

Natural Resources Security and Management Project

I. Context

The richness of the Philippines' natural resources is well known. It is one of 17 megabiodiverse countries in the world, home to about 1,100 terrestrial vertebrates and five percent of the world's flora. Situated in the Coral Triangle, Philippines' waters has one of the highest diversity of corals, fish, and its coral reefs are the second largest in the world. The total economic value of its marine ecosystems is conservatively estimated at \$967 billion¹. About \$840 billion of mineral wealth is largely untapped. The forest industry--both formal and informal sectors-- employs over 400,000 individuals and has added \$5.6 billion in gross value to the economy just in 2011. In addition, the carbon pool in forest lands is significant at about 1.1 billion metric tons.²

Because of this, the natural resources sector has a tremendous potential to contribute to the country's economic sustainability and resilience. The Philippine Development Plan for 2017-2022 recognizes not only the contribution of efficiently- managed natural resources and environment to economic development but also towards the promotion of a long and healthy life for Filipinos.

However, natural resources wealth has not translated into prosperity for the country and for the greater proportion of its citizens. The irresponsible use of natural resources, abetted by corruption and lack of regard for environmental and social safeguards, has undermined long-term economic growth. The contribution of agriculture, forestry, fishing and mining to the gross domestic product in 2018 is just 10 percent. Nature is also becoming a liability as on average, 20 typhoons hit the Philippines per year, causing billions of dollars in damages and thousands of lives lost. Further, as a biodiversity hotspot, the country suffers from high rates of crime associated with fishing, forestry and wildlife, and rapid environmental degradation, thereby threatening both its biodiversity and resilience. The natural resource flows from these environmental crimes largely benefit its neighbors in the region. The Philippines is ranked second-worst in the world for murders of those defending their land and environment--48 environmental defenders were killed in 2017, a 71 percent increase from the previous year.³ A number of factors drive natural resource degradation and loss in the Philippines, which include

¹ Azanza, R. V. et al. (2017). Valuing and managing the Philippines' marine resources toward a prosperous ocean-based blue economy. *Public Policy*, 18, 1-26.

² Lasco, R. D. & Pulhin, F. B. (2009). Carbon budgets of forest ecosystems in the Philippines. *Journal of Environmental Science and Management*, 12, 1-13.

³ Global Witness (2018). *At what cost? Irresponsible business and the murder of land and environmental defenders in 2017*. London: Global Witness.

growing market demand, weak governance, infrastructure development and lack of capacity in enforcement.⁴

Overall, the Natural Resources Security and Management Project will secure nature and strengthen natural resource governance in the Philippines by addressing the key drivers of natural resource degradation and loss. This project will harness natural resources to transform poor societies and lead to development outcomes.

II. Strategic approach

The project supports the country's Journey to Self-Reliance by strengthening its commitment to biodiversity and habitat protection and open and accountable (environmental) governance and improving government capacity to manage its natural resources leading to inclusive development. While the country's Biodiversity and Habitat score in the 2018 Yale Environmental Performance Index is high at 0.78 (rank = 83), it is actually lower than its baseline score of 0.80 (rank = 63rd). Environmental degradation threatens to reverse many of the conservation gains achieved in recent years.

The project will result in the better management of natural resources. Therefore, it will contribute to the purpose of USAID's Environment Project (Natural resource management enhanced, so that people and ecosystems thrive) and sub-purpose 1 (Biologically diverse areas better conserved).

The project will support the Biodiversity Code. It will have an explicit biodiversity objective, identify interventions based on an analysis of threats to biodiversity and a corresponding theory of change, positively impact biodiversity in biologically significant areas, and monitor indicators along the theory of change. It will also seek to reduce greenhouse gas emissions from land use.

The project will leverage the resources of other donor organizations that have similar or related ongoing activities in the country. These include the Asian Development Bank, European Union, International Fund for Agricultural Development, Japan International Cooperation Agency, and the United Nations Development Programme.

The project will also coordinate with other relevant USAID-supported projects. These include *Protect Wildlife*, which seeks to reduce wildlife-related transnational crimes and conserving

⁴ See, for example: a) Pomeroy, R. (2016). Drivers and impacts of fisheries scarcity, competition, and conflict on maritime security. *Marine Policy*, 67, 94-104.; b) Carandang, A. P. et al. (2012). *Analysis of key drivers of deforestation and forest degradation in the Philippines*. Manila: GIZ.; and c) Miller, E. A. et al. (2019). The historical development of complex global trafficking networks for marine wildlife. *Science Advances*, 5, eaav5948.

forests and wildlife habitats, and *Fish Right*, which seeks to improve the management of fisheries and other coastal resources in high-biodiversity marine areas.

