



# Entry Points for Mainstreaming Ecosystem-based Adaptation

The Case of Philippines

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## Acronyms

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<b>ADSDPP</b>	Ancestral Domain Sustainable Development and Protection Plan
<b>BMU</b>	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
<b>CBD</b>	Convention for Biological Diversity
<b>CCCAM-DRR</b>	Cluster on Climate Change Adaptation, Mitigation and Disaster Risk Reduction
<b>CCS</b>	Climate Change Service
<b>CDP</b>	Comprehensive Development Plan
<b>CLUP</b>	Comprehensive Land Use Plan
<b>CoP</b>	Community of Practice
<b>CSO</b>	Civil Society Organization
<b>DENR</b>	Department of Environment and Natural Resources
<b>DILG</b>	Department of the Interior and Local Government
<b>EbA</b>	Ecosystem-based Adaptation
<b>EMB</b>	Environmental Management Bureau
<b>ENR</b>	environment and natural resources
<b>Execom</b>	Executive Committee
<b>FEBA</b>	Friends of Ecosystem-based Adaptation
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
<b>HLURB</b>	Housing and Land Use Regulatory Board
<b>ICC</b>	indigenous cultural communities
<b>ICCA</b>	Indigenous Community Conserved Areas
<b>IKI</b>	International Climate Initiative
<b>IKSP</b>	Indigenous Knowledge Systems and Practices
<b>IP</b>	Indigenous Peoples
<b>IUCN</b>	International Union for Conservation of Nature
<b>JAO</b>	Joint Administrative Order
<b>LCCAP</b>	Local Climate Change Adaptation Plans
<b>LGU</b>	Local Government Unit
<b>NAP</b>	National Adaptation Plan
<b>NCCAP</b>	National Climate Change Action Plan
<b>NCIP</b>	National Commission on Indigenous Peoples
<b>NDC</b>	Nationally Determined Contribution
<b>NFSCC</b>	National Framework Strategy on Climate Change
<b>NGO</b>	Non-Governmental Organization
<b>NRM</b>	Natural Resources Management
<b>OECM</b>	Other Effective area-based Conservation Measure
<b>PA</b>	Protected Area
<b>PBSAP</b>	Philippine Biodiversity Strategy and Action Plan
<b>PCDSPO</b>	Presidential Communications Development and Strategic Planning Office
<b>PDP</b>	Philippine Development Plan
<b>PoWPA</b>	Programme of Work on Protected Areas (CBD)
<b>PSF</b>	People's Survival Fund
<b>R2R</b>	Ridge-to-Reef
<b>REDD+</b>	Reducing Emissions from Deforestation and Forest Degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks
<b>SIAD</b>	Sustainable Integrated Area Development
<b>UNDP</b>	United Nations Development Programme
<b>ZO</b>	Zoning Ordinance



## Executive Summary

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The Mainstreaming Ecosystem-based Adaptation (EbA) in Planning and Decision-Making Processes Project aims to strengthen the ability of decision-makers at international, national and local level to mainstream ecosystem-based adaptation into policy and planning processes. Funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) under the International Climate Initiative (IKI), one of the project's main objectives is to develop strategies, methods and tools for mainstreaming EbA (e.g. policy entry points, vulnerability assessments, prioritisation of measures, monitoring & evaluation). To support this objective, this study on entry point analysis for mainstreaming EbA into policy decision-making and planning processes was conducted in Mexico, Peru, South Africa, Philippines, and Vietnam.

The study defines "entry points" as windows for opportunity to influence decision-making that may occur at all levels of governance as well as situations or processes that help gain the interest of policy makers, important stakeholders or the broader public for mainstreaming EbA.

Due to its geographic location and development patterns, the Philippines is among the most vulnerable countries to climate change in the world. The main hazards affecting the population are rise in sea levels, extreme rainfall events, extreme heating events, increased ocean temperatures, and disturbed water budget. Although the term EbA is fairly new to the Philippines, practitioners in the field of environment conservation and protection as well as advocates for climate change adaptation are very familiar with the concept. Stemming from conservation efforts, the Philippines has several policies and climate change and conservation frameworks on which EbA efforts can build. There is, however, a need to further analyse and harmonize these regulatory documents.

Five entry points were identified that pose immediate opportunity for mainstreaming EbA: 1) land use planning process, 2) Sustainable Integrated Area Development Strategy (SIAD), 3) Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction (CCCAM-DRR) agenda, 4) protected area management, and the 5) National Adaptation Plan (NAP) process including the revision of the National Climate Change Adaptation Plan.

The EbA approach in the land use planning process has been embedded in the **Housing and Land Use Regulatory Board Comprehensive Land Use Plan** Guidebook 2013/2014, which has adopted the ridge-to-reef (R2R) or integrated watershed management framework to emphasize the relationship between the upland, lowland and coastal ecosystems. Volume 2 of the

Guidebook comprehensively mainstreamed the ecosystems approach from data gathering to crafting the zoning ordinance (ZO), the local policy and implementation document of the Comprehensive Land Use Plan (CLUP).

The **Philippine Development Plan** (PDP) 2017-2022 supports EbA through the Sustainable Integrated Area Development Strategy. Chapter 20 of the Plan underscores the importance of the role of ecosystem services, especially in the agriculture, fisheries, industry and services sectors "to ensure ecological integrity and improve the socio-economic conditions of resources-based communities through sustainable integrated area development." The Department of Environment and Natural Resources (DENR) has also aligned priority interventions through the adoption of the **Sustainable Integrated Area Development** (SIAD) Strategy, in that EbA can be mainstreamed in the action plans from the development of the objectives and key result areas to the crafting of proposed interventions. The current development of the policy tool 'Strategic Environmental Assessment on Resilience' is perceived by Department of Environment and Natural Resources as a key instrument in the crafting of future policies and in designing programs that ensure climate-informed decision making and ecological stability.

The study also stressed the importance of including EbA in the **Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction** agenda. In the Philippines, the discussion of EbA mainly falls under two national government agencies: the Climate Change Commission (CCC) and the Department of Environment and Natural Resources (DENR), the office mandated to manage the natural resources sector. The CCC is charged with coordinating various national agencies and sectors, while the DENR chairs the Climate Change Adaptation, Mitigation and Disaster Risk Reduction cluster in which relevant national agencies participate. The National Climate Change Adaptation Plan is currently being updated, and it includes Environment and Ecological Security as one of seven strategic thematic areas, which represents a potential entry point for mainstreaming EbA. Thus, with the right motivation, facilitation and political will, EbA can be incorporated in the agenda. It is worth noting that the DENR already has already acknowledged the significance of EbA mainstreaming and developed a Draft Roadmap of the Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction for 2018-2022, based on international disaster risk reduction frameworks as well as national frameworks.

The Philippines, as one of the 17 world's megadiverse countries and a biodiversity hotspot, is party to the Convention on Biological Diversity. The government's continuous commitment

in biodiversity conservation is also evident in the **Philippine Biodiversity Strategy and Action Plan (PBSAP) 2015-2028** in accordance with the National Integrated Protected Area System Act of 1992. EbA plays an important role in the implementation of the Philippine Biodiversity Strategy and Action Plan, in that it shifts the focus on the ecosystem services framework for biodiversity conservation. The identification of Other Effective area-based Conservation Measures (OECM) is another opportunity for EbA in protected area management.

The **National Adaptation Plan** process in the Philippines is still ongoing and, with it, the National Climate Change Adaptation Plan (NCCAP) is currently being updated. The update on this plan includes an ecosystems approach to recalibrate the strategic priorities for the adaptation plan. In the current plan, EbA is lodged in the “ecological and environmental stability” thematic priority. However, the Climate Change Commission recognized the importance of EbA as a cross-cutting concept, integrating this in the updated plan 2011-2028 and linking the National Adaptation Plan and Nationally Determined Contribution processes.

The **National Framework Strategy on Climate Change** embodies the guiding principles on which EbA concept is anchored and the Philippine Development Plan has ensured that climate change is embedded in each chapter. In terms of EbA mainstreaming, Chapter 20 on Environment and Ecological Security is key, which is further articulated in the updating of the National Climate Change Adaptation Plan as one of the thematic areas. The GIZ-supported CCCII Project focuses on supporting the National Climate Change Adaptation Plan updating and it will ensure that EES includes EbA as a top priority along the National Adaptation Plan process. Once EbA is articulated in the National Climate Change Adaptation Plan, implementation by national agencies will follow.

At the subnational level, the National Economic Development Authority and Department of Environment and Natural Resources will need to determine the “carrying capacities of river basins and critical protected areas” using the **Strategic Environmental Assessment** on Resilience. At the local level, planning is supported by the Housing and Land Use Regulatory Board and Department of the Interior and Local Government (DILG) and, using the results of Strategic Environmental Assessment on Resilience Framework, local agencies are expected to align local policies and programs with the standards set in the Department of Environment and Natural Resources DAO on Strategic Environmental Assessment on Resilience. These, in turn, will be scaled up to the national level through the Cluster on Climate Change Adaptation, Mitigation and Disaster Risk Reduction.

Other opportunities for mainstreaming EbA include **private sector engagement** and the **infrastructure sector**. In this context, the government is currently prioritizing highly visible infrastructure projects to leverage as political capital. While it is not feasible to compete with this priority, it is possible to make the case for implementing EbA measures in combination with grey infrastructure as a hybrid approach. As such, engineering

options can be combined with EbA measures, capitalizing on the benefits that both approaches can offer in terms of adaptation outcomes and political visibility.

# I. Introduction

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Ecosystem-based adaptation (EbA) is defined by the Convention for Biological Diversity (CBD) Ad-hoc Technical Working Group (AHTEG) as “the use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people to adapt to the adverse effects of climate change” (Secretariat of the Convention on Biological Diversity 2009).

As a nature-based solution, EbA seeks to address the impacts of climate change by focusing on helping people to adapt to these adverse changes. The Friends of Ecosystem-based Adaptation (FEBA) described EbA as “a people-centric concept, but one that acknowledges that human resilience depends critically on the integrity of ecosystems” (FEBA 2017). Although the term EbA is relatively new, the concept is familiar in different existing climate change adaptation approaches.

## OVERVIEW AND OBJECTIVE OF THE STUDY

The BMU-IKI-funded global project “Mainstreaming Ecosystem-based Adaptation in Planning and Decision-Making Processes” implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH aims to strengthen the ability of decision-makers at the international, national and local levels to mainstream ecosystem-based adaptation into policy and planning processes. One of the project’s main objectives is to develop strategies, methods and tools for mainstreaming EbA (e.g. policy entry points, vulnerability assessments, prioritisation of measures, monitoring & evaluation). To support this objective, this study aims to conduct an analysis of the entry points for mainstreaming EbA into policy decision-making and planning processes. The project is also being implemented in Mexico, Peru, South Africa, Philippines, and Viet Nam.

This study aims to identify entry points for EbA mainstreaming for selected partner countries and provides a targeted information for policy makers and practitioners on how to successfully make the case for EbA and promote uptake by stakeholders at different levels.

