fact-sheet.pdf>, accessed May 27, 2015.
23. “The Nature Conservancy Notes,” The David & Lucille Packard Foundation, <http://www.packard.org/what-we-fund/stories-of-progress/the-nature-conservancy-conservation-notes/>, accessed May 27, 2015.
24. “Moody’s Rating Symbols and Definitions,” Moody’s Investors Service, p. 18, July 2009. <https://www.moody.com/sites/products/AboutMoodyRatingsAttachments/MoodyRatingsSymbolsand%2520Definitions.pdf>. Accessed May 15, 2015.
25. “Signatories to the Principles for Responsible Investment,” United Nations, <http://www.unpri.org/signatories/signatories/>. Accessed May 27, 2015.



MILKEN INSTITUTE

1250 Fourth Street
Santa Monica, CA 90401
Phone: 310-570-4600

1101 New York Avenue NW, Suite 620
Washington, DC 20005
Phone: 202-336-8930

137 Market Street #10-02
Singapore 048943
Phone: 65-9457-0212

E-mail: info@milkeninstitute.org • www.milkeninstitute.org