III. Problem statement

The Philippines is ranked among the hottest hotspots--biologically significant areas that are most affected by poverty.⁵ Sixteen of the top 20 poorest provinces host at least one protected area. According to the Philippine Biodiversity Strategy and Action Plan for 2015-2028, the top three threats to biodiversity are habitat loss and degradation due to deforestation, mining and marine ecosystem degradation, overexploitation in reference to fisheries and wildlife, and pollution.

The country is a net importer of wood, including from the United States, but this does not seem to deter illegal logging--the demand continues to be high. According to Global Forest Watch, from 2001 to 2012, the Philippines has lost 620,000 hectares of tree cover resulting in the emission of 69 million tons of CO₂ into the atmosphere.⁶ Much of the tree cover loss is related to agricultural expansion although illegal logging remains a problem. The Department of Environment and Natural Resources (DENR) has noted that there are still 15 illegal logging hotspots as of December 2018.

Illegal, unreported and unregulated fishing in the country, including poaching by other countries, results in losses of about \$100 billion.⁷ 10 of the country's 13 major fishing grounds are already under threat due to overfishing, destructive fishing practices, habitat degradation, pollution, poor waste disposal, and extreme weather. With fish making up the major protein source in the Filipino diet, this decline in fish stocks has implications for the country's food security, especially for the 40 percent of fisherfolk who already live beneath the poverty line. The country is also a major player in the illegal wildlife trade being both a source and destination of wildlife and wildlife products.⁸ The impact of the illegal wildlife trade in the country is estimated at \$1 billion per year.⁹ Marine litter, of which the Philippines is a top contributor, is an emerging issue. Given the country's high level of marine biodiversity, there is reason to believe that it is also a hotspot for marine litter-marine species interaction.¹⁰

⁵ Fisher, B. & Cristopher, T. (2007). Poverty and biodiversity: Measuring the overlap of human poverty and the biodiversity hotspots. *Ecological Economics*, 62, 93-101.

⁶ During the same period, the country gained 273,000 hectares. However, according to Global Forest Watch, "due to variation in research methodology and/or date of content, tree cover and tree cover loss and gain statistics cannot be compared against each other."

⁷ Ison, L. (2018, December 17). Multi-sectoral group adopts law vs illegal fishing. Retrieved from <https://www.pna.gov.ph/articles/1056919>

⁸ See, for example: a) Anda, R.D. (2018, July 28). DENR seizes truckload of turtle, pangolin meat in Puerto Princesa. *Philippine Daily Inquirer*, Retrieved from <https://newsinfo.inquirer.net/1015279/denr-seizes-truckload-of-turtle-pangolin-meat-in-puerto-princesa>; b) Miller, E. A. et al. (2019). The historical development of complex global trafficking networks for marine wildlife. *Science Advances*, 5, eaav5948.; and c) Picheta, R. (2019, March 4). More than 1,500 live turtles found duct-taped and stuffed in suitcases. Retrieved from <https://www.cnn.com/2019/03/04/asia/philippines-turtles-duct-tape-suitcases-scli-intl>.

⁹ <https://www.facebook.com/denrbiodiversity/photos/a.1900778803582515/2294041627589562/>

¹⁰ Abreo, N.A.S. (2018). Marine plastics in the Philippines: A call for research. *Philippine Science Letters*, 11, 18-19.

The irresponsible extraction of natural resources disregards social and environmental safeguards, jeopardizes the livelihood of vulnerable populations, and undermines inclusive economic growth and accountable governance. Further, certain foreign-funded infrastructure projects pose direct threats to the country's biodiversity and natural resources. Given the magnitude of some of these projects, the impacts can be disastrous to vulnerable communities and the ecosystems they depend on to provide them quality of life and build their resilience.

The Philippines has been recognized for the comprehensiveness and its early adoption of laws and policies that promote environmental governance and public participation in environmental matters.¹¹ However, environmental governance in the country has been perceived as weak because it is hindered by issues related to implementation or enforcement, resource mobilization and general lack of capacity.¹² For instance, the well-established legal framework for environmental assessment (EA), the Philippine Environmental Impact Statement system, is in place but actual implementation in terms of project inclusion and scope of EA is still weak.¹³ Further, the national government addresses poor implementation or enforcement by being more control-oriented (usually expressed in terms of regulations) and crafting policy after policy that tend to overlap.¹⁴ This only serves to perpetuate the vicious cycle of weak environmental governance and thereby fanning the hotspot.