## APPROACH AND METHODOLOGY

Here, we define “entry points” as windows for opportunity to influence decision-making that may occur at all levels of governance, as well as processes that can help gain the interest of policy-makers, important stakeholders or the broader public for mainstreaming EbA.

The findings of the study are drawn from a desk review of relevant literature and primary data from nine key informant interviews, two site visits, a survey with eight correspondents, and one meeting with GIZ staff in the Philippines.

A mission by an international expert, accompanied by a local expert, took place from September 18-31, 2017 in Manila, Philippines. The mission coincided with the GIZ EbA Valuation Training, which posed an opportunity to observe and interview key participants.

## II. Climate Change in the Philippines

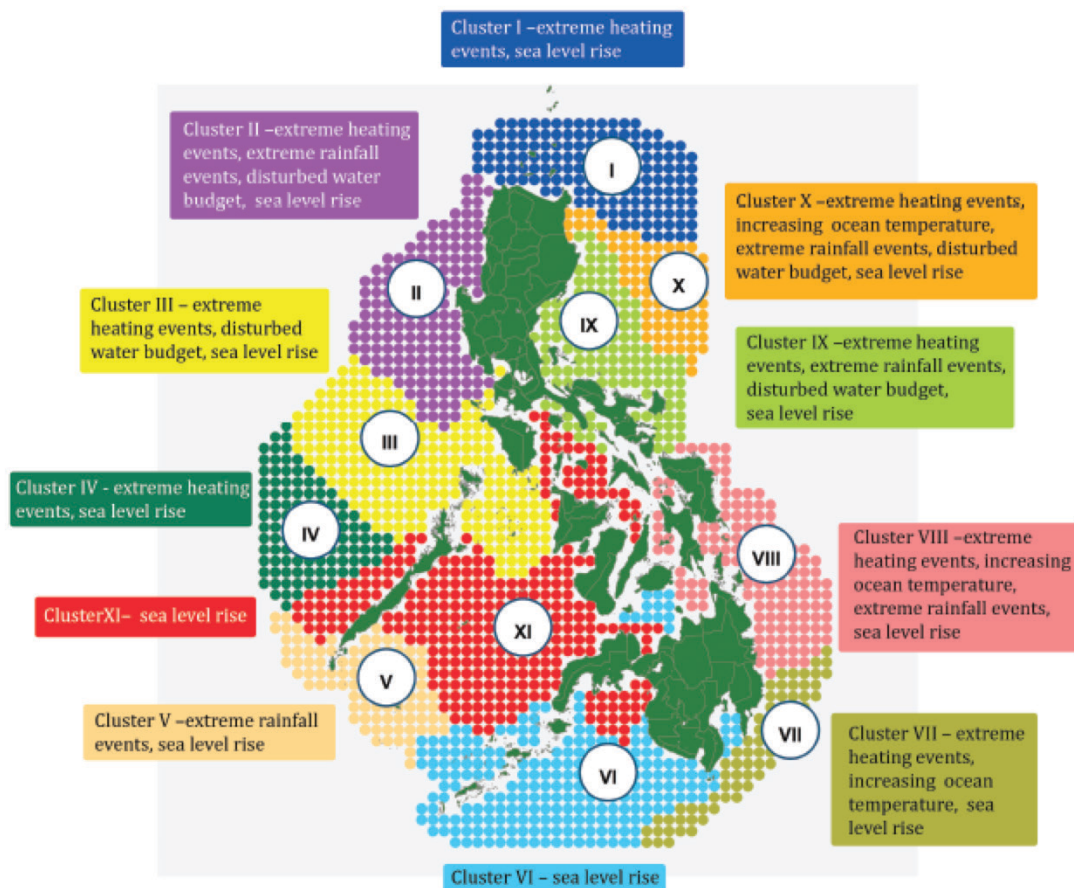
A report from the Department of the Interior and Local Government (DILG 2016) showed that the country ranked third among the most vulnerable countries to climate change. The country is also “recurrently affected by catastrophes,” as evidenced by the 283 total events that occurred from 1996 to 2015 (Kreft et al. 2016). Enhanced by the degradation of natural ecosystems, these events pose threats to food security, water resources, infrastructure, health, and settlements leading to substantial losses of lives and properties.

### CLIMATE CHANGE RISK AND VULNERABILITY

The Philippines’ vulnerability to climate change is attributed to its geographic location and development patterns (Fisher 2013). In 2013, the Department of Environment and Natural Resources (DENR) published the report “Climate Change

Adaptation. Best Practices in the Philippines” as part of the Joint Programme on Strengthening Philippine Institutional Capacity to Adapt to Climate Change (MDG-F 1656). The report identified the different factors that contribute to the country’s vulnerability.

Figure 1 maps the country’s exposure to five different risk factors: 1) rise in sea levels, 2) extreme rainfall events, 3) extreme heating events, 4) increased ocean temperatures, and 5) disturbed water budget.



**Figure 1.** Philippine exposure map on climate change (DENR 2013)

The map (figure 1) also highlights that the Philippines is notably vulnerable to sea level rise and storm surges, as each of the clusters across the country are threatened by these risks.



According to the World Bank (2017), an estimated 60% of the population reside in areas located along the coast. Moreover, the Department of the Interior and Local Government report identified that the urban poor and coastal communities are the most vulnerable groups to climate impacts. Around 20 typhoons cross the country annually, with 8 or 9 of these making landfall (World Bank 2017). Due to heavy or prolonged rainfall associated with these typhoons, flooding results and landslides also occur often. A study developed by the Department of Environment and Natural Resources in 2013 pointed out that extreme heat events and strong and prolonged droughts may cause damages to crops, water shortage and increase forest fire risk.

## **INSTITUTIONAL MAPPING FOR CLIMATE CHANGE GOVERNANCE**

In the Philippines, climate change actions are mainly coordinated by two national government agencies: the Climate Change Commission and the Department of Environment and Natural Resources.

The Climate Change Commission is the lead policy-making body of the government on climate change concerns, and one of its mandates is to “ensure the mainstreaming of climate change, in synergy with disaster risk reduction, into the national, sectoral and local development plans and programs.”<sup>1</sup> The Commission has an advisory board composed of various representatives from NGOs, academia, the business sector, and the disaster risk reduction community. For technical advice, a National Panel of Technical Experts is constituted by practitioners in the fields of climate change and disaster risk reduction.

In turn, the Department of Environment and Natural Resources is the “primary agency responsible for the conservation, management, development, and proper use of the country’s environment and natural resources, specifically forest and grazing lands, mineral resources, including those in reservation and watershed areas, and lands of the public domain, as well as the licensing and regulation of all natural resources as may be provided for by law in order to ensure equitable sharing of the benefits derived therefrom for the welfare of the present and future generations of Filipinos.”<sup>2</sup>

In terms of climate change issues, the Department of Environment and Natural Resources Climate Change Office under the Climate Change Division (CCD) of the Environmental Management Bureau (EMB) serves as the focal point on climate change and the Clean Development Mechanism (CDM) Secretariat in support of the country’s commitments to the UNFCCC. In a recent development, the Department of Environment and Natural Resources created the Climate Change Service (CCS) as the office responsible for coordinating climate change concerns within the department.

## **ADAPTING TO CLIMATE CHANGE: NATIONAL CLIMATE CHANGE POLICIES AND PLANS**

In 2009, the Philippine government enacted the Climate Change Act (Republic Act [RA] No 9729) of 2009 as a response to the global climate change crisis. The Act provides the policy framework to address the impacts of climate change on communities and on the environment. It also mandated the establishment of the Climate Change Commission, the “lead policymaking body of the government mandated to coordinate, monitor and evaluate government programs and ensure mainstreaming of climate change in national, local, and sectoral development plans.”<sup>3</sup> An amendment to the Act<sup>4</sup> was made in 2011, mandating the creation of the People’s Survival Fund (PSF), a special fund of at least 1 billion PHP (nearly 20 million USD) allotted annually for local government units (LGUs) and accredited local or community organizations to implement climate change adaptation projects. People’s Survival Fund criteria to grant the funds include: exposure to climate risks (30%), poverty incidence (40%) and presence of key biodiversity area (30%).

In April 2010, the National Framework Strategy on Climate Change (NFSCC) 2010-2022 was developed to guide the country’s strategic response to climate change. Given the country’s extreme vulnerability to climate impacts, emphasising adaptation as the anchor strategy and including mitigation mainly as a co-benefit. The framework (Figure 2) highlights the coordination of adaptation efforts towards “integrated ecosystem-based management which shall ultimately render sectors climate-resilient” (CCC 2013).

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<sup>1</sup> Section 14, RA10174

<sup>2</sup> EO 192v

<sup>3</sup> Section 4, RA 10174

<sup>4</sup> Section 18, RA 10174

## NATIONAL FRAMEWORK STRATEGY ON CLIMATE CHANGE

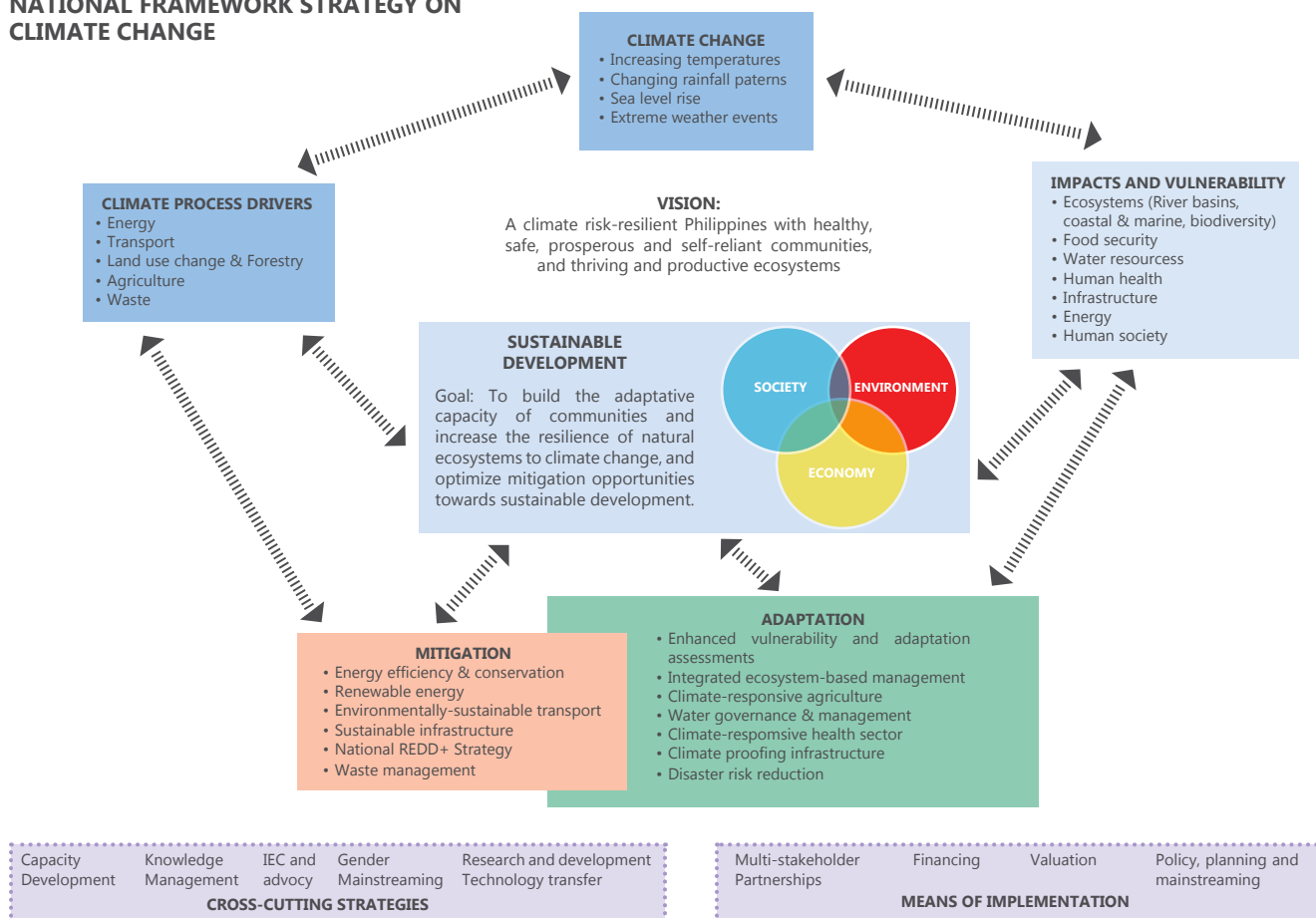


Figure 2. The National Framework Strategy on Climate Change (CCC 2013)

