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# Acronyms

ADSDPP	Ancestral Domain Sustainable Development and Protection Plan
AIP	Annual Investment Program
CLUP	Comprehensive Land Use Plan
CSO	Civil Society Organization
CSR	Corporate Social Responsibility
DA	Department of Agriculture
DPWH	Department of Public Works and Highways
DENR	Department of Environment and Natural Resources
EI	Economic Instrument
EPF	Environmental Protection Fee
ESG	Environmental, Social, and Governance
FAPs	Foreign-Assisted Projects
FLUP	Forest Land Use Plan
FMB	Forest Management Bureau
GFI	Government Financial Institution
IEC	Information, Education and Communication
IPAF	Integrated Protected Areas Fund
IWMP	Integrated Watershed Management Plan
IWRM	Integrated Water Resources Management
LGC	Local Government Code
LGU	Local Government Unit
MFI	Microfinance Institution
MOA	Memorandum of Agreement
NEDA	National Economic and Development Authority
NG	National Government
NGA	National Government Agency
NGO	Non-Government Organization
NGP	National Greening Program
NWRB	National Water Resources Board
PBSAP	Philippine Biodiversity Strategy and Action Plan

PD	Presidential Decree
PES	Payment for Ecosystem Services
PIDS	Philippine Institute for Development Studies
PIWSPPPA	Provincial Integrated Water Security Plan Programs, Projects and Activities
PMPCRFD	Philippine Master Plan for Climate Resilient Forestry Development
PO	People's Organization
PWSSMP	Philippine Water Supply and Sanitation Master Plan
RA	Republic Act
SDG	Sustainable Development Goal
SFI	Sustainable Financing Instrument
URAF	Unified Resource Allocation Framework
WMC	Water Management Council
WRM	Water Resources Management
WSS	Water Supply and Sanitation

# Framework for Financing Water Resources Management

## INTRODUCTION

This paper aims to help national and local governments address the financing requirements for water resources management (WRM). It focuses on watershed conservation and protection and its impact on the sustainable supply of water for domestic, irrigation, power generation, and other industrial uses.

Several national agencies, local government units (LGUs), water districts, and multisectoral bodies are mandated by existing policies to perform WRM functions (Annex I. Major Institutions and Entities Involved in WRM). The management and utilization of water, being a public and economic good, cuts across geographic and political boundaries and water-dependent sectors. Thus, WRM is interlinked, and roles and responsibilities can be thinly delineated, including financing for watershed conservation and protection.

This paper offers a framework for sustainable watershed management financing. It considers respective mandates and specific roles of the abovementioned bodies vis-à-vis priority activities and financing gaps. It proposes a strategic approach in allocating public resources, as well as mobilizing other sources of finance for WRM. The framework looks at the best use of different financing instruments for WRM, and the engagement of national and local institutions and the private sector in mobilizing resources.

It is envisioned that the WRM Financing Framework will define the policy for budget support from the national and local governments and will be used as a guide in mobilizing other financing sources for watershed conservation, protection, and development.

At the national level, the National Economic and Development Authority (NEDA) is encouraged to get the NEDA Infrastructure Committee and Sub-Committee on Water Resources to support the WRM financing framework as a parallel to the Unified Resource Allocation Framework (URAF) for water supply and sanitation to support Key Reform Agenda 4 (Balancing Water Supply and Demand) of the Philippine Water Supply and Sanitation Master Plan (PWSSMP). The Department of Environment and Natural Resources (DENR), being the main agency responsible for the formulation and implementation of policies related to environmental management as well as the conservation of the country's natural resources, and the LGUs, as mandated under Republic Act (RA) 7160 or the Local Government Code of 1991, will both play a key role in the implementation of the WRM financing framework.

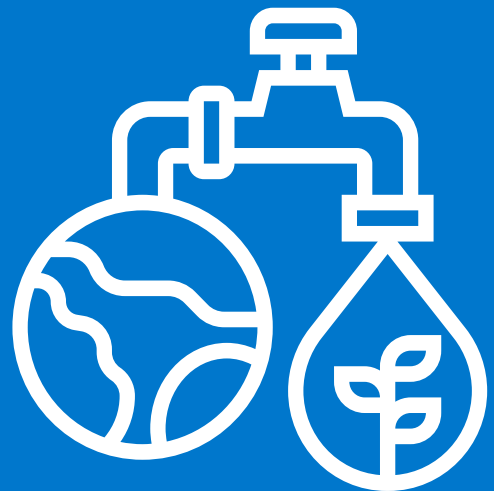
With the Mandanas ruling providing LGUs with a bigger share of national resources to implement their programs, projects, and activities, the WRM Financing Framework aims to guide LGUs in restructuring and prioritizing their budgets and leveraging them with other financial sources to increase their investments in WRM activities.

# 01

## BACKGROUND AND CONTEXT

**Water is a crucial lifeline** – it is necessary for sustaining human life and essential to the country's economic growth and development as it supports drinking and sanitation services, food and industrial production, water-based recreation, and energy generation.

Water resources management seeks to ensure adequate water supply and harness the benefits of water resources across all uses and boundaries while sustaining healthy water-dependent ecosystems



# Background and Context

Water is a crucial lifeline – it is necessary for sustaining human life and essential to the country’s economic growth and development as it supports drinking and sanitation services, food and industrial production, water-based recreation, and energy generation. However, increasing population growth, rapid urbanization and changes in land use, low investments in the water sector, institutional fragmentation and weak governance, continuing degradation and deforestation of watersheds, over-extraction of water sources from poor management of watersheds and regulation of water resources allocation, and intensified impacts of climate change, all contribute to water stress. If not addressed or averted, these challenges will have serious implications on water availability and quality, health, and food security.

WRM is a key strategy to address threats to water security. It is also an integral component of the global, national, and local development agenda. WRM seeks to ensure adequate water supply and harness the benefits of water resources across all uses and boundaries while sustaining healthy water-dependent ecosystems. Thus, the goal of WRM is water security. According to the World Bank, “Achieving water security in the context of growing water scarcity, greater unpredictability, degrading water quality and aquatic ecosystems, and more frequent droughts and floods, will require a more integrated and longer-term approach to water management.”<sup>1</sup>

Sustainable Development Goal (SDG) 6.5 of the Agenda for Sustainable Development targets the implementation of integrated water resources management at all levels by 2030. WRM is a coordinated approach that enables the achievement of other SDG targets on water supply, sanitation, water-use efficiency, wastewater treatment, water quality, and freshwater ecosystems that are critical for socio-economic development, healthy ecosystems, and human survival.

<sup>1</sup> World Bank, “Water Resources Management,” <https://www.worldbank.org/en/topic/waterresourcesmanagement#2>

<sup>2</sup> *Ibid.*

<sup>3</sup> UN Conference on Environment & Development, “Agenda 21”, 1992. [https://www.un.org/waterforlifedecade/waterandsustainabledevelopment2015/images/sustainable\\_development\\_eng.pdf](https://www.un.org/waterforlifedecade/waterandsustainabledevelopment2015/images/sustainable_development_eng.pdf)

<sup>4</sup> As defined by the United Nations Environment Programme; also adopted by the Philippine IWRM Plan Framework, NWRB Resolution No. 006-0507, May 16, 2007.

## What is WRM?

Water resources management is defined as a process of planning, developing, and managing the quantity and quality of water resources across all water uses involving institutions, infrastructure, incentives, and information systems that support and guide water management, including water-related risks such as floods, drought, and contamination.<sup>2</sup>

WRM recognizes water as a natural resource that is an integral part of the ecosystem and a social and economic good whose quantity and quality determines the nature of its utilization.<sup>3</sup>

Integrated water resources management (IWRM) is process that promotes the coordinated development and management of water, land and related resources in order to maximize economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.<sup>4</sup>

IWRM, thus, accounts for the synergies and tradeoffs in the use and value of water as an economic and social good.





### **Integrated Water Resources Management (IWRM) and related initiatives.**

The Philippine government adopted IWRM as a collaborative framework and mechanism for mainstreaming WRM in national and local planning and programming processes with the following target outcomes:

1. effective protection and regulation for water security and ecosystem health;
2. sustainable water resources and responsive services for present and future needs;
3. improved effectiveness, accountability, and synergy among water-related institutions and stakeholders; and
4. adaptive and proactive responses to future challenges.

The IWRM framework guided the development of various plans, both national and local. It was considered in the preparation of the National Water Security Roadmap (NWSR) which is intended to guide sectoral and local plans in ensuring the sustainability of water

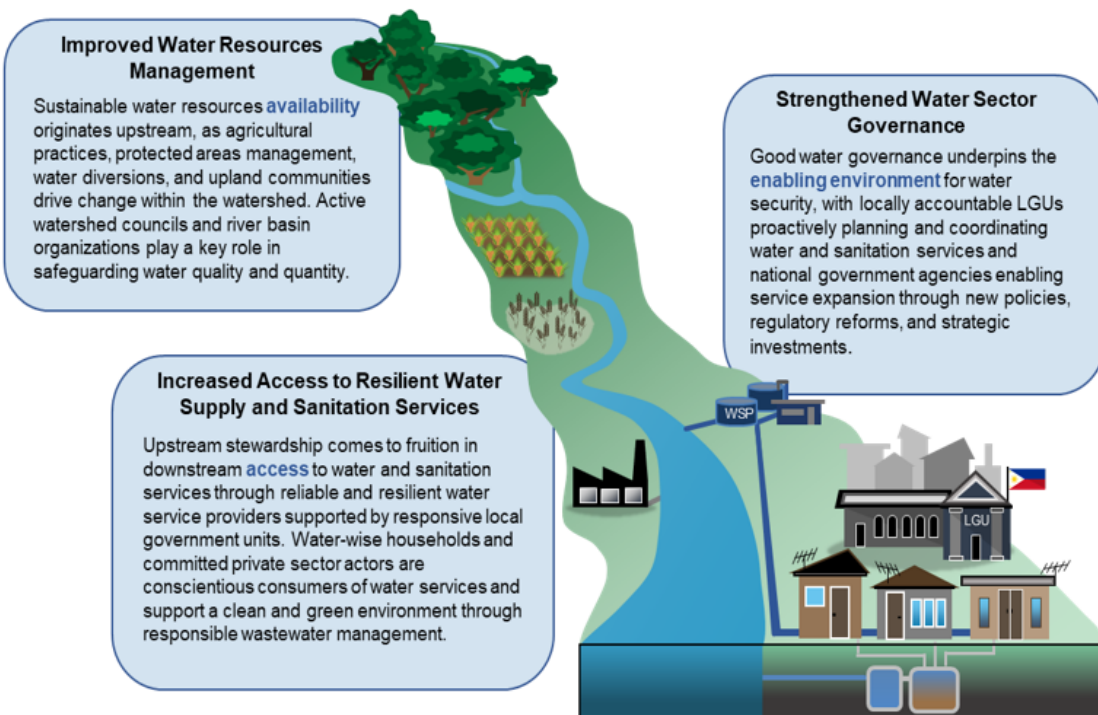
resources as a strategy to achieve water security.

The IWRM principles were also adopted in the the formulation of PWSSMP 2019–2030. IWRM principles were used to assess the water supply and sanitation (WSS) sector and identify the key reform agenda to achieve the national targets for universal access to WSS by 2030. The current Philippine Development Plan 2023–2028 highlights IWRM as a major strategy for effective water governance and integrated planning and management of land, water, and coastal resources. The strategies and programs of the 18 major river basin master plans and the Philippine Master Plan for Climate Resilient Forestry Development (PMPCRFD), prepared by DENR, were also guided by the IWRM approach.