A challenge to effective implementation of environmental laws and policies is the unequal power relationships among DENR, local governments, natural resource user groups and communities which “produce unequal access in decision-making, sharing of authority and responsibility.”¹⁵ Guided by a national policy and framework, the LGUs should assert their key role and responsibility to manage development and environmental impacts within their areas of jurisdiction. Most LGUs do not have enough technical competence to make sound judgements, and more capacity building is required at this level.¹⁶ In addition, corruption, which presents an opportunity to occur at several entry points in the value chain, is also a significant challenge.¹⁷ Other governance-related issues relate to access to information and justice, fragmented

¹¹ Gera, W. (2016). Public participation in environmental governance in the Philippines: The challenge of consolidation in engaging the state. *Land Use Policy*, 52, 501-510.

¹² Clemente, T.S. (2015). Environmental governance in the Philippines: Challenges and prospects. In S. Mukherjee & D. Chakraborty (Eds.), *Environmental challenges and governance: Diverse perspectives from Asia* (pp. 166-182). New York: Routledge.

¹³ Phillips, M.J. et al. (2009). Review of environmental impact assessment and monitoring in aquaculture in Asia Pacific. In FAO. Environmental impact assessment and monitoring in aquaculture. FAO Fisheries and Aquaculture Technical Paper. No. 527. Rome, FAO, pp. 153-283.

¹⁴ Ibid.

¹⁵ Baynes, J., Herbohn, J., & Dressler, W. (2016). Power relationships: Their effect on the governance of community forestry in the Philippines. *Land Use Policy*, 54, 169-176.

¹⁶ Phillips, M.J. et al., 2009, op cit.

¹⁷ Pulhin, J. M. & Ramirez, M. A. M. (2016). Timber regulation and value chain in community-based timber enterprise and smallholder forestry in the Philippines. *Forests*, 7, art. 152.

bureaucracy and patrimonial political system, and civil society fragmentation and mandate over representation, among others.¹⁸

But signs point to a cooling hotspot. There appears to be a growing environmental consciousness among the public, public investments in forest protection, biodiversity conservation and greening programs are starting to bear fruit, and sustainability is becoming more of a business model for the private sector rather than focused merely on regulatory compliance. Clearly, however, more needs to be done which this activity intends to support.

IV. Theory of change

The Natural Resources Security and Management Project proposes the following theory of change:

- IF the governance of natural resources and the areas from which these resources are derived are strengthened,
- IF the supply and demand factors that cause natural resources insecurity are effectively addressed, and
- IF ecosystem goods and services are developed,
- THEN the management of natural resources in the country will be improved,
- THEREBY strengthening environmental resilience.

V. Project objectives

The primary objectives of the five-year Natural Resources Security and Management Project are twofold. First, it seeks to improve the way that natural resources and the areas from which these are derived are governed. Second, it seeks to address the drivers of natural resources insecurity by addressing both the supply of and demand for natural resources through the reduction of environmental crimes and the development of the natural resources sector.

Results framework

The Natural Resources Security and Management Project will achieve the following major results: 1) reduction of environmental crimes, 2) development of the natural resources sector, and 3) improvement of the governance of natural resources. This is in sync with the draft Indo-Pacific Strategy Natural Resource Management Framework developed by the Asia Bureau.

¹⁸ Gera, 2016, op cit.

1. Environmental crimes reduced	2. Natural resources sector developed	3. Governance of natural resources improved
<p>1.1 Capacity to counter environmental crimes strengthened</p> <p>1.2 Positive (or pro) environmental behaviors promoted</p> <p>1.3 Inter-agency collaboration in environmental law enforcement improved</p>	<p>2.1 Private sector support for natural resource management increased</p> <p>2.2 Environmental and social safeguards upheld</p> <p>2.3 Natural resource valuation advanced</p> <p>2.4 Sustainable supply chains and ecosystem service markets established</p>	<p>3.1 Customary rights to land and coastal resources strengthened</p> <p>3.2 Management effectiveness of conservation areas improved</p> <p>3.3 Public sector support for natural resource management increased</p> <p>3.4 Civil society oversight of natural resource governance improved</p>