## EBA IN THE PHILIPPINES

Although the term EbA is fairly new to the Philippines, practitioners in the field of environment conservation and protection and climate change adaptation advocates are knowledgeable of the concept. However, it was only in 2009 (following the official approval of the concept via the Convention on Biological Diversity) that climate change was explicitly introduced in a national law, which later on became the basis for crafting a national climate change action plan. EbA became more prominent in the policy framework when it was incorporated in the 2017-2022 Philippine Development Plan. Policies and Frameworks Relevant to EbA in the Philippines are elaborated in Annex 1.

The National Framework Strategy on Climate Change and its guiding principles (Figure 3) identify the critical linkages between people and their surrounding ecosystems, and following the adoption of this strategy in 2010, the National Climate Change Action Plan 2011-2028 was developed to outline specific programs and strategies for adaptation and mitigation. Relevant EbA action lines include:

- Enhance adaptive capacity and resilience of communities and natural ecosystems to climate change;
- Adopt the total economic valuation of natural resources while ensuring biodiversity conservation; and

- Recognize the competitive advantage of putting value on the direct use, indirect use, option to use and non-use of environment and natural resources, as a short to long-term sustainable development goal (CCC 2012).

NSFCC Guiding Principles in relation to EbA
2.1 The Framework envisions a climate risk-resilient Philippines with healthy, safe, prosperous and self-reliant communities, and thriving and productive ecosystems;
2.2 The goal is to build the adaptive capacity of communities and increase the resilience of natural ecosystems to climate change, and optimize mitigation opportunities towards sustainable development;
2.8 Adaptation measures shall be based on equity, in accordance with common but differentiated responsibility; special attention must be given to ensure equal and equitable protection of the poor, women, children and other vulnerable and disadvantaged sectors;
2.10 The Framework adopts the Philippine Agenda 21 for Sustainable Development, to fulfill human needs while maintaining the quality of the natural environment for current and future generations;
2.13 The Framework recognizes the value of forming multi-stakeholder participation and partnerships in climate change initiatives, including with civil society, private sector, and local governments, and especially indigenous peoples and other marginalized groups most vulnerable to climate change impacts.

Figure 3. NSFCC Guiding Principles in relation to EbA (CCC 2013)

Seven priority areas were also identified within the National Climate Change Adaptation Plan to achieve “enhanced adaptive capacity of communities, resilience of natural ecosystems, and sustainability of built environment to climate change” (Recabar 2014). Specifically, thematic priority 3 on ecological and environmental stability centres on EbA and focuses on the achievement of one immediate outcome: the protection and rehabilitation of critical ecosystems, and the restoration of ecological services (CCC 2012). The National Climate Change Adaptation Plan was also developed to provide guidance to local government units in the preparation of their Local Climate Change Action Plan (LCCAP) to further advance climate actions at the local level.

### UNDERSTANDING EBA GOVERNANCE IN THE PHILIPPINES

Mainstreaming the EbA approach will require the participation and support of many stakeholders, each of whom will play a different role and will have varying degrees of influence.

The lead in mainstreaming EbA greatly relies on the government, both at the national and local level. The Climate Change Commission, as the policy arm for climate change issues, and the Department of Environment and Natural Resources, as the government agency in charge of the environment and natural resources sector, can spearhead the mainstreaming process

of EbA through the Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction. At the local level, the Department of Environment and Natural Resources can lead the process as the agency with reach down to the community level, in cooperation with the respective local government units (provincial, city/ municipality, barangay).

In turn, members of CSOs including NGOs and academia can support capacity building, knowledge management, research & development, and awareness raising processes. Development partners can further support the mainstreaming of EbA at various levels: policy and legal advice, capacity development, and knowledge management.

Figure 4 illustrates the different stakeholders that currently and potentially play a role in the mainstreaming of EbA, as identified by the Community of Practice in late 2017. At the centre, the figure shows the key stakeholders, or those whose support and participation are critical to achieve success. These are mainly government agencies such as the National Irrigation Administration, Department of Agriculture, Climate Change Commission, Department of Environment and Natural Resources, legislators, and others. The map also identifies primary stakeholders, which will have a main role in the mainstreaming process. These include local government units, the industry, farmers and fishermen, project developers, dam

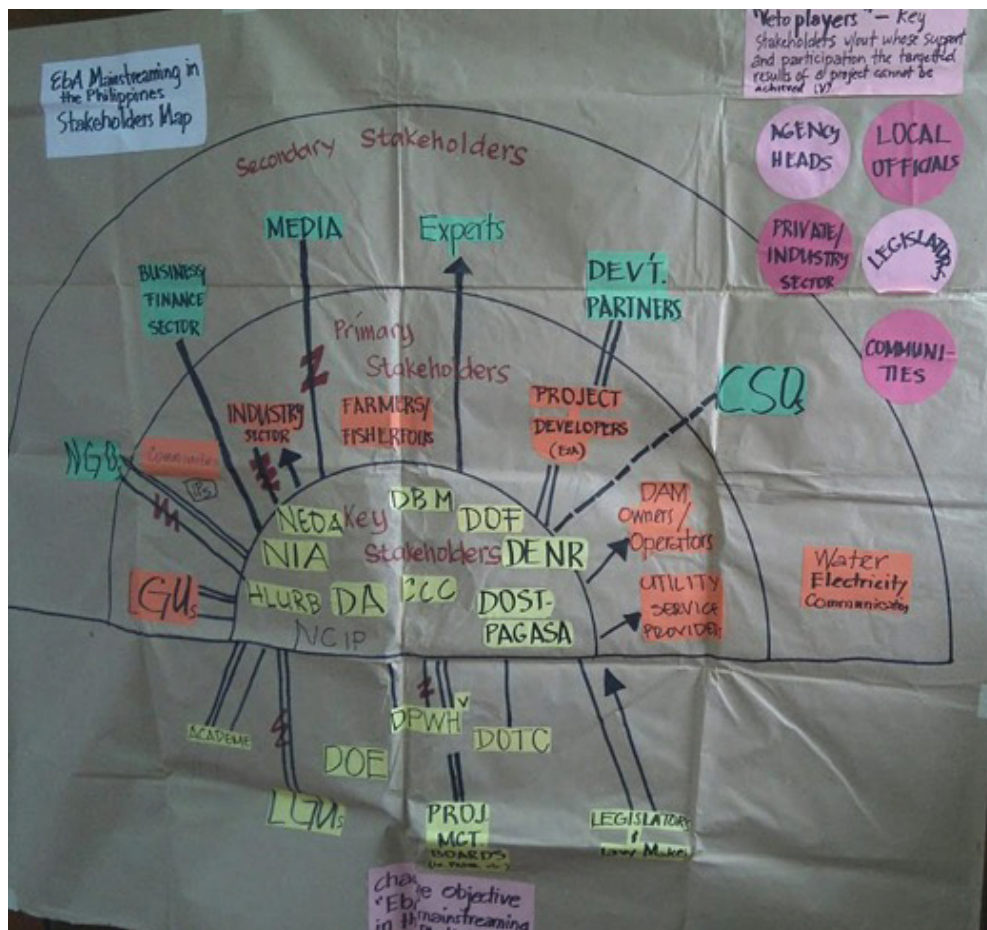


Figure 4. Stakeholder map of EbA mainstreaming in the Philippines (Source: GIZ Mainstreaming EbA Project Philippines)

owners and operators, and utility sector providers. Finally, secondary stakeholders include NGOs, the business and finance sectors, experts and development partners.

Recently, an EbA Community of Practice (CoP) in the Philippines has been developed, supported by the Global Mainstreaming EbA project, as a mechanism to share knowledge and learnings on EbA. Various individuals from a wide array of organizations are now part of this community, which uses an online platform for members to communicate. The EbA Community of Practice as an informal mechanism holds great potential for expanding the network not just to EbA practitioners but also to the wider public and can eventually influence key stakeholders. CSO members of the current EbA Community of Practice include the following:

- Aksyon Kalikasan, an NGO working with Cavite Province in the promotion of EbA through their 'Barangay' Green Governance Program funded mainly with local counterpart funds;
- Society of Environmental Engineers, a professional group of engineers advocating for the recognition of the environmental engineer profession before the Philippine Congress (Environmental Engineering Law) and through a licensure examination process for proper recognition by the Professional Regulatory Board. The Society advocates the inclusion of EbA in the curriculum for the profession;
- Tebtebba, an indigenous peoples network already represented in international events such as climate negotiations (COP 23 in Bonn, Germany) which has taken interest to take stock of the implementation of EbA measures by indigenous peoples cultural communities; and
- Upcoming Agro-Echo, farming NGO network in Mindanao Island which promotes sustainable agricultural practices.

The private sector can also be seen as a potential advocate of EbA as part of their corporate social responsibility. For instance, the International Pharmaceuticals, Inc. demonstrated interest when it came up with a proposal for public-private partnership project on "conservation and use of biodiversity to benefit the climate-vulnerable sectors".

## **LINKING CLIMATE CHANGE TO THE ENVIRONMENT AND NATURAL RESOURCES SECTOR**

In order to coordinate the efforts of the various government agencies involved in climate change discussions, the Cluster on Climate Change Adaptation, Mitigation and Disaster Risk Reduction was created through Executive Order 43, series of 2011. The Cluster is mandated to "lead in pursuing measures to adapt to and mitigate the effects of climate change on the Philippine archipelago; and undertake all the necessary preparation for both natural and man-made disasters."<sup>5</sup> The Department of Environment and Natural Resources Secretary chairs the Cluster and the Climate Change Commission serves

as the secretariat. The Cluster chair may also invite other relevant partners aside from the core members mentioned by the Executive Order.