WRM was also adopted as a strategy in other sectoral and local plans such as the Forest Land Use Plan (FLUP), Ancestral Domain Sustainable Development and Protection Plan (ADSDPP), Comprehensive Land Use Plan (CLUP), local development and investment plans, and watershed management plans.

## BOX I. USAID SAFE WATER INTEGRATED AND INCLUSIVE WATER SECURITY FRAMEWORK

The Safe Water Integrated and Inclusive Water Security Framework (IIWSF) embodies the principles of social equity, economic efficiency, and environmental sustainability and is built on the three interrelated pillars of water security: improved WRM, increased access to resilient WSS and strengthened water sector governance. This framework was adopted in the formulation of the Provincial Integrated Water Security Plan (PIWSP), a mechanism to cascade the key reform agenda of the PWSSMP to the sub-national level.



The PIWSP process uses a participatory approach informed by the application of data and evidence to support watershed management within the mandates of the provincial, city, and municipal governments. The process involves discussions among WRM and WSS stakeholders to ensure coherence of policies and plans. It recognizes the pivotal role of the provincial government in setting the local water security roadmap and synchronizing water-related plans and programs of LGUs, as well as financing to implement and sustain these initiatives.

**Dimensions of WRM.** As an integrated approach, the implementation of WRM has four interrelated dimensions:<sup>5</sup>

1. *enabling environment* (including policies and plans), to operationalize legal and regulatory frameworks;
2. *institutional and stakeholder participation* to implement plans and enforce regulations;
3. *management instruments*, including data and information, to inform decision-making and interventions; and
4. *financing for infrastructure investment*, to implement policies, plans and management instruments, and to fund operations of concerned institutions.

Financing stands at the core of sustainable WRM. Managing watersheds through planning, capacity building, data management, forest protection (including maintenance of forest patrols), reforestation and assisted natural regeneration of denuded lands, agroforestry, and sustainable livelihood support require financing. Determining WRM financing requirements (including recurring development and maintenance costs, as well as capital investments) involves the pricing of benefits for water-related services offered by

providers (LGUs and communities) and the cost or compensation from those who benefit from or use them. The value of the benefits from ecosystem goods and services (EGS) offered by watersheds should also be considered.

**Why the Need for WRM Financing.** Financing, as a key dimension of WRM, has been identified by the government, change implementors and stakeholders (communities, private sector, commercial and industrial users, academe) as a major and persistent gap in development plans. The 2021 United Nations Environment Programme Report on Progress on Integrated Water Resources Management (SDG 6.5.1) among 173 countries revealed that financing significantly lags behind the other three dimensions mentioned above.<sup>6</sup> In the Philippines, national government spending for WRM programs, projects, and activities has been below one percent (1%) of the average annual budget allocation. Approved budgets of DENR, notwithstanding its role as the main agency mandated to perform WRM and environment-related functions<sup>7</sup>, has been less than one percent (1%) of the national appropriations for the past ten years.<sup>8</sup> The bulk of national government allocation for watershed development goes to the National Greening Program (NGP).

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<sup>5</sup> United Nations Environment Programme, "Progress on Integrated Water Resources Management," <https://wedocs.unep.org/bitstream/handle/20.500.11822/36690/PIWRS6.5.1.pdf>.

<sup>6</sup> *Ibid.*

<sup>7</sup> The delineation of roles between DENR and LGUs in forest conservation, management, and protection are embodied in Republic Act (RA) 7160 (Local Government Code of 1991), Presidential Decree 705 (Forestry Reform Code) as amended; Executive Order No. 192 defining the mandates, organization, and functions of the DENR, and DENR Administrative Order No. 30, Series of 1992 prescribing the guidelines for the transfer and implementation of DENR functions and devolution of forest management functions to the LGUs.

<sup>8</sup> "DENR Proposes 25.29-B Budget for 'Green Growth Recovery in 2022,'" Department of Environment and Natural Resources, <https://denr.gov.ph/index.php/news-events/press-releases/3232-denr-proposes-p25-29-b-budget-for-green-growth-recovery-in-2022>



## BOX 2. THE NATIONAL GREENING PROGRAM (NGP)

The National Greening Program (NGP), introduced through Executive Order (EO) 26 in 2011, was the government's reforestation initiative to plant 1.5 billion trees in 1.5 million hectares of public domain lands for a period of six years from CY 2011 to CY 2016 (or an average of 250 million seedlings planted in 250,000 hectares annually). The NGP was by far, the largest and widest reforestation effort in the country fully funded by the national government. Before the NGP, government's overall performance in reforestation averaged at 30,000 hectares annually. At this rate, it would take 280 years to reforest the overall target of eight million hectares.

The NGP aimed to address problems related to poverty, food security, resource conservation and protection, and climate change. It adopted the convergence approach by bringing together the three key national agencies—DENR, the Department of Agriculture (DA), and the Department of Agrarian Reform (DAR)—to ensure that government resources and skills are streamlined and focused on the project in partnership with the LGUs, civil society organizations (CSOs), people's organizations (POs), the academe, and the private sector.

Under the NGP, DENR sets the program targets and conducts surveys, mapping, and planning. The Community Environment and Natural Resources Officers (CENROs) and Provincial Environment and Natural Resources Officers (PENROs) are responsible for identifying barangays which will be included in the program based on the barangay classification (third class and below) and the potential sites for reforestation and rehabilitation. The NGP is implemented through social mobilization and contract reforestation using a community-driven development approach, comprehensive site development, and individual contracts.

EO 193, issued on November 12, 2015, launched the Expanded NGP to rehabilitate all the remaining unproductive, denuded, and degraded forestlands, estimated at 7.1 million hectares, from 2016 to 2028. The budget allocation provided by the national government for the Expanded NGP averaged PhP 4.47 billion annually from 2015–2020. From 2019 to 2020, the average budget allocation was smaller at PhP 2.94 billion per year.

As of 2020, 23% of the target of 7.1 million hectares from 2011 has been reforested.

The following were the findings of a Philippine Institute of Development Studies (PIDS) study on the NGP implementation:<sup>9</sup>

### a. economic and social impact

- » NGP provided marginal increases in incomes to locals employed under the program
- » NGP strengthened social mobilization for planting and maintenance and protection activities creating enhanced awareness on watershed protection in maintaining ecological integrity

### b. implementation cost and efficiency

- » NGP activities are very labor-intensive and community-driven
- » NGP costs cover the acquisition of seedlings, social mobilization (site preparation; information, education, and communication (IEC), transportation, and actual planting); and maintenance and protection until the third year
- » The implementation cost was relatively low because maintenance and protection cost was only 28%, below the standard of 50% of the total reforestation cost.<sup>10</sup>
- » The average computed output (area planted with surviving seedlings) per cost ratio was only 0.3, third year
- » Delays in payment forced POs to take loans with very high interest rates (as high as 15% every 15 days) to pay the services of members involved in NGP

Based on the above findings, the study recommended improvements in NGP implementation as follows:

- review the costs of reforestation activities and allocate more funds for maintenance and protection beyond the usual three years;
- audit all NGP activities to assess the forest restorability cum quality of the stand/sites identified and investigate the financial, economic, and social viability of the proposed reforestation in the area (provincial or regional level);
- conduct outcome-based monitoring and evaluation by a third party to include quality of seedlings, canopy closure and microclimate, biodiversity condition and true survival rate of seedlings;
- review incentives in each reforestation site to ensure that harvesting incentive is clearly indicated in the contract or the Memorandum of Agreement (MOA); and
- increase support for the protection of existing forests and improve community organizing and inclusive participation, organizational development, and capacity building of partner POs to realize the net benefits gained from protecting existing forests, which far outweigh those from restoration programs.

<sup>9</sup> Arvin Vista et al., "Impact Assessment of the National Greening Program of the DENR: Scoping or Process Evaluation Phase (Economic Component), Discussion Paper Series No. 2016-27," Philippine Institute of Development Studies, <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1627.pdf>.

<sup>10</sup> NGP average cost of PhP 21,421/ha is relatively low compared with PhP 40,000/ha budget for Paper Industries Corporation of the Philippines (PICOP) Resources, PhP 78,000/ha budget for ABS-CBN Bantay Kalikasan Foundation; and PhP 75,000/ha for UP Land Grant (Carandang and Carandang, 2009). Kalikasan Foundation; and PhP 75,000/ha for UP Land Grant (Carandang and Carandang, 2009).

Funding allocated by the LGUs, which have the legal, regulatory, fiscal, and institutional mandates for WRM, has been more sporadic and limited to reforestation, nursery maintenance, rehabilitation of riverbanks and mangroves, ecosystem management, and capacity building. Activities not regularly budgeted at the local level include the conduct of hydrological and ecosystem-based assessment studies, data management, operations and maintenance, forest patrols, real-time monitoring of watersheds, and sustainable livelihood support. WRM activities are usually funded from the LGUs' General Fund and, on average, account for only 0.2-1.4% of their total annual budgets.<sup>11</sup>

The gap in WRM financing can be attributed to the lack of a robust enabling environment (including sound policies that direct and mobilize financing for required interventions), weak institutional collaboration, and unclear responsibilities for WRM. While the Local Government Code (LGC) mandates LGUs to share the responsibility of managing and maintaining the ecological balance within their territorial jurisdiction with the national government, there is still a general notion that DENR has overall supervision and control over public forestlands and watersheds. Nonetheless, it is in the best interest of LGUs to invest in WRM because mismanaged watersheds will ultimately impact their constituents through hazards such as flooding which can disrupt water supply and affect water quality. Affected communities will inevitably seek assistance from LGUs which may entail more costs and affect economic activities. The review or amendment of existing laws such as Presidential Decree (PD) 198 (Provincial Water Utilities Act of 1973), PD 1067 (Water Code), and RA 7160 (Local Government Code) should

also be pursued to enable LGUs and water service providers to invest outside their territorial jurisdiction in watershed management activities that impact their communities, (e.g., water source availability and groundwater recharge).

Moreover, the lack of understanding of the value of water, being an economic good, has limited the mobilization and optimal allocation of WRM financing. Undervaluation of water-related goods and services encourages free riders among beneficiaries and providers and reduces incentives in engaging potential financiers, such as the private sector, in WRM investments.

The Revised Master Plan for Forestry Development (RMPFD) (2013-2030) reported that coordination problems related to the integrated management of watersheds stem from the restricted and often conflicting mandates of the different development agencies operating in upland areas, conflict of interests and legal responsibility over land-use within watershed areas between DENR, DA, DAR and the LGUs.

The delineation and coordination of jurisdiction and scope of responsibilities among the various agencies covered in various legislations such as PDs 705, 1159, EOs 192, 223, and 224 of 1987, 258 of 1995, RAs 4850 amended by PD 813, RA 8371, LOIs 845 and 1002, and the Provincial Water Utilities Act of 1973 are not clear. While there have been significant achievements under the RMPFD, the current Philippine Master Plan for Climate Resilient Forestry Development (PMPCRFD) 2016-2028 indicated the need to secure congressional approval of bills defining forestland boundaries to improve forest and watershed governance, e.g. clear demarcation of production and protection forests; passage of the Sustainable Forest Management Act; harmonization of governance of public lands covered by overlapping tenure instruments such as the certificates of ancestral domain titles/claims (CADT/CADC), community-based forest management agreements (CBFMA) and protected areas (PAs), among others.