Aside from the heads of the NGOs as members, the Executive Order mandates the Executive Secretary (ES) and Secretary of the Presidential Management Staff (PMS) as regular members of the Cluster as part of their monitoring and oversight functions. Also, the Secretary of the Presidential Communications Development and Strategic Planning Office (PCDSPO) and Presidential Spokesperson are responsible for communicating the agreements and major discussions during the meetings, thus making them regular members as well.

For a topic or issue to be part of the Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction agenda, it must first be discussed at different levels. The Climate Change Service acts as the link of the Department of Environment and Natural Resources to the Climate Change Commission through the Cluster. However, other agencies do not have internal offices that coordinate climate change concerns like the Climate Change Service, but do have a climate change focal person, division or bureau<sup>6</sup>. The Climate Change Commission coordinates with these focal points on climate change adaptation mitigation and disaster risk reduction concerns.

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<sup>5</sup> Executive Order 43, s. 2011

<sup>6</sup> Interview with Sandee Recabar of CCC on 22 September 2017



### III. Entry Points for Mainstreaming EbA into Policy and Decision-Making Processes

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This section analyses the potential entry points that stakeholders might leverage for mainstreaming EbA into the country's overall development and climate change agendas. As mainstreaming can occur in different spheres, the suggested entry points cut across different governance structures and at different levels (national, local and community). With the intention to highlight the variety of potential stakeholders as well as the sequence of the mainstreaming process, this study modified the International Union for Conservation of Nature (IUCN) Protected Area Matrix, which discusses various governance types. The matrix (figure 5) identifies the process and overall role of the different participating stakeholders, as follows: 1) who initiated, 2) who followed, and 3) who sustained the process in each entry point. Here, we provide a high-level description of the governance for each entry point presented below.

1. Land Use Planning Process is managed at different governance levels, and the government is the main stakeholder in charge of this process. Actual land use planning is carried out at the local level (through local government units). However, participation of various stakeholders is encouraged depending on the level of engagement of these actors (i.e. indigenous peoples should be involved in ancestral domain areas). The national government (through the Housing and Land Use Regulatory Board) provides guidance in the process through policy issuances and decisions.
2. The Sustainable Integrated Area Development Strategy was developed at the national government level but is expected to trickle down to the local and community levels anchored on existing initiatives on natural resource management and climate change adaptation. As a concept, the Sustainable Integrated Area Development Strategy has been implemented in different areas across different sectors for quite some time.
3. The Climate Change and Disaster Risk Agenda is mainly driven by the national government. As discussions are still on-going, follow-up and sustainability has yet to be observed.
4. The national government through the Department of Environment and Natural Resources is mandated to implement protected area management in all ecosystems. At the same time, there are protected area management initiatives carried out by the private sector and in collaboration among a range of stakeholders, such as indigenous communities.
5. The updating of the National Adaptation Plan in synergy with the finalization of the Nationally Determined Contributions (NDC) has been initiated by the Climate

Change Cluster but will involve various actors in the climate change agenda. Sustainability of the process can be documented in the later part of its implementation.

The complexity of the governance structure in the Philippines is both a barrier and a major opportunity for EbA mainstreaming. Looking into the initiatives on EbA leads to a diverse appreciation of actors involved in natural resource management and climate change adaptation. Determining the governance type generally depends on the agencies mandated to tackle such concerns, although overlaps in some agencies' mandates (e.g. Department of Environment and Natural Resources and Climate Change Commission) should be considered as well. However, as the governance structure becomes closer to the community level, the more involved the other stakeholders are, which greatly adds to the complexity as more actors are involved. Governance was identified as a cross-cutting aspect for EbA mainstreaming in the Philippines, as shown in the results of the analysis and the key lessons for each entry point.

#### MOTIVATIONS FOR MAINSTREAMING EBA

This study also looked into the motivations that individuals and agencies might have for mainstreaming EbA in their sectors or line of work. The motivations are influenced either by the perceived benefits of EbA or because of the applicability of EbA in their mandates, existing structures, programs or projects.

John Kingdon developed an agenda-setting framework which explains that, in order to have policy changes, three streams should be addressed: problem stream (defining the problem), policy stream (developing a solution), and political stream (working the politics)<sup>7</sup>. In EbA, these streams are important in the analysis of entry points so that eventually the governance, institutional and political structures can mainstream the concept. Figure 6 summarizes the motivations stakeholders might have to mainstream EbA, according to the three streams.

#### PROBLEM STREAM

According to the national survey conducted by the Asian Institute of Developmental Studies, Inc. (AIDSI) in 2016, the majority of the respondents (90.6%) have heard of the term climate change, and 80.9% of the respondents thought that climate change is man-made<sup>8</sup>. However, only 28.3% of the respondents knew any government programs, projects, and activities to address climate change at the national and local levels. The study also attributes the moderate awareness of respondents to their source of information, which is primarily mass media.

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<sup>7</sup> Kingdon, J.W. 2010. *Agendas, alternatives and public policies*, updated Edition (2nd Ed.). London: Longman Publishing Group.

<sup>8</sup> The one-shot survey was conducted to 1,200 randomly sampled respondents from 6 provinces from 04 November to 02 December 2016.



Governance type	A. Governance by Government			B. Shared Governance /external agents or impulse		C. Private Governance			D. Indigenous peoples & local community governance	
	Federal or national ministry or agency	Regional Governments or agency in charge	Local gov.	Collaborative or joint governance	External agents (e.g. donors)	Individual land owner	Non-profit organization (e.g. NGO)	For-profit organization (e.g. tourism operator)	Indigenous peoples	Local communities
1: Land use planning process	2	1 2	1	3			2		2 3	2 3
2. Sustainable Integrated Area Development Strategy	1	2 3	2 3	2 3			2 3			
3. Climate Change and Disaster Risk Agenda	1							1 2		
4. Protected Area Management / OECM	1 2 3			2 3	1		1 2 3			1 2 3
5. National Adaptation Plan Process / NDC	1				1		2	2		
Legend	<span style="color: green;">1</span> Who initiated it? <span style="color: blue;">2</span> Who followed up? <span style="color: orange;">3</span> Who sustained the initiative?									

**Figure 5.** The EbA mainstreaming matrix highlights potential entry points and shows the diversity of governance

Although awareness means more than recall, the survey presents a favourable opportunity to introduce EbA at a more local scale. Based on the interactions with representatives from different organizations in this study, all are amenable with the EbA concept, but the challenge lies on the application in the different sectors and governance levels.

### POLICY OR PROPOSALS STREAM

The Philippines has a very active NGO and academe scene, which has developed a variety of proposals for climate change adaptation and enhanced ecosystem service provision, based on their specific areas of interest. From the government side, there are various existing policies on climate change, disaster risk reduction and management, and natural resource management where EbA can already build on. As ecosystems and climate change are topics already familiar to a wide range of stakeholders, there is an opportunity for mainstreaming by looking into specific provisions of national and local policies where EbA can be further integrated, analysing where the concept is applicable rather than the term. National policies pose a great opportunity for EbA mainstreaming because these can directly influence the local policies. Other areas where

EbA can be mainstreamed are existing government plans and programs, including the Philippine Development Plan, National Climate Change Adaptation Plan, the River Basin Master Plans, specific ecosystems and area management plans such as the Manila Bay, which covers three regions and the Sustainable Integrated Area Development Strategic Plans.

At the sub-national level, the Regional Physical Framework Plan and Provincial Development and Physical Framework Plans are expected to integrate climate and ecosystems consideration to avoid climate maladaptation measures. At the local level, the most feasible entry point where EbA can be mainstreamed is through the local government unit Comprehensive Land Use Plan-Zoning Ordinance. The Comprehensive Land Use Plan, which already includes the ecosystems analysis, will be the basis for crafting the Zoning Ordinance and the development programs and projects of the local government units.

### POLITICAL STREAM

Awareness and directives from the national government define the priorities of government agencies. The Philippine Development Plan, which sets the strategic programs and plans

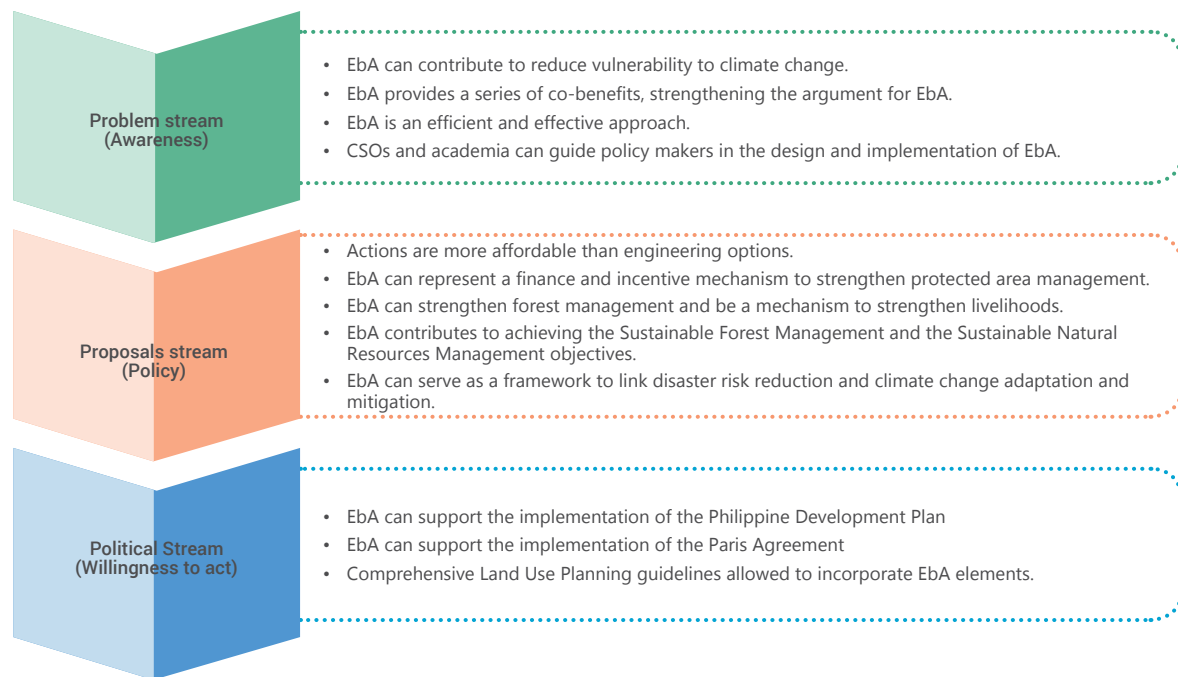


Figure 6: Motivations for mainstreaming EbA.

of the administration, made a favourable indicator for EbA mainstreaming when it included the importance of ecosystems in addressing climate change impacts and identified Sustainable Integrated Area Development Strategy as a priority program. The political stream at the local level is far more challenging than the national level, because the local government units can practice their local autonomy. Further, most programs and projects at the local level are politically motivated and greatly depend on the individuals in the government. On the other hand, there is still an opportunity for mainstreaming EbA if awareness on EbA is enhanced within the government as well as communities.

### SELECTION OF ENTRY POINTS FOR MAINSTREAMING EBA

Here, we describe and analyse different entry points that can help mainstream EbA at different levels. For each entry point, we identify the main and contributing stakeholders, concrete opportunities to be pursued, and key lessons.

The process of identifying these entry points included a desk review and consultation with various stakeholders; they were then prioritised based on the following criteria: 1) Has potential impact in the international, national and local level processes; 2) Promotes synergies; and 3) Builds on existing efforts.

**Table 1:** Criteria for selecting entry points for EbA

ENTRY POINT	1) POTENTIAL IMPACT TO INFLUENCE INTERNATIONAL, NATIONAL AND LOCAL LEVEL PROCESSES	2) PROMOTES SYNERGIES	3) BUILDS ON EXISTING EFFORTS
1. Land Use Planning Process	Links local and national processes in tackling land use and development issues, and partly governance issues in the environment and natural resources sector	Planning process involves various consultations between actors (local and national government, NGOs, CSOs, indigenous peoples, indigenous cultural communities, and private sector, among others)	Land use planning is an iterative process at the local level; most local government units are in the process of updating their plans in compliance with the guidebook.  Ecosystems analysis can provide information in land use changes across timelines
2. Sustainable Integrated Area Development Strategy	Promotes implementation of strategy through watershed approach, providing concrete actions in implementing the national targets	Crafting of the Sustainable Integrated Area Development Strategy action plans will promote synergies between the government, CSOs and, to some extent, indigenous peoples and private sector	Looks into existing plans and programs of Department of Environment and Natural Resources and links to the local government unit plans and programs (if implemented according to EMB-Climate Change Division suggested EbA- Sustainable Integrated Area Development Strategy mainstreaming cycle and DAO 17-02 issued in February 2017)
3. Climate change adaptation and disaster risk Agenda	Creates convergence among government actors in tackling international and local commitments on climate change and disaster risk reduction	Synergies between government agencies, among NGOs and the Office of the President. Enhances integrated action of conventions (UNFCCC, UNISDR, CBD); with emphasis on Eco-DRR, the roadmap already developed with the WB RRSP project support needs to be further validated against the updated National Climate Change Adaptation Plan	Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction roadmap cites existing efforts of the government on climate change adaptation and mitigation and disaster risk reduction
4. Protected Area Management	Opportunity to link with the CBD (Aichi target, National Biodiversity Strategy and Plan, PoWPA) and UNFCCC reporting	Linking the government to local PA managers including communities and indigenous peoples	There are on-going consultations for the PA Master Plan; there are also areas that are updating their PA management plans
5. National Climate Change Adaptation Plan Updating along the National Adaptation Planning Process	Links national commitments to the international reporting for climate change adaptation and mitigation	Convergence among government agencies, development partners, CSOs and the private sector	Process is on-going and consultation mechanism is in place

## ENTRY POINT 1: LAND USE PLANNING PROCESS

<b>Main actors</b>	Housing and Land Use Regulatory Board
<b>Contributing/ supporting actors</b>	Forest Management Bureau, local government units
<b>EbA measure</b>	Integration of climate change adaptation measures into land use plans
<b>Mainstreaming</b>	EbA inclusion in the development/update of Forest Land Use Plan and Local Climate Change Adaptation Plan, which will be integrated in the Comprehensive Land Use Plan
<b>Concrete Opportunities</b>	<ul style="list-style-type: none"> <li>Housing and Land Use Regulatory Board and Department of Environment and Natural Resources together with the Climate Change Commission need to agree on possible targets for piloting the mainstreaming of EbA in the planning process or in updating the risk assessment module of the Housing and Land Use Regulatory Board Technical Planning Assistance Program</li> <li>Local government units updating their Comprehensive Land Use Plan have the most opportune time to include EbA in their plans</li> </ul>

The Climate Change Act of 2009 mandates local government units to formulate, plan and implement climate change action plans consistent with existing provisions of the Local Government Code, National Framework Strategy on Climate Change and the National Climate Change Adaptation Plan. The Local Climate Change Action Plan is expected to be integrated in the Comprehensive Land Use Plan and Comprehensive Development Plan (CDP). These plans are all interconnected in the rationalized planning system of the Philippines.

In 2014, the Housing and Land Use Regulatory Board released the Comprehensive Land Use Plan Guidebook 2013/2014 as guidance to local government units in formulating/updating their Comprehensive Land Use Plans. The Guidebook has adopted the ridge-to-reef (R2R) or integrated watershed ecosystems management framework to emphasize the relationship between the upland, lowland and coastal ecosystems.

Introducing the ecosystems approach and vulnerability and risk assessment modules in the Comprehensive Land Use Plan is an

opportunity to influence partners both at the national and local levels on mainstreaming EbA. Volume 2 of the Housing and Land Use Regulatory Board Guidebook has comprehensively mainstreamed the ecosystems approach from data gathering to crafting the Zoning Ordinance, the policy document of the Comprehensive Land Use Plan that can define and designate specific zones for the local government units to regulate and maximize.

Although the Guidebook includes climate change adaptation measures with the introduction of the ecosystems approach, EbA is still yet to be defined and cleared in the land use planning process. The Comprehensive Land Use Plan Guidebook does not explicitly label EbA as such as it is a relatively new concept<sup>9</sup>, and the Housing and Land Use Regulatory Board is not mandated by law to cover this concept<sup>10</sup>. On the other hand, EbA is a preferred land use approach by the local government units and communities consulted<sup>11</sup>, but some of the local government units may view it as another burden that they need to comply with. The Housing and Land Use Regulatory Board has been receiving complaints from local government units that the existing Comprehensive Land Use Plan itself is already voluminous and exhaustive<sup>12</sup>.

**Key lessons: EbA is not entirely new in the Philippines but clearly defining activities that fall under EbA and policies should be done as part of information dissemination and awareness raising activities.**

- EbA as a “new” concept:** It is necessary to conduct additional awareness-raising activities. Measures such as greening, rehabilitation and protection, among others, are already being carried out, and these measures can represent EbA measures, as long as they are targeted to reducing the population’s vulnerability to climate change impacts. Knowledge and awareness about EbA by main actors in government and the local government units is not completely missing, it is just a matter of the terminology used. A recommendation is to include a chapter on EbA in the second volume of the Comprehensive Land Use Plan Guidelines.
- Clear policy for EbA:** There is a need to define EbA in the land use planning process and have a clear and effective law/order to mainstream EbA in the development of the cities and communities. The roles of actors in the process should also be clarified (e.g. Monitoring and evaluation: Self-monitoring is done by the local government units and external entities, i.e. Housing and Land Use Regulatory Board vs. Department of the Interior and Local Government, is not determined<sup>13</sup>).
- Conflicts over land:** There are conflicts and overlaps in terms of land tenure that leads to the absence of land governance (Contreras et al. 2015).
- Monitoring changes in land use at the sub-national level** is important as well for testing EbA measures including evidences for benefits and upscaling potential.

<sup>9</sup> Interview with Dolores Nuevas, GIZ, 18 September 2017.

<sup>10</sup> Interview with Peter Daniel Fraginal, HLURB, 22 September 2017.

<sup>11</sup> Interview with Dolores Nuevas, GIZ, 18 September 2017.

<sup>12</sup> Interview with Peter Daniel Fraginal, HLURB, 22 September 2017.

<sup>13</sup> Interview with Agnes Balota, GIZ, and Dr. Rosa Perez, NPTE-CCC, 20 September 2017.



## ENTRY POINT 2: SUSTAINABLE INTEGRATED AREA DEVELOPMENT STRATEGY

<b>Main actors</b>	Department of Environment and Natural Resources
<b>Contributing/ supporting actors</b>	National government agencies, local government units, civil society and private sector
<b>EbA measure</b>	Ecosystem-based interventions considered in government priorities
<b>Mainstreaming</b>	Linking local plans with existing Department of Environment and Natural Resources national plans and programs
<b>Concrete Opportunities</b>	<ul style="list-style-type: none"> <li>Department of Environment and Natural Resources needs to revisit the Sustainable Integrated Area Development Strategy targets and document lessons on EbA</li> </ul>

The Department of Environment and Natural Resources has adopted the Sustainable Integrated Area Development Strategy<sup>14</sup> in response to the current administration's

development agenda and priorities under the Philippine Development Plan. The Plan guides the crafting and prioritization of plans, projects and programs of the government. Specifically, chapter 20<sup>15</sup> 2017-2022, which addresses the environment and natural resources sector, has now centred its attention in the importance of ecosystem services in other sectors, primarily agriculture, fisheries, industry and services. The plan also recognizes the impacts of climate change and disasters, and the importance of addressing them both at the national and local levels.

The strategy aims to “apply area-based interventions, concepts on its natural resources development programs including but not limited to national greening program and integrated island development and takes into consideration indigenous peoples, urban poor, farmers and fisher folks, Muslim Filipinos, rebel returnees, youth, vocational work force, men and women stakeholders and integrity in the development of environment and natural resource programs and projects.” It covers river basins and watersheds initially to be implemented in 29 priority sites but can be further implemented in other areas in the Philippines. The Sustainable Integrated Area Development Strategy promotes watersheds as the platform for planning, covering ecosystems from ridge-to-reef. Action Plans and priority interventions have to fulfil criteria such as technical viability, social acceptability as well as environmental and economic sustainability. This also includes coherence with national and subnational plans such as Local Climate

<sup>14</sup> DENR Administrative Order No. 2017-02 “Guidelines on the implementation of Sustainable Integrated Area Development Strategy”. 15 February 2017

<sup>15</sup> Chapter 20, PDP 2017-2022: Ensuring ecological integrity, clean and healthy environment.



Change Action Plans and Comprehensive Land Use Plans. The strategy will be implemented through action plans based on the implementation guidelines, and it will include an analysis and assessment of watersheds and sub-watersheds as well as delineation of areas into protection and production zones.

Although there are existing guidelines issued by the Department of Environment and Natural Resources, how climate change adaptation and mitigation will be integrated is yet to be defined. The Sustainable Integrated Area Development Strategy concept promotes inclusive and expansive governance by the government, civil society and private sector, calling for their active involvement in the formulation and implementation of the action plans.

**Key lessons: There is a need to clarify roles of different actors in EbA to effectively implement programs under their mandates.**

- **Power play and governance structures:** Although national government agencies align their plans and programs with the Philippine Development Plan, synergies among these are not encouraged or clear and often there are overlaps in their mandates. To address this, those involved either stay within their own interpretation of the mandates or release multiple programs, which are also influenced by the current head of their respective agencies. There is also a disconnect between national and local government actors in terms of implementation.

- **Integration of Climate Change Adaptation and Mitigation and the Sustainable Integrated Area Development Strategy:** EbA can link climate change adaptation and mitigation and the Sustainable Integrated Area Development Strategy through its mainstreaming in the action plans from the development of the objectives and key result areas to the crafting of proposed interventions. At the national level, there is still an opportunity to influence the selection criteria of priority interventions particularly on the technical viability, environmental sustainability as well as the economic/ financial criteria.