<sup>11</sup> USAID *Safe Water Baseline Assessment Report, 2019*

WRM activities benefit various stakeholders, including communities, LGUs, national government agencies (NGAs), and the private sector. Thus, these sectors must also invest in water resource management. These stakeholders are likely to invest in WRM activities that directly benefit them or mitigate adverse impacts on their constituents. LGUs can invest in WRM activities related to stewardship and infrastructure activities because these benefit them by securing water sources and livelihoods of local communities and reducing adverse impacts of climate-related hazards. Examples of these are protection of existing forests, rehabilitation of degraded watersheds, vulnerability assessment and adaptation planning and support to community livelihoods such as fuelwood development and agroforestry farms.

The private sector can also support WRM activities that enhance the provision of ecosystem goods and services which are necessary to sustain business operations. For instance, wood processors are expected to develop their own plantations or support communities in plantation development while water service providers must be made accountable for the protection and rehabilitation of their water source catchments. Communities must likewise share in the costs related to the installation of soil and water conservation structures and the development of their farms.

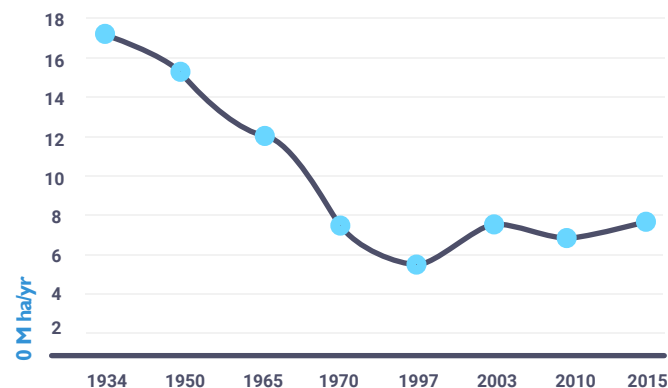
NGAs must provide the appropriate enabling environment to motivate relevant stakeholders to invest in WRM. Apart from providing clear and stable policies, NGAs should provide guidance to LGUs, communities, the private

sector, and other stakeholders on where they can invest, how they can participate in WRM activities, and their rights/benefits from the resulting ecosystem's goods and services. Thus, NGAs' support in the preparation of land use and management plans is crucial, including the generation and provision of science and evidence-based information and maps, necessary in formulating these plans.

# FORESTS COVER AND INVESTMENTS

## FOREST COVER

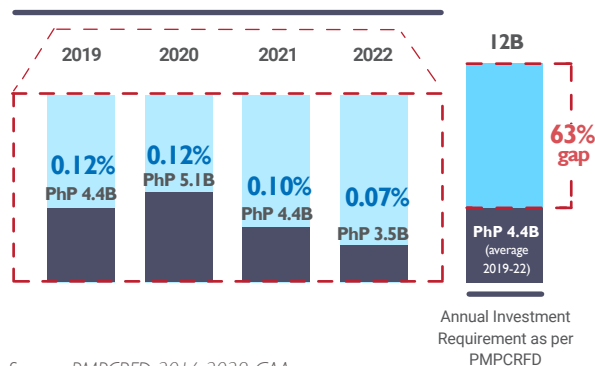
(In Million hectares)



Sources: Actual inventory of land cover cited in the PH Master Plan for Climate Resilient Forestry Development and the General Appropriations Act (2019-2022)

## WRM ALLOCATION

from the National Budget



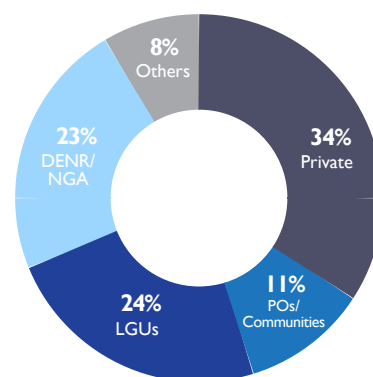
Sources: PMPCRFD 2016-2028; GAA

**Estimated WRM Financing Requirement.** The total financing required under the Philippine Master Plan for Climate Resilient Forestry Development (PMPCRFD) to meet the target of 10.7 million hectares of forest cover by 2028 is PhP 135 billion, or PhP 11-12 billion annually. Of this amount, the forestry master plan estimates that about 34% will be funded by the national government; 3% by LGUs; 7% by peoples' organizations/ communities; 31% by the private sector, and 25% by other sources.

Following the discussions in the previous section and with the implementation of the Mandanas ruling, this cost distribution may have to be re-structured. LGUs will have to increase their investments in WRM activities related to their mandate under the Local Government Code on the management and maintenance of ecological balance within their territorial jurisdiction. With support from the NGAs and the LGUs, local communities, POs and the private sector will also need to assume a greater

share and be accountable for the development of forest plantations that will directly redound to their economic benefit. As such, the proposed investment mix may be reconfigured as follows: 23% from NGAs, such as the DENR; 24% from LGUs; 11% from POs; 34% from the private sector and only 8% from other sources.

## PROPOSED INVESTMENT MIX



**Total Funding Requirement (2016-2028) =**  
PhP 135B or PhP 12B annually

Source: Based on restructured investment shares indicated in PMPCRFD 2016-2028 considering the implementation of the Mandanas ruling

The current budget allocation for WRM activities averages PhP 4.4 billion, leaving a financing gap of PhP 8 billion or 63%. As the financing gap for watershed conservation and protection widens, degradation and depletion of the watersheds become faster and the associated economic, social, and environmental costs become higher:

The Philippine Biodiversity Strategy and Action Plan (PBSAP) 2015-2028 also estimates a total of PhP 65-76 billion to address forest degradation that results in biodiversity loss and over-exploitation of water availability.<sup>12</sup> Leveraging financial, fiscal, and economic tools are among the solutions that are applicable for water resource management to address the financing gap and improve biodiversity outcomes. Modifications in existing policy frameworks and expenditure patterns e.g. generating revenues through economic

instruments and innovative mechanisms (impact investment vehicles, taxes), increasing public sector budgets, realigning expenditures allocable for conservation, and delivering financial resources effectively (enhancing cost-effectiveness and efficiency, synergies and promoting equity) are also recommended as part of the financing solutions.

National policies, regulations, and plans must be operationalized to achieve the full benefits from WRM. Financing strategies are required to influence adequate investment and stable financing flows for the long-term management of water resources.

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<sup>12</sup> Biodiversity Financing Initiative (BIOFIN) - Philippines, "Financing Plan for the Philippine Biodiversity Strategy and Action Plan," 2016.



# 02

## PRINCIPLES OF WRM FINANCING

*WRM financing is anchored on the concept that water is an economic good.*



# Principles of WRM Financing

WRM financing is anchored on the concept that water is an economic good.<sup>13</sup> Users will be willing to pay the price of an economic good if the benefits exceed the costs involved in using or sustaining the good or service. Attributing value to water signifies that it is finite and has competing uses, and therefore should be managed sustainably. Sustaining water availability will involve protecting, restoring, and managing the watershed and water-related ecosystems – freshwater sources, forests, and other natural ecosystems. Financing WRM considers the interplay of three critical factors:

- the value or benefit;
- the use or cost; and
- the opportunity cost of water resources.

The benefits come from the economic, social, and environmental returns from watershed protection, rehabilitation, or restoration (see Box 3). The costs are in the form of losses from watershed denudation and averting the impacts on water availability and quality, such as the cost of developing water sources in farther locations, longer transmission lines, costlier water treatment, or desalination. Opportunity costs are incurred when the allocation of water for one use affects the availability of water for another use such as when water supply for irrigation is diverted to domestic or household consumption.

## BOX 3. BENEFITS OF WATERSHED CONSERVATION AND PROTECTION IN THE PHILIPPINES



- generates 149% to 167% higher water yields in the driest months of the year compared to a bare urban landscape
- reduces the volume of floodwater by 47% in the wettest months of the year
- protects against erosion and sediment generation, reducing the risk of hazards and lowering household water treatment cost
- less costly to reforest than replace regulating ecosystem services with man-made technology.<sup>14</sup>

<sup>13</sup> Financing Initiative (BIOFIN) - Philippines, "Financing Plan for the Philippine Biodiversity Strategy and Action Plan," 2016. The Dublin Statement of the International Conference on Water and the Environment (1992) states that "water has an economic value in all its competing uses and should be recognized as an economic good". The Four Dublin Principles state that —

1. Water is a finite, vulnerable, and essential resource and should be managed in an integrated manner.
2. Water resources development and management should be based on a participatory approach, involving all relevant stakeholders.
3. Women play a central role in the provision, management and safeguarding of water.
4. Water has an economic value and should be recognized as an economic good, considering affordability and equity criteria.

<sup>14</sup> "Understanding the Role of Forests in Supporting Livelihoods and Climate Resilience: Case Studies in the Philippines," World Bank, <https://documents1.worldbank.org/curated/en/365991588137464307/pdf/Understanding-the-Role-of-Forests-in-Enhancing-Livelihoods-and-Climate-Resilience-Case-Studies-in-the-Philippines.pdf>.

WRM financing, premised on water being an economic and common good,<sup>15</sup> is framed by the following principles:<sup>16</sup>

- a) *transparency and accountability*—the user or beneficiary pays the cost of the goods, accounting for the private benefits gained from its consumption; the one who pollutes or depletes water resources shares in the costs of managing it to prevent further degradation or depletion, internalizing costs to compensate for welfare loss, balancing full cost recovery and accounting for externalities with stakeholders' capacity and willingness to pay;
- b) *inclusivity and equity*—managing water resources demands a holistic approach and stresses the need for a participatory process that accounts for the needs, capacities, and constraints faced by different users and providers, and addresses both competitiveness and affordability concerns;
- c) *science-led*—evidence-based data and studies provide a strong foundation in the design and prioritization of WRM financing instruments and investments; and
- d) *coherence*—considering the inter-sectoral nature of WRM, financing policies and instruments should account for existing water structures, stakeholders' behavior and natural or climatic conditions and be founded on a coherent, integrated, and adaptable policy regime consistent with related frameworks, including the sustainable finance principles (protective, compliant, purposeful, inclusive, science-led, transparent, and accountable, holistic and cross-sectoral; and innovative and adaptive).<sup>17</sup>

All the principles above contribute to effective governance in managing financing for WRM.

The valuation of the benefits and costs of WRM provides critical information for identifying and directing investments and designing financing schemes. Valuation of water resources, however, is not straightforward because most of these are public goods in nature and do not have readily available monetary values attached to them. No user or beneficiary is excluded from the gains achieved through financing WRM for public goods.<sup>18</sup> WRM includes governance functions and infrastructure support that are predominantly public goods, e.g., policymaking and enforcement, forest protection, riverbank rehabilitation for flood control, restoration of water quality in public water bodies, preservation, and enhancement of water ecosystems and habitats.

Since the provision of public goods is normally undertaken by the government, this implies that the public sector should take the lead role in implementation and financing. Thus, WRM financing becomes, in large part, the government's function to ensure that water resources are made available and sustainable.

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<sup>15</sup> *Common or public good* refers to resources that are non-excludable but non-rival (possessed and consumed by multiple users).

<sup>16</sup> "A Framework for Financing Water Resources Management," Organisation for Economic Cooperation and Development, <https://www.oecd.org/environment/aframeworkforfinancingwaterresourcesmanagement.htm>

<sup>17</sup> "Sustainable Finance," ICMA Group, <https://www.icmagroup.org/sustainable-finance/>

The principles outline best practices when issuing sustainable finance instruments such as green bonds serving social and/or environmental purposes through global guidelines and recommendations that promote transparency and disclosure, thereby underpinning the integrity of the market. The principles also raise awareness of the importance of environmental and social impacts among financial market participants, which ultimately aims to attract more capital to support sustainable development.