### ENTRY POINT 3: CLIMATE CHANGE ADAPTATION AND DISASTER RISK AGENDA

<b>Main actors</b>	Department of Environment and Natural Resources
<b>Contributing/ supporting actors</b>	Cabinet Cluster on Climate Change Adaptation, Mitigation and Disaster Risk Reduction
<b>EbA measure</b>	EbA as a consolidated climate change adaptation and mitigation-disaster risk reduction approach
<b>Mainstreaming</b>	EbA prioritization and inclusion in the Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction Roadmap
<b>Concrete Opportunities</b>	<ul style="list-style-type: none"> <li>Department of Environment and Natural Resources and Climate Change Commission should include EbA mainstreaming and promote nature-based solutions for climate risks and adaptation needs starting with the articulation of the need for national agencies and sub-national levels to conduct strategic environmental assessments on resilience as basis in policy formulation and future programs designs.</li> </ul>

In terms of cooperation and coordinating structure, the Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction is a strategic entry point for mainstreaming EbA. The inclusion of EbA as part of the Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction agenda will not only create convergence among NGOs but also an opportunity for the topic to be relayed to the President through the Presidential Communications Development and Strategic Planning Office (PCDSPO) and Presidential Spokesperson.

However, EbA has yet to be discussed at the Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction. For EbA to be officially tabled at the cluster level, the topic should already be actively discussed within the Department of Environment and Natural Resources. Currently, EbA is embedded in the Environmental Management Bureau and is still to be brought up to the Bureau Executive Committee (ExeCom) and eventually at the Department of Environment and Natural Resources Executive Committee. The Executive Committee meetings provide a venue to discuss emerging policy issues and possible issuances that can address these. However, with regards to adaptation measures, the Department

of Environment and Natural Resources recently presented the Draft Roadmap of the Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction for 2018-2022<sup>16</sup>. The roadmap is based on international disaster risk reduction frameworks<sup>17</sup>, as well as national frameworks<sup>18</sup>. The roadmap identified the criteria for prioritization of vulnerable provinces: high poverty incidence, high susceptibility or exposure to hazards, and provinces situated in critical watersheds.

**Key lessons: Promote EbA through education of the Department of Environment and Natural Resources and Climate Change Commission to encourage ownership and buy-in to align EbA with the national to the local level priorities.**

- **EbA within the Department of Environment and Natural Resources:** Although the Department of Environment and Natural Resources has a general acceptance to utilize an integrated approach, EbA is still not generally known within the Department. As EbA is already being adopted by the Environmental Management Bureau to some extent, the discussion can start with Environmental Management Bureau and have this elevated by them to Climate Change Service of the Department of Environment and Natural Resources<sup>19</sup>. EbA, as part of the Department of Environment and Natural Resources Draft Roadmap, can educate the other agencies and can be the government's overall approach to climate change adaptation and mitigation and disaster risk reduction.
- **EbA at the Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction:** All of the climate change adaptation and mitigation and disaster risk reduction services of relevant agencies are being explored for strategic areas of convergence to come up with cluster roadmap.<sup>20</sup> For a stronger convergence, a Joint Administrative Order (JAO) among agencies would be appropriate. The current members of the Cluster on Climate Change Adaptation and Mitigation and Disaster Risk Reduction are key partners in mainstreaming EbA in their own agencies. Another key agency that should be included in the list is the National Commission on Indigenous Peoples (NCIP), given that indigenous peoples and indigenous cultural communities have essential Indigenous Knowledge Systems and Practices that are essential in implementing EbA.

<sup>16</sup> Working draft as of 01 September 2017 presented during the One DENR-GIZ Steering Committee Meeting, 19 September 2017.

<sup>17</sup> Sendai Framework 2015-2030 and 2015 Asia-Pacific Economic Cooperation DRR Framework

<sup>18</sup> Ambisyon 2040, NFSCC 2010-2022, and 2011 National Disaster Risk Reduction and Management Framework

<sup>19</sup> Interview with Sandee Recabar, CCC, 22 September 2017.

<sup>20</sup> Interview with Agnes Balota, GIZ, 20 September 2017.

## ENTRY POINT 4: PROTECTED AREA MANAGEMENT

<b>Main actors</b>	Biodiversity Management Bureau
<b>Contributing/ supporting actors</b>	Department of Environment and Natural Resources
<b>EbA measure</b>	Ecosystem services-focused framework for biodiversity conservation
<b>Mainstreaming</b>	EbA inclusion in the implementation of the Philippine Biodiversity Strategy and Action Plan and in the identification of Other Effective area-based Conservation Measures (OECMs)
<b>Concrete Opportunities</b>	<ul style="list-style-type: none"> <li>Department of Environment and Natural Resources needs to operationalize the EbA content of the Philippine Biodiversity Strategy and Action Plan</li> <li>Document Other Effective area-based Conservation Measures and other protected area management initiatives as part of EbA</li> </ul>

Philippines, as one of the 17 megadiverse countries and a biodiversity hotspot, is party to the Convention on CBD. The country has a total of 240 Protected Areas (PAs) under the National Integrated Protected Area System<sup>21</sup> covering around 5.44 million hectares, of which 4.06 million are terrestrial ecosystems and 1.38 hectares are marine ecosystems (DENR 2012). However, according to the study of the Department of Environment and Natural Resources and United Nations Development Programme (UNDP) on the state of the protected areas, designated protected areas only cover 34.82% of the identified 7.6 million hectares or 228 Key Biodiversity Areas (KBAs) in the Philippines (UNDP 2012). Acknowledging that ecosystems can provide services that are key to sustain communities, the study identified the need to “link protected areas to the wider landscape” (UNDP 2012).

As a result, the Biodiversity Management Bureau crafted the Philippine Biodiversity Strategy and Action Plan 2015 to 2028, stating that “by 2028, biodiversity is restored and rehabilitated, valued, effectively managed and secured, maintaining ecosystem

services to sustain healthy, resilient Filipino communities and delivering benefits to all.”<sup>22</sup> EbA can be mainstreamed in the implementation of the Philippine Biodiversity Strategy and Action Plan, building on the ecosystem services-focused framework for biodiversity conservation.

In addition, EbA may play an important role in protected area management through the identification of Other Effective area-based Conservation Measures,<sup>23</sup> as these offer the possibility of decentralized management of conservation areas, which does not necessarily go through the long process of protected area recognition that is already in place.<sup>24</sup> One opportunity is the conservation area managed by an indigenous community that can be reflected in the Ancestral Domain Sustainable Development and Protection Plan (ADSDPP) of the ancestral domain and forest land use planning of the local government units. These plans will be further integrated into the Comprehensive Land Use Plan and Comprehensive Development Plan of the local government units for implementation. On the policy side, the area can be recognized as a locally conserved area through a local government unit Resolution.<sup>25</sup>

**Key lessons: Inter-agency collaboration is recommended to make EbA a cross-cutting concept, linking protected area management, biodiversity and adaptation measures.**

- **Protected area management:** In terms of protected area management, the Philippines is much more advanced than its neighbouring countries because of the multi-stakeholder governance structures and safeguards stated in the National Integrated Protected Area System Act.<sup>26</sup> The Biodiversity Management Bureau intends to enhance this and establish a system of protected area networks that would involve local conservation network (managed by local government units), national government, Indigenous Community Conserved Areas, and the private sector.<sup>27</sup> However, protected area financing and incentive mechanisms are needed to motivate people to manage protected areas.
- **Linking biodiversity and climate change adaptation:** Synergies should be explored between the Philippine Biodiversity Strategy and Action Plan and National Climate Change Adaptation Plan, specifically on how the biodiversity components will be reiterated and/or reflected in the National Climate Change Adaptation Plan.<sup>28</sup>
- **Other Effective area-based Conservation Measures (OECM) vs. Protected Areas:** The Philippines has very limited awareness of Other Effective area-based Conservation Measures, and there has even been an active resistance on this matter (the Department of

<sup>21</sup> The National Integrated Protected Area System Act (NIPAS) Act of 1992 has classified areas of biological importance and are habitats to key species in the terrestrial, wetlands and marine ecosystems.

<sup>22</sup> DENR. Philippine Biodiversity Strategy and Action Plan. 2015.

<sup>23</sup> OECM is defined as “A geographically defined space, not recognized as a protected area, which is governed and managed over the long-term in ways that deliver the effective and enduring in-situ conservation of biodiversity, with associated ecosystem services and cultural and spiritual values.” (OECM task force of IUCN- World Commission on Protected Areas)

<sup>24</sup> Interview with Klaus Schmitt of GIZ on 20 September 2017.

<sup>25</sup> The resolution may be issued by the Sangguniang Bayan (City/Municipal Development Council) for cities and municipalities, and by the Sangguniang Panlungsod (Provincial Development Council) for provinces.

<sup>26</sup> Interview with Atty. Edna Maguigad, NTFP-EP Philippines, 19 September 2017.

<sup>27</sup> Interview with Dir. Theresa Mundita Lim, BMB, 22 September 2017.

<sup>28</sup> Interview with Sandee Recabar, CCC, 22 September 2017.



Environment and Natural Resources might not want to adopt this process because it weakens their control over these areas). However, from the perspective of enhanced EbA mainstreaming and engaging a wider group of stakeholders, this scheme offers the possibility of decentralized management of resource management or conservation areas without going through the long process of protected area recognition. Therefore, EbA can also be seen as a potential link and entry point for Other Effective area-based Conservation Measures in the Philippines.<sup>29</sup>

indicators of various plans and strategies to appropriately reflect the updates.

The National Climate Change Adaptation Plan 2011-2028 presents the importance of the resilience and stability of natural systems and communities as part of climate change adaptation and mitigation. In the updating of the National Climate Change Adaptation Plan, an ecosystems approach (with a holistic perspective, based on the 12 principles promoted by CBD) could be applied in recalibrating the strategic priorities for the adaptation plan.

## ENTRY POINT 5: NATIONAL ADAPTATION PLANNING PROCESS

<b>Main actors</b>	Climate Change Commission
<b>Contributing/ supporting actors</b>	Department of Environment and Natural Resources, Cluster on Climate Change Adaptation and Mitigation and Disaster Risk Reduction
<b>EbA measure</b>	EbA as a cross-cutting theme for the National Climate Change Adaptation Plan thematic priorities
<b>Mainstreaming</b>	Inclusion of EbA in the National Climate Change Adaptation Plan
<b>Concrete Opportunities</b>	<ul style="list-style-type: none"> <li>• EbA needs to be included as one concrete strategy in the updated National Climate Change Adaptation Plan</li> <li>• Link climate change adaptation and protected area management as EbA contribution to the plan</li> </ul>

**Key lesson: Through the National Adaptation Plan -Nationally Determined Contribution process, the Philippines makes its international climate change commitments stronger, with EbA at the heart of climate change adaptation and mitigation.**

- **Interlinkages in National Adaptation Plan:** The National Adaptation Plan process has been designed for adaptation planning and the Philippines wants a process that combines mitigation and adaptation. Moreover, the policy pronouncement is that the country views mitigation as a co-benefit of adaptation. Hence, they retrofitted the process in such a way that emissions are considered and combined with adaptation pathways as well as use the nexus approach to see interlinkages of different sectors.<sup>31</sup>

The ongoing National Adaptation Plan process of the Philippines is an opportunity to influence key decision makers towards mainstreaming EbA. Although EbA is lodged in the “ecological and environmental stability” thematic priority of the National Climate Change Adaptation Plan, the Climate Change Commission has recognized the importance to view EbA as a cross-cutting concept.<sup>30</sup>

At present, the National Adaptation Plan process is at the stage of crafting the framework that connects the National Adaptation Plan and Nationally Determined Contributions (NDC) processes. Mainstreaming EbA in these processes would entail a stronger link between the Climate Change Commission and the Department of Environment and Natural Resources, as well as the other members of the Climate Change Cluster on Adaptation and Mitigation-Disaster Risk Reduction. Further, there is also a need to harmonize the different targets and

<sup>29</sup> Interview with Dr. Klaus Schmitt, GIZ, 20 September 2017.

<sup>30</sup> Interview with Sandee Recabar of CCC on 22 September 2017.

<sup>31</sup> Interview with Agnes Balota, GIZ, 20 September 2017.

## IV. Promoting, Hindering Factors and Opportunities

EbA inherits the existing challenges faced by the natural resources sector. However, these challenges can also be turned into opportunities of mainstreaming. Building on the identified entry points, EbA can be effectively mainstreamed, as long as the hindering factors are properly analysed and addressed.

### BARRIERS & CHALLENGES

The barriers and challenges identified in mainstreaming EbA are anchored on the following issues: technical, institutional arrangements, legal and policy, and awareness, as summarized in table 2.

### ENABLING FACTORS & OPPORTUNITIES FOR MAINSTREAMING EbA

Beyond the challenges, EbA is in the opportune time to be mainstreamed in various existing policies and initiatives in the environment and natural resources sector. Based on the responses of the resources persons and respondents, EbA is seen to be a win-win solution for addressing climate change impacts with minimal trade-offs in the long run.

As there are various existing policies and initiatives where

EbA can already be mainstreamed, the challenge is how to harmonize and link the concept.

The following topics are some of the identified opportunities for mainstreaming EbA:

- Harmonization of valuation tools for environmental services as basis for EbA
- Identifying specific processes in prioritizing EbA projects and programs;
- Linking EbA and REDD+<sup>32</sup>, building on the recent developments and lessons in preparing for REDD+ implementation in the Philippines;
- Linking EbA and People's Survival Fund, opportunities of promoting EbA in selecting projects for People's Survival Fund funding; and
- Crafting a guidance document on the implementation of EbA which provides the technical framework for designing, implementing and monitoring EbA measures in the Philippines. To do this, there would be the need for Environmental Management Bureau to present their suggestion on EbA in implementation of the Sustainable Integrated Area Development Strategy at the right forum or management conference platform in line as well with

ISSUES	DESCRIPTION
Technical Issues	<ul style="list-style-type: none"> <li>• Lack of solid data as basis for EbA</li> <li>• Difficulties in conducting valuation of ecosystem services (process, data and tools)</li> <li>• Poor quality of protected area management plans where EbA can be anchored</li> <li>• No incentive mechanism in place to motivate stakeholders (e.g. private sector) to be actively engaged in protected area management and EbA</li> <li>• Lack of technical guidance, funding limitations, and concrete policies on EbA</li> </ul>
Institutional Arrangements	<ul style="list-style-type: none"> <li>• Lack of interagency cooperation, data sharing, training, policy advocacy</li> <li>• Weak implementation of existing climate change policies at the national level</li> <li>• Need to strengthen the National Panel of Technical Experts as the technical backbone of the Climate Change Commission</li> <li>• Need for clarification of mandates on conflicting uses of resources</li> </ul>
Legal and Policy Issues	<ul style="list-style-type: none"> <li>• Need for clarification on benefit sharing mechanisms</li> <li>• Need for clarification on tenure, property rights and ownership</li> <li>• Conflict on intended use of resources</li> <li>• Linking EbA to the free, prior and informed consent process</li> <li>• Clarification on the role of EbA in the EIA process and Strategic Environmental Assessment framework</li> </ul>
Awareness	<ul style="list-style-type: none"> <li>• Lack of buy-in for a number of local government units</li> <li>• Weak knowledge and awareness on EbA</li> <li>• Lack of political will (motivation) from leaders</li> </ul>

<sup>32</sup> Reducing Emissions from Deforestation and Forest Degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks (REDD+)018).



the finalization of the Strategic Environmental Assessment on Resilience Department Administrative Order which the Department of Environment and Natural Resources Policy and Planning Service should/can spearhead.

Further, there are still other opportunities for EbA mainstreaming within the environment and natural resources sector such as forestry and protected area management. Ecosystems as a transboundary and multi-sector entity serve as a valid argument to discuss EbA in all other sectors beyond natural resources such as infrastructure and agriculture.

## LESSONS LEARNED

There are numerous lessons in the environment and natural resources sector that EbA can build on. These can be categorized into four general areas: a) technical, such as demonstrating cost-effectiveness of EbA; b) legal and policy, including the need to have effective regulations to mainstream EbA into development of cities and communities; c) cooperation, including having a strong and consistent support from civil society organizations and academia to guide policy makers; and d) awareness, such as identifying and empowering local champions to promote change.

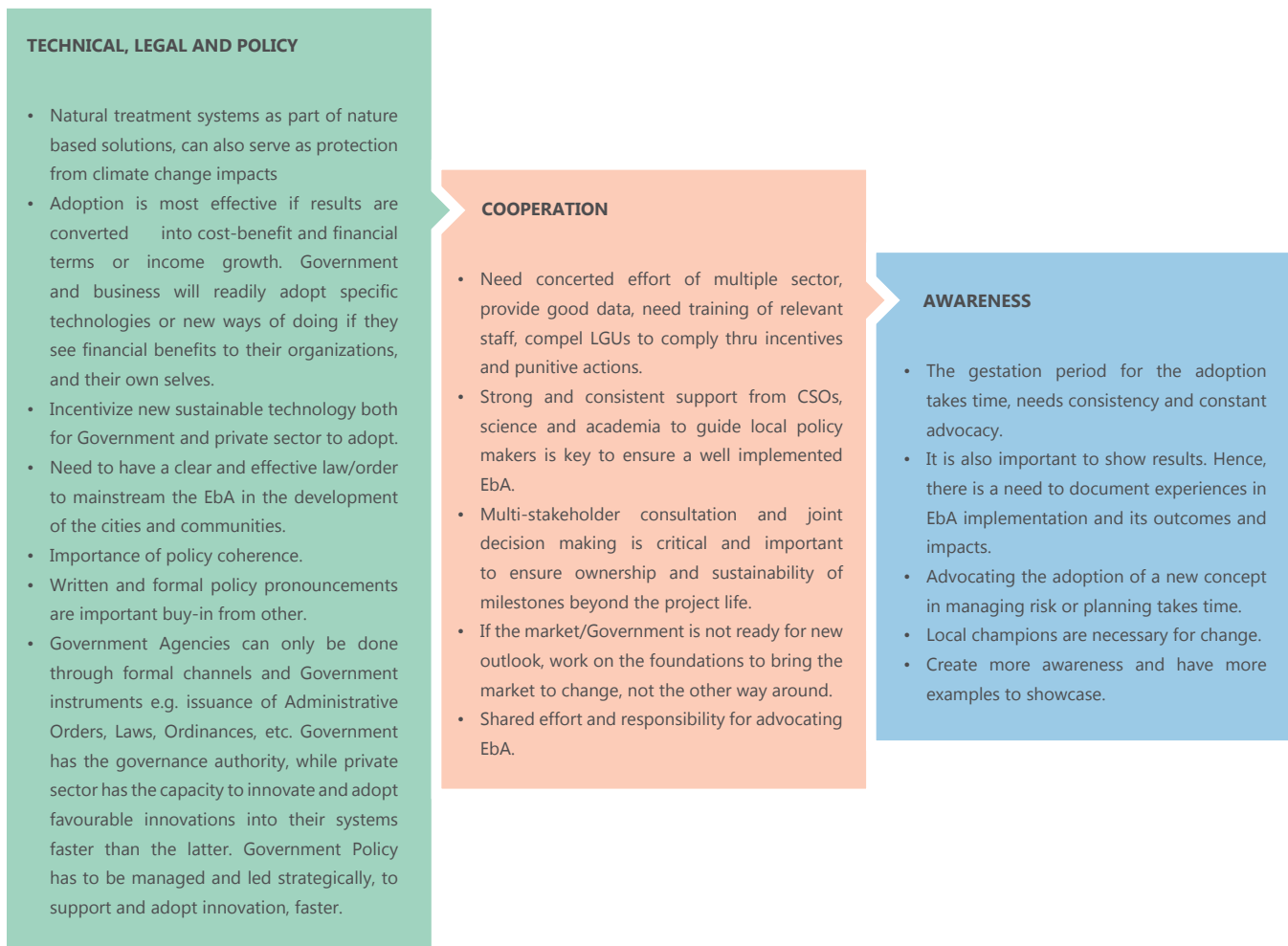


Figure 7. Lessons for Mainstreaming EbA

The Philippines is at an ideal time to mainstream EbA, both at the national and local levels, given that all opportunity streams (problem, policy/proposal and political) pose high concurrence for mainstreaming EbA. In addition to the entry points described in the previous section, here we present additional insights that can help stakeholders move forward in the mainstreaming process and build synergies with ongoing efforts.

### PRIVATE SECTOR ENGAGEMENT

Another opportunity not tackled by the study is the engagement of the private sector such as producers of goods and commodities (e.g. pharmaceutical products), tourism and insurance providers. There are existing initiatives on EbA that are not yet explored specifically related to their corporate social responsibilities. A stocktaking of initiatives would enrich the existing knowledge on EbA particularly on how the private sector can be engaged in mainstreaming EbA. For this purpose, we recommend using the United Nations Global Compact Framework for Corporate Action on Biodiversity and Ecosystem Services, which identifies a range of drivers (or risks and opportunities) for businesses to incorporate biodiversity and ecosystem services concerns into their operations (UN Global Compact, 2012). These drivers are categorized as follows: operational, regulatory and legal, reputational or market, and financial. Voluntary certification schemes for products (e.g. local, organic products, fair trade, etc) from ecosystems that provide risk reduction services for communities might serve as additional incentives for engaging the private sector by providing access to other markets.

### EBA IN THE INFRASTRUCTURE SECTOR

The current administration has launched the “Build Build Build” Program as part of its 10-point socio-economic agenda, which aims to reduce poverty by producing jobs through accelerated infrastructure and industry development. Although most of the projects identified are grey infrastructures, there is still an opportunity to discuss with involved government agencies particularly the Department of Public Works and Highways (DPWH), Department of Transportation (DoTR), and the Bases Conversion and Development Authority (BCDA). It might be possible to make the case for implementing EbA measures (enhancing ‘green infrastructure’) or in combination with grey infrastructure to develop hybrid approaches. As seen in countries like Indonesia (‘Build with Nature’ program), conventional engineering options can be combined with EbA measures, capitalizing on the benefits that both approaches can offer, both in terms of adaptation outcomes, and in terms of political visibility.