<sup>18</sup> "Financing of Water Resources Management: Experiences from sub-Saharan Africa," EU Water Initiative, [https://www.gwp.org/globalassets/global/about-gwp/publications/eu/wileuwi\\_fwg-financing-wrm-final.pdf](https://www.gwp.org/globalassets/global/about-gwp/publications/eu/wileuwi_fwg-financing-wrm-final.pdf)

# 03

## FRAMEWORK FOR WRM FINANCING

*The proposed framework for financing local watershed management adopts the WRM financing principles discussed in the preceding section. The WRM Financing Framework envisions defining the policy for budget support from the national and local governments and its use in guiding the mobilization of other financing sources for watershed conservation, protection, and development.*



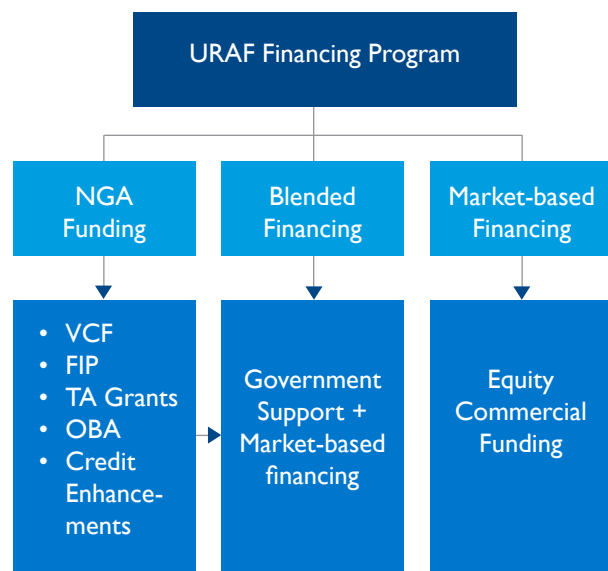
# Framework for WRM Financing

The proposed framework for financing local watershed management adopts the WRM financing principles discussed in the preceding section. The WRM Financing Framework envisions defining the policy for budget support from the national and local governments and its use in guiding the mobilization of other financing sources for watershed conservation, protection, and development. It proposes a strategic approach to allocating public resources and mobilizing other sources of finance for WRM. The framework looks at how different financing instruments such as grants, loans, economic and sustainable finance instruments, and engagements with national and local institutions and the private sector in mobilizing resources can be best used for WRM.

Complementation and value addition of the WRM Financing Framework. While there are other related frameworks (PMPCRFD, PBSAP Financing Plan, and Sustainable Finance Framework), the value of the WRM Financing Framework is its contribution as a parallel financing framework to the URAF for water supply and sanitation, and its application to investment programming and resource mobilization at the local level to support the implementation of WRM programs, projects and activities. Specifically, with the Mandanas ruling, the framework aims to guide the LGUs in restructuring and prioritizing their budgets and leveraging them with other financial sources to increase their investments in WRM activities.

The URAF, in support of the PWSSMP's Key Reform Agenda 4 (Balancing Water Supply and Demand), rationalizes the use of public resources and enables the access of eligible water service providers to appropriate financing sources such as external grants, concessional loans, commercial loans, or private equity based on the financial viability of water supply and sanitation projects, their borrowing capacity and equity. However, it does not include watershed financing. As a parallel to the URAF, the WRM Financing Framework addresses the financing needs of the WRM component of the water supply and demand chain.

**FIGURE I. URAF AS A STRATEGY**



The WRM Financing Framework also complements the Philippine Sustainable Finance Framework.<sup>19</sup> Both support the same objectives to meet the SDG 6 sustainability commitments for universal access to water supply and sanitation and integrated WRM and contribute to the implementation of the climate change strategy in the Philippine Nationally Determined Contribution (75% reduction in greenhouse gas emissions by 2030). The Sustainable Finance Framework promotes sustainable financing instruments (SFIs) through the issuance of green, social, or sustainability-linked instruments.

The WRM Financing Framework promotes capital market instruments, including SFIs, that incorporate environmental, social, and governance (ESG) criteria into business or investment decisions. Watershed protection and conservation are eligible for financing from SFI proceeds. The core components adopted by both financing frameworks promote the use and management of proceeds based on a transparent, evidence-based process for project evaluation, selection, reporting, and monitoring.

## Philippine Sustainable Finance Framework



**Sustainable Finance Framework**  
Republic of Philippines  
November 2021

**Sustainable finance** is a form of financial service that integrates environmental, social and governance (ESG) criteria into business or investment decisions for the lasting benefit of both clients and society at large. It consists of different financial instruments such as labeled use of proceeds of bonds and loans, sustainability-linked bonds, and loans.

**Objectives:** Support the country's sustainability commitments (SDGs and climate action), and guide how sustainable financing instruments (SFIs) such as green, social or sustainability bonds, loans and other debt instruments can be raised

**Financing Principles** Protective, compliant, riskaware, systematic, inclusive, cooperative, transparent, purposeful, impactful, precautionary, diversified, solution-driven, partnering and scienceled

**Core Components:** Use of proceeds, process for project evaluation and selection, management of proceeds, and reporting

**Eligible Green Expenditures:** Net proceeds raised from any SFI issuance can fund environmentally sustainable agriculture; environmentally sustainable forestry, including afforestation or reforestation; and preservation or restoration of natural terrestrial and marine landscapes

**Management of Proceeds:** DOF and Btr will allocate an amount equal to the net proceeds of SFI issued to fund eligible green and social projects that are transferred to the government treasury

**Reporting of Sustainable Finance Flows:** Reporting has two aspects: a) Allocation Reporting – net proceeds raised and allocated per eligible expenditure; split between financing and refinancing; and b) Impact Reporting - estimated environmental and social impacts arising from the implementation of the eligible social projects and/or eligible green projects

Source: Department of Finance

<sup>19</sup> "Sustainable Finance Framework: Republic of the Philippines," Department of Finance, <https://www.dof.gov.ph/download/sustainable-finance-framework/?wpdmdl=30994&refresh=638d8d510d04b1670221137>.

### 3.1 Scope and Objectives

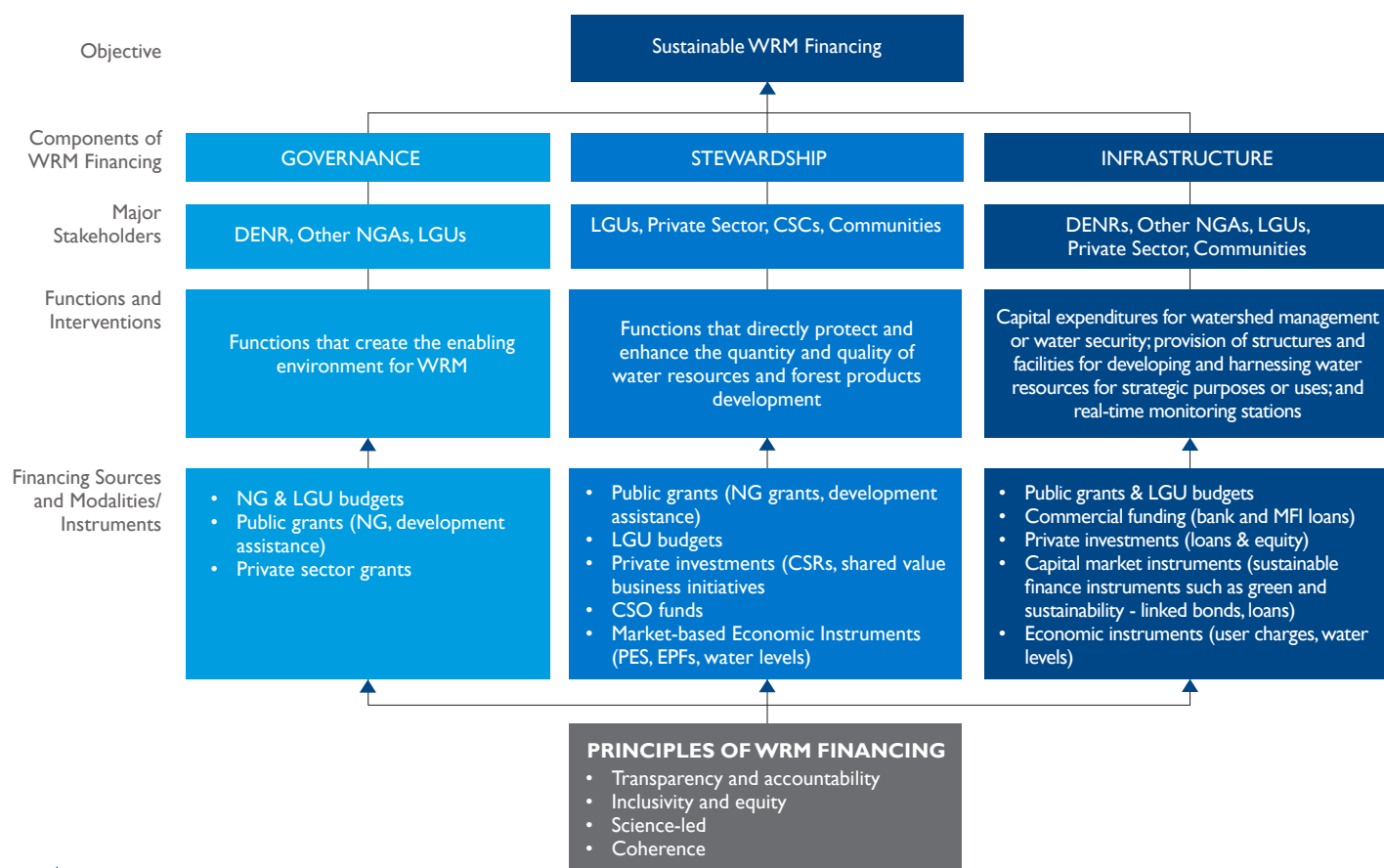
**Scope.** Water resource management cuts across several sectors, including environment and natural resources, water and sanitation, public works, agriculture, energy and power, and tourism. The WRM Financing Framework discussed in this paper does not tackle the broad spectrum of WRM but focuses on the financing of watershed management components that impact the quality, resilience, and sustainability of water resources, both surface and groundwater, for water supply provision at the local level. At the same time, it takes into account collateral benefits from ecosystem protection, such as biodiversity conservation, climate resiliency, disaster risk reduction, and sustainable supply for other water uses such as irrigation, power generation and industrial uses.

**Objectives.** The WRM Financing Framework aims to influence national and local investment programming and resource allocation for watershed management by providing a strategic approach to:

- a) guide the allocation, generation, and mobilization of financial resources for priority investments and sustainable watershed management;
- b) identify financing modalities and instruments for sustainable watershed conservation and protection; and
- c) engage stakeholders (LGUs, water service providers, private sector, civil society organizations, and communities) in establishing and/or strengthening financial responsibilities and alliances for sustainable WRM financing.

The WRM Financing Framework aims to achieve sustainable financing for watershed management that covers recurrent and capital investments to ensure water resource availability and sustainability (Figure 2). Public resources are leveraged with other sources based on the identified WRM functions (governance, stewardship, and infrastructure) and funding requirements.

**FIGURE 2.** WRM FINANCING FRAMEWORK



### 3.2 Components of Local Watershed Management Financing

The typology of WRM interventions (programs, projects, and activities) that require financing are categorized into the following components:

- governance
- stewardship
- infrastructure support

The **governance** component includes funding for integrating functions that create the enabling environment for the management of water resources.

These critical activities lay the foundation that shape investments and efficiency of interventions for sustainable watershed management. They are crucial in mobilizing watershed stakeholders to act and address the challenges in water resources management. Governance activities are generally public goods and normally provided and funded by the government from public resources (national and local government budget allocation). The private sector can also be tapped to support governance initiatives such as policy formulation and IEC activities. Table 1 shows examples of governance activities at the local level.

**FIGURE 3.** TYPES OF WRM INTERVENTIONS

1. GOVERNANCE	2. STEWARDSHIP	3. INFRASTRUCTURE
DENR, Other NGAs, LGUs	LGUs, Private Sector, CSCs, Communities	DENRs, Other NGAs, LGUs, Private Sector, Communities
<p>Functions that create the enabling environment for WRM</p> <ul style="list-style-type: none"> <li>• Policy &amp; Planning</li> <li>• Knowledge development &amp; data management (conduct of hydro studies, water availability assessments, VRA, trade off analyses, impact assessment)</li> <li>• Monitoring &amp; Enforcement</li> <li>• Secretariat support for TWGs and Task Forces</li> <li>• Institutional &amp; capacity development/ Social preparation</li> <li>• Ground demarcation of zones (boundary planting of identified zones)</li> <li>• Public awareness</li> </ul>	<p>Functions that directly protect and enhance the quantity and quality of water resources and forest products development</p> <ul style="list-style-type: none"> <li>• Forest conservation and protection, e.g. Lawin Patrol</li> <li>• Ecosystem protection</li> <li>• Watershed and catchment management</li> <li>• Livelihood activities for watershed protection</li> <li>• Agroforestry</li> <li>• Establishment of industrial tree plantations</li> </ul>	<p>Capital expenditures for watershed management or water security; provision of structures and facilities for developing and harnessing water resources for strategic purposes or uses; and real-time monitoring stations</p> <ul style="list-style-type: none"> <li>• Nursery establishment</li> <li>• Riverbank rehabilitation</li> <li>• Flood management</li> <li>• Establishment and maintenance of hydrometeorological monitoring stations</li> <li>• Erosion control structures</li> <li>• Construction of dams, water impounding, rainwater harvesting facilities</li> <li>• Trail construction</li> </ul>



**TABLE 1. WATERSHED GOVERNANCE INTERVENTIONS AND SOURCES OF FINANCING**

WRM INTERVENTIONS	IMPORTANCE OF THE INTERVENTIONS	EXISTING/POTENTIAL SOURCES OF FINANCING
Baseline and hydrologic studies, and watershed characterization and vulnerability assessment	<p>The first step in watershed management planning is to characterize the watershed to understand its condition and the problems/issues in management, including its vulnerability to climate change hazards.</p> <p>The hydrologic study is also a necessary input in Integrated Watershed Management Plan (IWMP) formulation. It provides estimates of surface water flows and groundwater recharge at baseline and in the 2020 and 2050 climate change scenarios. A groundwater recharge map is also developed. Watershed characterization and vulnerability assessment are conducted by DENR for prioritized watersheds.</p> <p>The results of these activities will be disseminated to watershed stakeholders to build awareness and understanding of the condition of water resources. This will eventually lead them to plan the protection and management of the watershed.</p>	<ul style="list-style-type: none"> <li>• NG budgets through DENR</li> <li>• Development assistance</li> <li>• Academe</li> </ul>
Formulation of an integrated watershed management plan	<p>The IWMP guides stakeholders in the sustainable management, protection, and development of watersheds.</p>	<ul style="list-style-type: none"> <li>• Mostly provincial government budget</li> <li>• Some from NG budgets and public grants through DENR</li> <li>• Academe</li> <li>• CSO funds</li> </ul>
Stakeholders' orientation on the approved IWMP	<p>This activity is necessary to inform stakeholders of the final land uses within the watershed and what activities are allowed and prohibited in these land use zones.</p>	<ul style="list-style-type: none"> <li>• Mostly LGU budgets</li> </ul>
Social preparation—community strengthening	<p>As partners in managing watersheds, local communities, and stakeholders will be capacitated on the various interventions (e.g. LAWIN patrol system, nursery operations, agroforestry development).</p>	<ul style="list-style-type: none"> <li>• LGU budgets</li> <li>• Development assistance</li> <li>• CSO funds</li> </ul>
Ground demarcation of zones (boundary planting of identified zones)	<p>Management zones have to be demarcated on the ground so that communities will know where the allowable and prohibited activities are located. Boundary planting is much cheaper than monumenting.</p>	<ul style="list-style-type: none"> <li>• NG budgets through DENR Integrated Protected Areas Fund (IPAF)</li> <li>• Community equity</li> </ul>
Installation of billboards and signages for major land uses	<p>Signages inform local communities of specific land uses which can be implemented on the ground.</p>	<ul style="list-style-type: none"> <li>• LGU budgets</li> </ul>

WRM INTERVENTIONS	IMPORTANCE OF THE INTERVENTIONS	EXISTING/POTENTIAL SOURCES OF FINANCING
Water Management Council (WMC) organization, strengthening, and operations	WMCs provide oversight in IWMP implementation and must be capacitated to better manage watersheds.	<ul style="list-style-type: none"> <li>• Mostly LGU budgets, some from NG budget through the DENR</li> <li>• Development assistance</li> <li>• CSO funds</li> <li>• Cost sharing of members</li> </ul>
Payment for Ecosystem Services (PES) Establishment	Establishment of PES mechanism provides an additional source of financing for WRM interventions.	<ul style="list-style-type: none"> <li>• LGU budgets</li> <li>• Development assistance</li> <li>• Water service providers</li> <li>• Private sector</li> <li>• Communities</li> </ul>
Water monitoring (availability and quality)	Continuous water monitoring is important to keep track of water yield and quality.	<ul style="list-style-type: none"> <li>• NG budgets through DENR</li> <li>• National Water Resources Board (NWRB)</li> <li>• LGU budgets</li> <li>• Academe</li> <li>• Communities</li> </ul>

*Stewardship* covers functions that directly protect and enhance the quantity and quality of water resources. Examples of stewardship functions include forest conservation and protection, riverbank rehabilitation, flood management, ecosystem protection, watershed and catchment management, and livelihood activities for watershed protection (Table 2).

**TABLE 2.** STEWARDSHIP ACTIVITIES AND SOURCES OF FINANCING

WRM INTERVENTIONS	IMPORTANCE OF THE INTERVENTIONS	EXISTING/POTENTIAL SOURCES OF FINANCING
Forest protection and LAWIN patrol	Protecting existing forests and plantations is a priority among the stewardship activities to maintain the watershed integrity. Conducting LAWIN patrols with communities is an effective forest protection activity.	<ul style="list-style-type: none"> <li>• NG budgets through DENR</li> <li>• IPAF</li> <li>• LGU budgets</li> <li>• PES collections</li> <li>• Proceeds from other EIs such as water levies and EPFs</li> <li>• Community equity, e.g., IP labor counterpart</li> </ul>
Reforestation and assisted natural regeneration (ANR) of denuded lands and brushlands	Reforestation and ANR may be undertaken in protected forest zones as part of revegetating the watershed and improve water yield and quality.	<ul style="list-style-type: none"> <li>• NG budget through DENR–NGP</li> <li>• IPAF and PES collections</li> <li>• Public grants, e.g. NG grants like People’s Survival Fund (PSF)</li> <li>• Development assistance</li> <li>• LGU budgets</li> </ul>

WRM INTERVENTIONS	IMPORTANCE OF THE INTERVENTIONS	EXISTING/POTENTIAL SOURCES OF FINANCING
Agroforestry development	Existing cultivated areas may be developed into agroforestry farms to provide a long-term livelihood source to communities while reducing soil erosion.	<ul style="list-style-type: none"> <li>• NG budget through DENR–NGP</li> <li>• IPAF and PES collections</li> <li>• Commercial sources</li> <li>• LGUs with community equity</li> <li>• Private companies</li> </ul>
Community livelihood development	Sustainable livelihoods should be provided to watershed communities to prevent them from engaging in destructive forest-based activities such as charcoal making.	<ul style="list-style-type: none"> <li>• LGU budgets</li> <li>• IPAF and PES collections</li> <li>• Private companies</li> <li>• CSO funds</li> <li>• Community equity</li> </ul>
Establishment of vegetative soil and water conservation measures and nature-based riverbank stabilization measures such as SALT and bamboo dikes	Riverbank and soil erosion upstream contribute to the deterioration of water quality. Hence, these must be addressed by rehabilitating riverbanks and adopting soil and water conservation measures.	<ul style="list-style-type: none"> <li>• LGU budgets</li> <li>• IPAF and PES collections</li> <li>• CSO funds</li> <li>• Community equity</li> <li>• WSPs</li> <li>• NG budget through DENR</li> </ul>

While mainly a public good and provided on public initiative, some stewardship activities offer some scope for cost recovery from beneficiaries. Box 6 cites an example of stewardship functions that have income-generating and cost recovery opportunities.

#### **BOX 4. COST RECOVERY OPPORTUNITIES FROM WRM STEWARDSHIP ACTIVITIES<sup>20</sup>**

The Philippine Peñablanca Sustainable Reforestation Project (PPSRP) was implemented in Cagayan province in Northern Philippines in 2007. The PPSRP involved the reforestation of the Peñablanca Protected Landscape and Seascape and was a joint undertaking of the Toyota Group, DENR, the Peñablanca local government, and environmental non-government organization (NGO) Conservation International (CI). Under the project, the Philippines was selected as a recipient of US\$ 3 million as comprehensive support to re-vegetate and reforest approximately 2,500 hectares of degraded, open areas in the Peñablanca protected zone. The project also supported the livelihood of the local community while ensuring the success of reforestation efforts.

By the end of 2010, about 1,772 hectares of degraded areas within the protected area were reforested and planted with approximately 1.36 million indigenous and fruit trees. The local community was heavily involved, with the residents maintaining and managing the planted trees. This resulted in a 90% survival rate of planted trees. By 2012, mango trees and other high-value crops such as coffee and cacao, started to bear fruits thus providing livelihoods to community residents. Residents also started using, on a trial basis, stoves that burn corn husks instead of wood as cooking fuel.

<sup>20</sup> "Philippine Peñablanca Sustainable Reforestation Project (PPSRP)," Food and Agriculture Organization of the United Nations, [https://www.fao.org/fileadmin/templates/ex\\_act/pdf/PhilippineCCB.pdf](https://www.fao.org/fileadmin/templates/ex_act/pdf/PhilippineCCB.pdf).

*Infrastructure* for watershed management includes the provision of structures and facilities for developing and harnessing water resources for strategic purposes or uses, e.g., dams, groundwater extraction, irrigation, water impounding, and water supply systems. Most of these investments also have the features of public goods and are often provided through public initiative (Table 3). Many interventions under this component provide scope for the cost recovery of private or community investments through the sale of services to beneficiaries.