### EBA PROJECTS IN THE PIPELINE

There are two EbA Projects funded by the BMU-IKI in the Philippines that are in the pipeline: a) Ecosystem-based management and ecosystem services valuation in two river basins in the Philippines and b) Strengthening Natural Hazard Disaster Risk Management through Ecosystem-based Adaptation and Insurance Protection. Both projects are delayed and are currently being discussed by the governments of Germany and the Philippines.

The former aims to support coordinated implementation of priority ecosystem-based adaptation management measures that protect, maintain, enhance integrity of permanent vegetative cover, regulate water extraction and pollution, as well as protect coastal ecosystems and regulate coastal settlements. The project will be implemented by GIZ and the Department of Environment and Natural Resources, with project timeline of October 2016 through September 2020 (tentative).

The project on Strengthening Natural Hazard Disaster Risk Management through Ecosystem-based Adaptation and Insurance Protection aims to promote EbA in local and national planning and the use of Risk Transfer Mechanisms. The project has 5.5 million Euro in funding from BMU-IKI and will be implemented by GIZ in coordination with the National Economic Development Authority, the Department of Agriculture, the Department of Finance, and the Insurance Commission. The project timeline is October 2016 through September 2020 (tentative).

## References

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- Andres, F. 2017. NDC process and overall targets. Presented at the Multi-Stakeholder Forum for the NDC Sectoral Targets. Presented at the NDC at the Senate of the Philippines on July 18, 2017. Available at [http://climate.gov.ph/images/NDC/3\\_NDC-Forum\\_Phil-Senate\\_fma-lecb\\_071617.pdf](http://climate.gov.ph/images/NDC/3_NDC-Forum_Phil-Senate_fma-lecb_071617.pdf).
- Capiroso-Coballes, K.A. 2017. Integrating the National Adaptation Plan (NAP)-Nationally Determined Contributions (NDC) into the development planning process. Understanding the NAP-NDC linkages: Experiences from the Philippines, UNFCCC COP 22 Side Event at Marrakech, Morocco, on November 7, 2016. Available at [https://seors.unfccc.int/seors/attachments/get\\_attachment?code=28F5WFX26Z50QTZHX4N9035CW31Q1ZJ6](https://seors.unfccc.int/seors/attachments/get_attachment?code=28F5WFX26Z50QTZHX4N9035CW31Q1ZJ6).
- Contreras, A.P., Geuder-Jilg, E. and Gata, M.L.L.P. 2015. Improving Governance of Tenure: Enhancing Guidance for the Issuance of a Unified Tenure System. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH: Quezon City, Philippines. Available at <https://forestry.denr.gov.ph/redd-plus-philippines/publications-pdf/published/Improving%20governance%20of%20tenure.pdf>.
- Climate Change Commission (CCC) n.d. Organizational Chart. Available at <http://climate.gov.ph/about-ccc#organizational-chart>.
- Climate Change Commission (CCC) 2013. National Framework Strategy on Climate Change 2010-2022. CCC: Manila, Philippines. Available at [http://www.neda.gov.ph/wp-content/uploads/2013/10/nfscs\\_sgd.pdf](http://www.neda.gov.ph/wp-content/uploads/2013/10/nfscs_sgd.pdf).
- Climate Change Commission (CCC) 2016. A Guide on How to Access the People's Survival Fund. Proponent's Handbook. CCC: Quezon City, Philippines. Available at <http://psf.climate.gov.ph/wp-content/uploads/2016/12/PSF-AmendedHandbook.pdf>.
- Climate Change Commission (CCC) 2017. PH takes center stage in international climate change adaptation work. Press release on June 12, 2017. Available at <http://climate.gov.ph/2-uncategorised/228-ph-takes-center-stage-in-international-climate-change-adaptation-work>.
- Department of Environment and Natural Resources (DENR) 2013. Climate Change Adaptation Best Practices in the Philippines. DENR: Quezon City, Philippines. Available at [http://climatechange.denr.gov.ph/index.php?option=com\\_content&view=article&id=147:climate-change-adaptation-best-practices-in-the-philippines&catid=8:press-releases](http://climatechange.denr.gov.ph/index.php?option=com_content&view=article&id=147:climate-change-adaptation-best-practices-in-the-philippines&catid=8:press-releases).
- Department of Environment and Natural Resources (DENR) 2015. DENR Organizational Chart. Available at <https://www.denr.gov.ph/about-us/organizational-chart.html>.
- Department of Environment and Natural Resources-Forest Management Bureau (DENR-FMB) 2017. Update of the Philippine National REDD-plus Strategy. June 2017. Manila, Philippines: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Available at <https://forestry.denr.gov.ph/redd-plus-philippines/updates/pnrps.pdf>.
- Department of the Interior and Local Government (DILG) 2016. Climate Change: A Primer for Local Government. DILG: Quezon City, Philippines. Available at [http://www.dilg.gov.ph/PDF\\_File/reports\\_resources/dilg-reports-resources-2016418\\_39818529be.pdf](http://www.dilg.gov.ph/PDF_File/reports_resources/dilg-reports-resources-2016418_39818529be.pdf).
- Food and Agriculture Organization (FAO) 2002. Land Tenure and Rural Development. Available at <http://www.fao.org/tempref/docrep/fao/005/y4307E/y4307E00.pdf>.
- Friends of Ecosystem-based Adaptation (FEBA) 2017. Making Ecosystem-based Adaptation Effective: A Framework for Defining Qualification Criteria and Quality Standards (FEBA technical paper developed for UNFCCC-SBSTA 46). Bertram, M., 1 Barrow, E., 2 Blackwood, K., 3 Rizvi, A.R., 3 Reid, H., 4 and von Scheliha-Dawid, S. 5 (authors). GIZ, Bonn, Germany, IIED, London, UK, and IUCN, Gland, Switzerland. 14 pp. Available at [https://www.iucn.org/sites/dev/files/20170427-potential\\_eba\\_qualification\\_and\\_quality\\_criteria\\_final\\_draft\\_5m.pdf](https://www.iucn.org/sites/dev/files/20170427-potential_eba_qualification_and_quality_criteria_final_draft_5m.pdf).
- Fisher, M. 2013. This map shows why the Philippines is so vulnerable to climate change. The Washington Post, November 12, 2013. Available at <https://www.washingtonpost.com/news/worldviews/wp/2013/11/12/this-map-shows-why-the->

philippines-is-so-vulnerable-to-climate-change/?utm\_term=.759af2d8451c.

- Kreft, S., Eckstein D., and Melcior, I. 2016. Global Climate Risk Index 2017: Who suffers most from extreme weather events? Weather-related loss events in 2015 and 1996 to 2015. Briefing Paper. Germanwatch e.V.: Bonn, Germany. Available at <https://germanwatch.org/de/download/16411.pdf>.
- Philippine Environmental Governance Program (EcoGov) 2003. Allocating Forest Lands: Commonly Issued Allocation Instruments. EcoGov and DENR: Manila, Philippines.
- Philippine Statistics Authority 2017. Philippine Population Surpassed the 100 Million Mark (Results from the 2015 Census of Population). Available at <https://psa.gov.ph/population-and-housing>.
- Post, K. n.d. Increasing the Resilience of Marine Ecosystems: Creating and Managing Marine Protected Areas in the Philippines. Available at <https://www.marineconservationphilippines.org/wp-content/uploads/Marine-Protected-Areas-in-the-Philippines.pdf>.
- Puno, R.V.D. 2016. NAP-NDC linkages: Process in the Philippines. Presented at the Understanding the NAP-NDC linkages: Experiences from the Philippines, UNFCCC COP 22 Side Event at Marrakech, Morocco, on November 7, 2016. Available at [https://seors.unfccc.int/seors/attachments/get\\_attachment?code=1A0FY6TR5C1WDQSUBHIMCWG3MHHU9I2F](https://seors.unfccc.int/seors/attachments/get_attachment?code=1A0FY6TR5C1WDQSUBHIMCWG3MHHU9I2F).
- Rawlins et al., 2017. Understanding the Role of Forests in Supporting Livelihoods and Climate Resilience: Case Studies in the Philippines. World Bank: Manila, Philippines.
- Recabar, S. 2014. Climate change mitigation policies, strategies and initiatives of the Philippines. Presented at the 23rd Asia Pacific Seminar on Climate Change on August 25-26, 2014. Available at [https://www.env.go.jp/en/earth/ap-net/documents/seminar/23rd/08\\_Philippines\\_Recabar.pdf](https://www.env.go.jp/en/earth/ap-net/documents/seminar/23rd/08_Philippines_Recabar.pdf).
- Recabar, S. 2017. Updating the NCCAP. Presented at the Aligning Climate Finance with Philippine Nationally Determined Contribution (NDC): A National Multi-Sectoral Dialogue at Manila, Philippines, on October 9-10, 2017. Available at [http://climate.gov.ph/images/NDC/Sofitel/05\\_Philippine-Climate-Change-Action-Plan\\_Sandee-Recabar.pdf](http://climate.gov.ph/images/NDC/Sofitel/05_Philippine-Climate-Change-Action-Plan_Sandee-Recabar.pdf).
- SEARCA 2017. National Adaptation Plan (NAP) Global Network invites CCC to join project Steering Committee, SEARCA shares Climate Resilience and Green Growth (CRGG) initiatives. Available at <http://www.searca.org/index.php/news-and-events/searca-news/2784-national-adaptation-plan-nap-global-network-invites-ccc-to-join-project-steering-committee-searca-shares-climate-resilience-and-green-growth-crgg-initiatives>.
- Secretariat of the Convention on Biological Diversity 2009. Connecting Biodiversity and Climate Change Mitigation and Adaptation: Report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change. Montreal, Technical Series No. 41, 126 pages. Available at <https://www.cbd.int/doc/publications/cbd-ts-41-en.pdf>.
- Sison, E., Gonzales-Flor, B., Paunlagui, M., and Gevana. 2017. National Climate Change Awareness Survey Final Report. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH: Manila, Philippines.
- UN Global Compact (2012) A Framework for Corporate Action on Biodiversity and Ecosystem Services. UN Global Compact and International Union for Conservation of Nature
- United Nations Development Programme (UNDP) 2012. Communities in Nature: State of Protected Areas Management in the Philippines.
- World Bank 2017. Disaster risk impacts and vulnerabilities. Available at [http://sdwebx.worldbank.org/climateportal/countryprofile/home.cfm?page=country\\_profile&CCCode=PHL&ThisTab=RiskOverview](http://sdwebx.worldbank.org/climateportal/countryprofile/home.cfm?page=country_profile&CCCode=PHL&ThisTab=RiskOverview).



## Annex: Relevant Policies and Frameworks on EbA

The green and orange boxes present policies/ frameworks on environment and natural resources, and climate change, respectively.