**TABLE 3.** INFRASTRUCTURE ACTIVITIES FOR WRM AND SOURCES OF FINANCING

WRM INTERVENTIONS	IMPORTANCE OF THE INTERVENTIONS	EXISTING/POTENTIAL SOURCES OF FINANCING
Nursery establishment	Nurseries are needed for producing planting materials which will be used in various forest rehabilitation activities such as reforestation, ANR, and agroforestry.	<ul style="list-style-type: none"> <li>• NG budgets (DENR)</li> <li>• Development assistance</li> <li>• LGUs budgets</li> <li>• Community equity</li> </ul>
Development of small water impounding projects (SWIPs), contour or ridge canals, infiltration canals, swales, and rainwater harvesters	These structures may be necessary to capture excess rainwater and prevent run-off during the rainy season to be used during the dry season.	<ul style="list-style-type: none"> <li>• NG budgets [DA and Department of Public Works and Highways (DPWH)]</li> <li>• Development assistance</li> <li>• LGU budgets</li> </ul>
Structural measures for riverbank rehabilitation and soil and water conservation	Vegetative measures may not work in cases of severely eroded areas and highly erodible sloping areas and riverbanks. Structural measures may be required to prevent severe erosion and further deterioration of water quality.	<ul style="list-style-type: none"> <li>• NG budgets (DENR, DA, DPWH)</li> <li>• Development assistance</li> <li>• LGUs budgets</li> <li>• CSO grants</li> </ul>
Establishment of fire towers and checkpoints	Fire towers are necessary for early detection of forest/grass fires while checkpoints help deter timber poaching inside watersheds.	<ul style="list-style-type: none"> <li>• NG budgets (DENR)</li> <li>• LGU budgets</li> </ul>
Trail construction	Trails facilitate movement of forest and fire protection teams and the transport of planting materials in forest rehabilitation areas.	<ul style="list-style-type: none"> <li>• NG budgets (DENR)</li> <li>• Development assistance</li> <li>• LGU budgets</li> <li>• Community equity</li> </ul>

### 3.3 Sources of Watershed Management Financing

WRM programs, projects, and activities (PPAs) can be funded by:

- a) NG and LGU budgets;
- b) Economic or market-based instruments (PES, environmental protection fees, and other user charges and levies);
- c) Commercial loans from Government Financial Institutions (GFIs), Microfinance Institutions (MFIs), and other banks;
- d) Development assistance (multilateral and bilateral sources of grants and concessional financing);
- e) private investments;
- f) Sustainable financing instruments (green, social or sustainability bonds); and
- g) Grants from the private sector and civil society organizations.

For sustainable WRM, price-based financing sources from water users' and beneficiaries' contributions are more cost-effective, reliable, and sustainable than those that rely heavily on national and local budget appropriations funded from taxes or transfers (NG grants and development assistance). Transfers (budget allocation and grants) are more limited, unpredictable, and often determined by political capital and mired by bureaucratic and administrative procedures. Thus, local financing strategies should consider the deployment of market- or price-based instruments (e.g., PES, tariffs, levies) and private sector engagement to augment or leverage public funding for sustainable WRM funding.

#### National government and LGU budgets.

Current public resources for WRM mostly come from taxes and transfers (Table 4):

- a) NG budget for WRM activities appropriated through the General Appropriations Act in the agency budgets;
- b) foreign-assisted programs and projects funded by government loans for WRM-related programs and projects;
- c) special programs, earmarked funds, or grants created or mandated by law;<sup>21</sup> and
- d) local budget allocated through the annual Sangguniang Bayan (SB) ordinances as mandated under the Local Government Code.

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<sup>21</sup> The Mandanas ruling provides LGUs with a bigger share of national resources that they can use for WRM activities. As such, LGUs may need to restructure their budget allocation to increase their investments in WRM activities.

**TABLE 4. SOURCES OF PUBLIC FINANCING FOR WRM**

SOURCES OF FUNDS	SPECIFIC FUNDING PROGRAMS/PROJECTS
National agencies	<p><b>DENR and its bureaus and attached agencies:</b></p> <ul style="list-style-type: none"> <li>• Forest Management Bureau (FMB): Forest Development, Rehabilitation, Maintenance, and Protection/National Greening Program; and Soil Conservation and Watershed Management, including River Basin Management and Development</li> <li>• National Mapping and Resource Information Authority (NAMRIA): Resource Assessment and Mapping (Forestland Evaluation and Mapping and Land Cover Mapping)</li> <li>• NWRB: Water Resources Management Program; Water Resources Regulatory and Enforcement Program; Water Resources Vulnerability and Sustainability Assessment Program</li> <li>• Palawan Council for Sustainable Development: Palawan Environmentally Critical Areas Network (ECAN) Program: Budget for ECAN advocacy and communications zoning, monitoring, operationalization of clearance system</li> </ul> <p><b>Department of Agriculture–Bureau of Soils and Water Management (DA–BSWM)</b></p> <ul style="list-style-type: none"> <li>• Support to Operations–Planning and policy formulation for soil and water resources conservation, management, and development</li> <li>• Provision of agricultural equipment and facilities for high-value crops production</li> <li>• Other water resources projects</li> </ul>
Loan programs	<ul style="list-style-type: none"> <li>• DENR FMB: Foreign–Assisted Projects (FAPs)–Forestland Management Project</li> <li>• DENR FMB: FAPs–Integrated Natural Resources and Environmental Management Project</li> <li>• DA: FAPs–Philippine Rural Development Project</li> </ul>
Mandated allocation/ Earmarked or Special funds	<ul style="list-style-type: none"> <li>• PSF (Box 5)</li> <li>• IPAF (incorporated in the DENR's annual budgets)</li> <li>• Electrification Fund; Development and Livelihood Fund; and Reforestation, Watershed Management, Health and/or Environmental Enhancement Fund managed by DOE as mandated under Energy Regulation (ER) I-94 as amended. ER I-94 requires the generation company and/or energy resource developer to set aside PhP1.00 per kw hour of total electricity sales as financial benefits to host families; the construction of wastewater management facilities and reforestation activities are eligible for financing using these funds</li> <li>• Mining taxes, fees, and royalties charged by the Mines and Geosciences Bureau, Bureau of Internal Revenue, and other taxes charged by NG and LGUs Local Development Fund (from the National Tax Allocation), Local Disaster Risk Reduction and Management Fund (mandated by the National DRRM Act), Gender and Development allocation provided by LGC (Attachment A: Special Funds)</li> </ul>
LGUs	<p>Budget allocation for maintenance and other operating expenses and capital outlay for reforestation, nursery maintenance, rehabilitation of riverbanks and mangroves, ecosystem management program, and capacity-building activities</p>

## **BOX 5. COST SAUB WATERSHED ECOSYSTEM REHABILITATION AND FLOOD RISK REDUCTION FOR INCREASED RESILIENCE TO CLIMATE CHANGE AND NATURAL HAZARDS**

In 2018, the Provincial Government of Sarangani received a grant of PhP 93.6 million from the People's Survival Fund (PSF) for the rehabilitation and management of the critical Saub River and watershed area in Maitum. The project has a total cost of PhP102.9 million, with the provincial government contributing PhP 9.3 million. The project is managed by the Provincial Environment and Natural Resources Office (PENRO). It covers nine barangays in Maitum that are traversed by Saub River and its tributaries. These are Batian, Kalaneg, Kiayap, Mabay, Malalag, New La Union, Old Poblacion, Sison, and Zion.

The project involves the construction of a spillway and other flood control structures along the Saub River to address its perennial swelling, causing flooding in nearby communities during heavy rains. The riverbanks and watershed area will be planted with various fruit trees and high-value crops as part of the agroforestry and rehabilitation components. The seedlings will be distributed for free to residents, who are also tapped as co-implementers in the development of the agroforestry area.

Source: Philippine News Agency (August 30, 2018), <https://www.pna.gov.ph/articles/1046436>

According to a PIDS study,<sup>22</sup> many LGUs are not able to fund identified PPAs in their annual investment programs (AIPs) due to insufficient funds. LGUs are mostly dependent on financial assistance from the national government while very little is received in the form of grant-type funding. LGUs need to mobilize financing from other sources but they have limited access because of:

- a) *policy and information barriers*: information gap about other sources, lack of clear enabling guidelines on access, lack of incentives for private sector participation;
- b) *institutional barriers*: capacity gap to develop projects and meet funding requirements, lack of institutional and administrative readiness at the local level to access and implement projects; and
- c) *operational barriers*: bureaucratic processes involved in accessing funds from other sources, e.g. seeking authority from local legislative bodies to access funds, tedious documentary requirements, accreditation and evaluation, and approval processes, among others.

**Economic Instruments.** Economic instruments (EIs) play a significant role in WRM financing. They incorporate the price of water resource use into the price of goods and services and encourage sound and efficient production and consumption through full-cost pricing. EIs can take the form of a tax on activities that are damaging or extractive to the resource, a user charge for its use, or a subsidy to encourage activities that conserve or protect water resources. In principle, a higher price imposed

<sup>22</sup> Charlotte Justine D. Sicat, et al., "Assessment of the Philippine Local Government Planning and Budgeting Framework, Discussion Paper Series No. 2019-18," Philippine Institute of Development Studies, <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1918.pdf>

on watershed damaging activities will make it more expensive to extract water resources. Likewise, a higher price attached to water services will provide an incentive to maintain and increase the provision of these services. Examples of EIs implemented by national and local governments and water service

providers to finance WRM activities are found in Annex 2 (Economic Instruments Implemented for WRM in the Philippines). Box 6 provides an example of outcomes from the adoption of economic instruments in the form of user charges.

#### **BOX 6. FOREST LAND USE AGREEMENT FOR TOURISM PURPOSES (FLAgT)**

The FLAgT is a contract between the DENR and a natural or juridical person that authorizes the latter to occupy, manage, and develop, subject to government share, any forestland of the public domain for tourism purposes (e.g., bathing establishment, campsite, ecotourism destination, hotel site, etc.). The FLAgT aimed to develop the country's forestlands into productive uses consistent with the concept of sustainable development. It also sought to provide equitable economic opportunities to local communities and other stakeholders, generate additional revenues for the government, and optimize the use of forestlands through sustainable management. The contract has a duration of 25 years and is renewable for another 25 years upon mutual understanding of both parties. The current entry or user fee and the annual government share is, at the minimum, 5 percent of the most recent zonal value of the nearest commercial zone of the barangay, municipality/city, or province, whichever is higher (DENR Department Administrative Order Nos. 2004-28 and 2004-59).

In general, the effectiveness of using the user fee under the FLAgT has:

- increased collection of fees and charges for natural resource use;
- decreased incidence of land prospecting;
- decreased dependence of the Protected Area Management Board (PAMB) and/or LGUs on the national government in the management of protected and coastal areas;
- increased corporate social responsibility projects being implemented;
- reduced legislative process; and
- resulted in a smaller monitoring area for LGUs.

Source: "Forest Land Use Agreement/Forest Land Use Agreement for Tourism," Department of Environment and Natural Resources Forest Management Bureau, <https://forestry.denr.gov.ph/index.php/fmb-product-and-services/forest-land-use-agreement-forest-land-use-agreement-for-tourism>.



**Commercial Financing.** Market-based credit financing facilities or loans for water-related and watershed management investments can help LGUs address immediate investment requirements to meet public costs and benefits of WRM. LGUs can avail of commercial loans from GFIs and private commercial banks to support, capital expenditures such as the provision of structures and facilities for developing and harnessing water resources for strategic purposes or uses like dams, water impounding facilities, rainwater harvesting systems, and flood and erosion control structures. LGUs can also apply for grants from corporate social funds of commercial institutions for WRM. Attachment B maps out some of the available commercial financing windows and social programs. LGUs may also link households in watershed areas with MFIs to support financing for livelihood requirements of WRM projects and activities.

**Development Assistance.** There are also multilateral and bilateral funding facilities established for WRM-related activities. While LGUs may not be eligible to directly access some multilateral sources like the Green Climate Fund and the Global Environment Facility's Small Grants Program, they can course their request for funding through accredited entities like GFIs or partner with a concerned government agency or another qualified proponent to access grant or concessional financing. LGUs are eligible to access other funds like Japan's Grant Assistance for Grassroots Human Security Projects (Attachment C).

**Private Investments.** Risks and opportunities drive private sector investment in WRM. Supporting WRM presents opportunities to create business value to private companies while also contributing to address the environmental, economic, and social impacts of water. Businesses generate better brand and financial value by addressing their water impact. Making water management a part of their

sustainability action, therefore, has created strong incentives for companies to invest in WRM. Private companies, especially those that use water intensively, face huge risks because of dwindling water resources. Prolonged water stress in an area may lead to business disruptions. Thus, the private sector has a big stake in the sustainable management of water resources.

Several water-dependent companies invest beyond their operational boundaries and support WRM activities at the watershed or basin level. Examples of these companies are big water utilities, multinationals such as Coca-Cola, Unilever, Nestle, and other fast-moving consumer goods manufacturers. The CEO Water Mandate has succinctly explained the business case for private sector action on WRM below:<sup>23</sup>

*"Internal efforts to drive operational efficiencies are no longer seen as an endgame of sustainability performance. The external basin conditions and contexts, where water risk ultimately resides, necessitate a more long-term view. It is this new awareness, along with the reality that a business's water-related challenges can be fully addressed only through external engagement beyond the factory fence-line, that is being captured under the emerging paradigm of "water stewardship."*

The League of Corporate Foundations<sup>24</sup> defines corporate social responsibility (CSR) as a corporation's continuing commitment to perform as a responsible member of society by behaving ethically and contributing to economic development while improving the quality of life of its workforce, the community, and the environment. Companies provide grants for watershed conservation and protection activities in addition to adherence to environmental standards and regulations.

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<sup>23</sup> "The Business Case for Investing in Sustainable Water Management," the CEO Water Mandate, <https://ceowatermandate.org/sharedchallenges/business-case/>

<sup>24</sup> LCF is a network of operating and grant-making corporate foundations and corporations that promotes and enhances the strategic practice of CSR among its members and the larger business community.

Large corporations have set up foundations that provide grants to CSOs and POs to implement WRM activities. In the Philippines, CSR investments in environmental projects has been traditionally lower compared to education and livelihood. However, companies now have the impetus for increasing the share of their CSR resources towards initiatives on the environment because of the frequent occurrences of disasters and extreme weather events, and the imperatives for ESG.<sup>25</sup>

Coca-Cola's Global Water Stewardship Program is an example of a large-scale CSR program for WRM. Through its local and global foundations - the Coca-Cola Foundation Philippines, Inc. (CCFPI) and The Coca-Cola Company Foundation (TCCF) based in Atlanta, Georgia, grant funding is provided to CSOs and communities. Box 7 describes one of Coca-Cola's water stewardship programs implemented through a combination of CSR and core business operations that involves reducing water use in their business operations, engaging partnerships with a CSO and communities in reforestation, and investing in livelihood activities and capacity development to benefit farmers in their supply chain.

Power companies and large water utilities also invest in WRM to sustain and grow their businesses. Hence, they should be tapped by LGUs to co-invest in watershed management activities.

### **Sustainable Finance Instruments (SFIs).**

These are forms of capital market instruments that integrate environmental, social, and governance criteria into business or investment decisions for the lasting benefit of both clients and society at large. It consists of different financial instruments such as labeled use of proceeds of bonds and loans, and sustainability-linked bonds and loans.

The SDGs and demands by consumers and investors for companies to adopt sustainability action has created strong incentives even among non-water dependent companies to invest in WRM (e.g. through SFIs). Moreover, the evolving trend for public sustainability reporting of a company's practice of significant economic, environmental, and/or social impacts following globally accepted standards has also encouraged investments in WRM. These disclosures enable organizations to measure, understand and communicate their ESG impacts. In 2019, the Philippine Securities and Exchange Commission (SEC) issued Principle 10 in the Code of Corporate Governance for Publicly Listed Companies requiring ESG reporting by publicly listed companies in addition to the annual report. Beginning in 2023, the SEC will make ESG reporting mandatory for all types of corporations.<sup>26</sup>

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<sup>25</sup> Recently, philanthropic activities of companies in the Philippines have focused on response to the COVID-19 pandemic.

<sup>26</sup> *Business Mirror*, August 30, 2021

**BOX 7. COCA-COLA FUNDED P4WATER PROJECT**

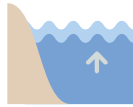
# PARTNERSHIP FOR WATER AND ECONOMIC RESILIENCE WITH MUAD, COCA-COLA & USAID

Upland farming communities play a valuable role in protecting upland ecosystems to sustain water resources and climate change resilience of low-lying areas and the networks of rivers and watersheds. In the Philippines, USAID and Coca-Cola are working with a local federation of upland farming groups to strengthen this role.

**What Are We Addressing:** In Negros Occidental, the sustainability of Bago and Malogo watersheds are threatened by:



**Lack of sustainable livelihoods** force communities to resort to timber poaching and charcoal making



**Lowlands bear the brunt of floods** due to deforestation and upland agricultural expansion



**Increasing population** results to an increased demand for water supply reliant on healthy watersheds



**Upland communities are often not engaged** in the management of watersheds

**Introducing P4WatER:** USAID and Coca-Cola Foundation Philippines, Inc. supported the Multi-sectoral Alliance for Development (MUAD) Negros to protect and rehabilitate the critical watersheds in Negros Occidental with the engagement of upland farmers.



**Conservation-oriented agriculture:** integrate climate, adaptive, and regenerative system in upland farming practices.



**Water quality and quantity monitoring:** build capacity of community leaders to monitor water.



**Watershed protection:** enhance skills and knowledge on the protection of forests and springs, including Lawin forest protection system.



**Improve savings:** organize and increase generation of community level savings to support livelihoods.

**What We've Learned So Far:** The P4WatER project serves as a successful model of an integrated and inclusive water security framework in action - supporting the role of the upland communities and leveraging the private sector in sustainable watershed management.



**Upland farmers' economic development** is key to non-extractive activities ensuring low-land resiliency



**Agricultural expansion** can be prevented through **adaptive technologies** and new practices.

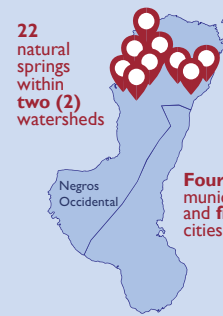


**Engaging local communities** in watershed protection promotes positive behavioral changes



**Consolidation of farmers** through a federation enhances **value chains** and networks of support

## P4WatER Results at a Glance



In its second year of implementation since World Water Day 2021, the **P4WatER project** has achieved the following:

**1,162** upland farmers benefitting from training courses on nursery establishment and propagation

**13** community green farms and nurseries established for vegetables, fruits and native trees

**26** caretakers (two from each 13 POs) trained on ICARE Food House Technologies for organic farming

**7,000+** metric tons of GHG emissions reduced from 16,000+ native trees and 7,000+ fruit trees planted

**7.8M** in PHP as total savings generated for upland farmers to sustain livelihood activities

**50%** proportion of women in leadership and managerial positions in 18 organizations

There are also voluntary reporting mechanisms (Box 8) that allow corporations to report or disclose the environmental impacts of their business and actions taken to support sustainability actions such as carbon footprint reduction, GHG emission, water footprint, and water efficiency.

### **BOX 8. VOLUNTARY PLATFORMS ON ESG REPORTING**

Global Reporting Index (GRI) has GRI 303 on Water and Effluents where organization can assess the impacts it has on water resources that benefit the ecosystem, other water users, and the organization itself. An organization, particularly a water-intensive one, can use this information for effective water management.

Carbon Disclosure Project (CDP) provides companies with a platform to disclose information of their environmental impacts at the request of their stakeholders. In addition to responding to this request, companies disclosing to their investors and customers through CDP can gain tangible business benefits.

Private businesses, depending on their sustainability strategy, can augment the funding and capacity requirements of the LGUs through any or a combination of CSR or shared value business initiatives such as engagement in capital market instruments. These two routes, however, are not mutually exclusive since companies align their CSR agenda with their business objectives.

Grants from civil society organizations. Corporate foundations are supported by their respective companies' internal funding to implement a program on WRM.

Meanwhile, some CSOs operate as independent foundations, unlike corporate foundations. These grant-giving CSOs create social and environmental benefits by funding community-based organizations. Foundation for Sustainable Societies, Inc., Forest Foundation Philippines, and Foundation for Philippine Environment are local CSOs that provide grants to community-based organizations. World Wildlife Fund and Conservation International are international CSOs that are actively engaged in financing WRM initiatives.

Attachment D lists some of the private sector entities and activities that provide financing for WRM-related initiatives.

### **3.4 WRM Financing Prioritization, Evaluation, and Selection Process**

WRM financing using public resources in the form of: a) budgetary allocations; b) grants/subsidies (e.g., NG funds to LGUs and POs); or c) incentives for watershed management through financial support (cost-sharing arrangements, livelihood support, provision of planting materials) and fiscal incentives (income tax deductions and tax rebates) will prioritize governance and infrastructure components of WRM based on the following criteria:

**Technical/Environmental** - PPAs that address climate and environmentally critical situations that may result in the loss of lives, loss of livelihood, or endanger health and communities.

1. Water availability - areas that are water-stressed and facing scarcity levels
2. Susceptibility/vulnerability to climate hazards - areas with high vulnerability index (extreme climate events and changes in climate over the next 30 years)

3. Forest cover and loss - critical watersheds that serve as water sources with low forest cover or high deforestation rates
4. High recharge areas - areas within the watershed that significantly influence the quality and quantity of groundwater systems

**Economic/Social** - PPAs that lead to the upliftment of the socioeconomic conditions of the majority of households

1. Economic significance of the watershed
2. Social returns to investment
3. Scope of benefits
4. Scalability/potential for replication of successful approaches

The general prioritization criteria will guide the use of other funding sources that have their respective evaluation and selection processes.

The evaluation and approval process will depend on the alignment with the fund objectives and source of financing. The General Appropriation Act provisions, NGA annual budgets, and AIPs of the LGUs are the bases of eligibility and approval of projects. For NG and LGU budgets as sources of financing, DENR also issued Memorandum Circular 2016-02 (Revised Guidelines and Procedures on Appraisal, Selection, and Approval of Project Proposals Submitted to Central Office for Funding as Special Projects). The basic evaluation and selection process involves the following:

- a) Screening of eligibility of proponent and project
- b) Completeness of requirements
  - Project Proposal
  - Work and Financial Plan
  - Implementation Mechanism
  - Monitoring and Reporting System
- c) Evaluation of financial and economic viability as required

The concerned Technical Working Group or Committee conducts the evaluation and endorses the project to an Executive Committee for approval.

### 3.5 Resource Mobilization and Implementation Strategies

Resource mobilization is essential in ensuring that WRM interventions are implemented and sustained. This section offers some strategies to mobilize financing for WRM. Disseminating information on the value of watershed management is a basic strategy to establish the market for WRM and engage the government, private sector, civil society, and communities.

The valuation of the benefits and costs of WRM provides critical information for identifying and directing investments and designing financing schemes. Integrated planning and prioritization of interventions increase the efficacy of public financial resources. Leveraging public resources with commercial funds, through private sector and CSO engagement can generate new financial resources for WRM. The adoption of economic instruments provides stable sources of watershed financing.

#### Identifying and Estimating WRM Requirements

A clear awareness of the value of watershed benefits and the establishment of a system for properly valuing watershed resources will provide the right information for WRM requirements, investment decisions, budget allocation, and funds mobilization.

Science- and evidence-based tools and methodologies such as baseline studies, socio-economic profiles, hydrologic studies, water resource assessments (groundwater and surface water), vulnerability assessments, climate analysis, valuation of water ecosystems, and reference scenarios aid in

determining the value of watersheds and designing the menu of appropriate watershed management interventions such as forest protection and conservation, rehabilitation or restoration, or other land management practices for agricultural areas.

The following are taken into consideration in determining the WRM components and investment options:

- a) land cover and identified policy-designated land use zones
- b) sectoral strategies or plans (e.g., CLUP, FLUP, ADSDPP, IWMPs, etc.)
- c) vulnerability of the area (e.g., critical recharge area, susceptibility to soil erosion and landslides, etc.)
- d) groundwater recharge rate/water availability (e.g., surface flow and infiltration, ratio of surface water to rainfall during the dry and rainy seasons, base flow)
- e) topography and soil type
- f) existing land tenure regimes (formal and customary)
- g) prevailing forest-based livelihood sources for the community
- h) presence of completed or ongoing restoration activities including success of previous restoration initiatives.

Watershed management options can generally be divided into three categories: rehabilitation, improvement, and protection. Rehabilitation is applied to seriously deteriorated watersheds to restore lost benefits. Unfortunately, many watersheds in the country need rehabilitation. Improvement techniques are used to obtain benefits such as water yield and flood control. Protection measures are employed to maintain the status quo.<sup>27</sup>

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<sup>27</sup> T.C. Sheng. *Watershed Management Field Manual: Watershed Survey and Planning*. Food and Agriculture Organization. <http://www.fao.org/docrep/1006/t0165e/t0165e00.HTM>

## Raising Awareness and Creating a Market for WRM Interventions

Disseminating data and knowledge on the value of watershed management to stakeholders is key to integrated WRM and securing financing. Sharing the results of the hydrologic studies and other assessments highlighting the economic, social and environmental implications of WRM and the identified WRM initiatives opens opportunities for the proactive participation of financing institutions and sources in watershed management.

Social and behavioral change communication and knowledge sharing activities can be pursued through multi-stakeholder platforms that involve LGUs, national government agencies, private entities and businesses, financial institutions, civil society, community groups, and research institutions, as well as other key watershed-related stakeholders. Platforms that support multi-stakeholder collaboration and peer-learning play a critical role in motivating engagement and supporting efforts to scale good WRM practices. Examples are the water security forums/summits, business forums, Philippine Association of Water Districts (PAWD) conventions, provincial, city and municipal leagues conventions, and Water Management Councils meetings, etc.

LGUs can initiate awareness raising on the shared value of water management and governance and market water-related sustainability investments and initiatives by also holding investment and marketing forums to close the information gap on WRM requirements and financing.

Stakeholders from the government, private sector, civil society, and communities need to be identified to create a market for WRM investments.



It is critical to understand the potential contribution these stakeholders can bring (e.g., funding, advisory, implementation capacity, leveraging complementary efforts, stewardship). Potential partners can be actively engaged through information sharing and consultations to gauge appetite and determine parties that may have potential funding interest. Establishing the value proposition and business case of investing in WRM will be central to the process. The preparation of a business case proposal may be framed according to interested parties' policy goals, performance delivery objectives, or prioritization of initiatives against available funding or budget contribution for WRM. It can include:

- the water sector context;
- water security challenges;
- the opportunity for WRM to address these challenges and deliver associated benefits and co-benefits;
- implementation scenarios to understand the investment costs, projected outcomes, and the estimated value of benefits to generate return on investment; and
- cost-benefit ratio projections.

Securing funding will involve forging a MOA with concerned stakeholders and preparing work and financial plans for implementation.

### **Integrating WRM in LGU Plans and Investment Programs**

The integration or mainstreaming of WRM financing in local investment plans helps secure LGU financing commitment. The pipeline of programs, projects, and activities needs to be drawn and incorporated into the annual investment programs (AIPs) of the LGUs to get budget allocation or funding from NG grants, or other sources. The PIWSP provides the framework and plan at the provincial level for coordinating and integrating related PPAs among the LGUs and watersheds under their jurisdiction.

The concerned local departments, water-related councils, working groups, and legislative bodies should coordinate, from planning to investment programming and budgeting process, to secure funding for WRM. Having legislative champions for WRM interventions will help get financing for these activities.

The institutional and administrative readiness of LGUs to access financing, including the capacity to prepare proposals, and implement projects need to be strengthened to facilitate the mobilization of funds from commercial and private sector sources and grants.

### **Leveraging Public Resources for WRM Financing**

Leveraging LGU resources with funding from commercial and private sources provide more opportunities in addressing WRM financing gaps. The advantages of leveraging financing include:

- access to additional funds;
- concessionality if loans are mixed with grants;
- risk sharing; and
- value for money (cost efficiency and effectiveness).

Credit financing can leverage internal resources of LGUs. Section 296 b of the Local Government Code allows LGUs to incur debt and other forms of borrowings (loans and bonds) from government or private banks and lending institutions to stabilize and augment local finances. An LGU needs to secure a favorable Monetary Board opinion if it considers borrowing funds. It must also secure a certification of net debt service and borrowing capacity from the Bureau of Local Government Finance (BLGF).<sup>28</sup>

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<sup>28</sup> The debt service ceiling is the maximum amount that an LGU can appropriate in the annual budget for the payment of its statutory and contractual loan obligations.

The decision to issue bonds and other obligations to finance self-liquidating, income-producing development or livelihood projects are subject to the regulations of SEC and the Bangko Sentral ng Pilipinas.

Blended finance uses capital from public or other grant sources to catalyze investments from the private sector. It brings together developmental and profit-oriented flows, best suited for investments with development impact and non-competitive financial returns. Blended finance has many benefits, including faster access to finance and more flexibility in the use of the funds, translating into faster results of the intended WRM objectives on the ground. LGUs often cite affordability as a reason for not accessing commercial finance. This can be addressed by blending concessional or public funds, grants and development assistance, and tenor extensions from commercial financing. Blended finance is associated with further improving governance and accountability in WRM.

## Replicating/Scaling up of Innovative Mechanisms

Watershed conservation and protection are critical for securing the flow of ecosystem services that are essential for people and nature. A variety of innovative schemes have emerged as potential sources of sustainable financing for WRM because of dwindling public funds.

Payment for ecosystem services (PES) is gaining ground as an innovative approach to watershed conservation and protection. It involves a voluntary or mandatory transaction between beneficiaries or buyers of ecosystems services and those whose lands provide these goods and services through subsidies or market payments. The payments for the benefits recognize the value of ecosystems goods and services and ensure that these benefits continue well into the future.

The payments, thus, provide a direct, tangible incentive to conserve and protect the concerned ecosystem (details are in Attachment E).

The implementation of PES schemes requires:

- a) an assessment of the range of ecosystem goods and services generated in a particular area;
- b) an estimate of the economic value of those benefits to different groups of people; and
- c) establishing a regime or institution that can capture that value and reward landowners for preserving the delivery of ecosystem services.

Adopting PES can lead to a more equitable sharing of costs of public goods, and a more predictable financing flow than through budgetary payments which are subject to changes in political priorities. Additional revenue for owners and managers should be sufficient to justify investments in the maintenance or enhancement of ecosystem-based public goods.

Collection mechanisms for PES contributions can be through tariff surcharges on water service provision by the water districts. They may also come from user's or environmental protection fees incorporated in business permits or real property taxes imposed by the LGUs. Ring-fencing of the proceeds in a special account in the LGU and water district system of accounts and reinvestment planning are part of the process to ensure the use of PES proceeds for watershed protection, restoration, development, and management.

Several LGUs in the country have adopted the PES scheme as a source of financing WRM. Bago City in Negros Occidental currently implements the scheme in the form of an Environmental Protection Fee (EPF) (Box 9).



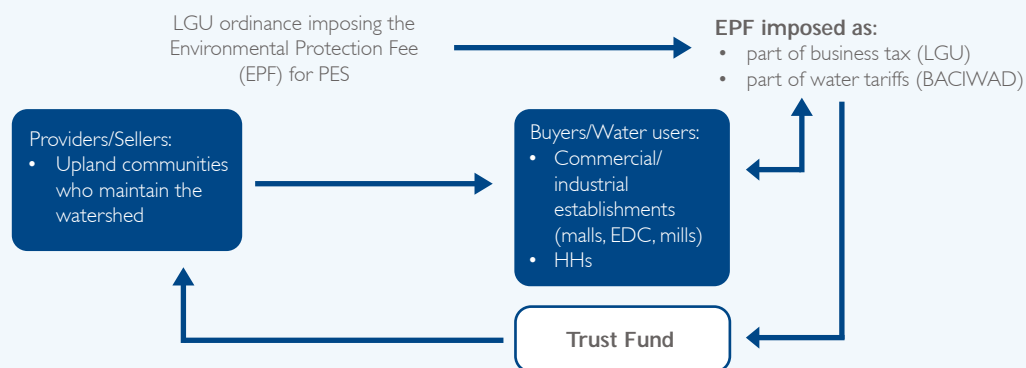
## BOX 9. PES IN BAGO CITY, NEGROS OCCIDENTAL

Bago City has a watershed area of around 25,823 hectares, which is one-third of the total area of the Bago Watershed. The watershed is the main water source of the city's agriculture and tourism sectors, as well as for households and enterprises. In recent years, the water source has dwindled due to: 1) loss of forest cover; 2) unregulated illegal settlements; 3) illegal activities; and 4) natural hazards such as landslides, flooding, and forest fires.

In 2015, USAID's B+WISER Program supported Bago City in setting up an LGU-based PES scheme. The LGU of Bago City passed the EPF Ordinance No.15-16 for PES. The scheme involved designating agents which collect the PES contributions from entities covered by the ordinance:

COLLECTING AGENT	COLLECTED FROM:	PES CONTRIBUTION
Local Government Unit (LGU) through City Treasurer's Office	(a) Commercial/Industrial establishments (b) LGU operated resorts	<ul style="list-style-type: none"> <li>5% of the assessed business tax</li> <li>PhP 5/guest (USD 0.10/guest)</li> </ul>
LGU through concerned barangays	(a) rice producers who are non-members of the Irrigators Association; and (b) households with levels 1 and 2 water systems	<ul style="list-style-type: none"> <li>PhP 75 per hectare per year for rice producers (USD 1.5/ha/yr)</li> <li>Fixed rate of PhP 5/mo/household (USD 0.10/mo/hh)</li> </ul>
Irrigators Association	Rice producers who are members of the organization	<ul style="list-style-type: none"> <li>PhP 75 per hectare per year for rice producers (USD 1.5/ha/yr)</li> </ul>
Sugar Planters Association	Sugar producers	<ul style="list-style-type: none"> <li>PhP 1 per 50-kg bag based on production per year (USD 0.02/bag)</li> </ul>
Bago City Water District (BACIWAD)	households connected to the BACIWAD	<ul style="list-style-type: none"> <li>PhP 0.50 per cubic meter of water consumed (USD 0.01/m<sup>3</sup>)</li> </ul>
Barangay Water System Association (BAWASA)	households with piped water connection that are not connected with the water district	<ul style="list-style-type: none"> <li>Fixed rate of PhP 5/mp/household (USD 0.10/mo/hh)</li> </ul>

### How it Works



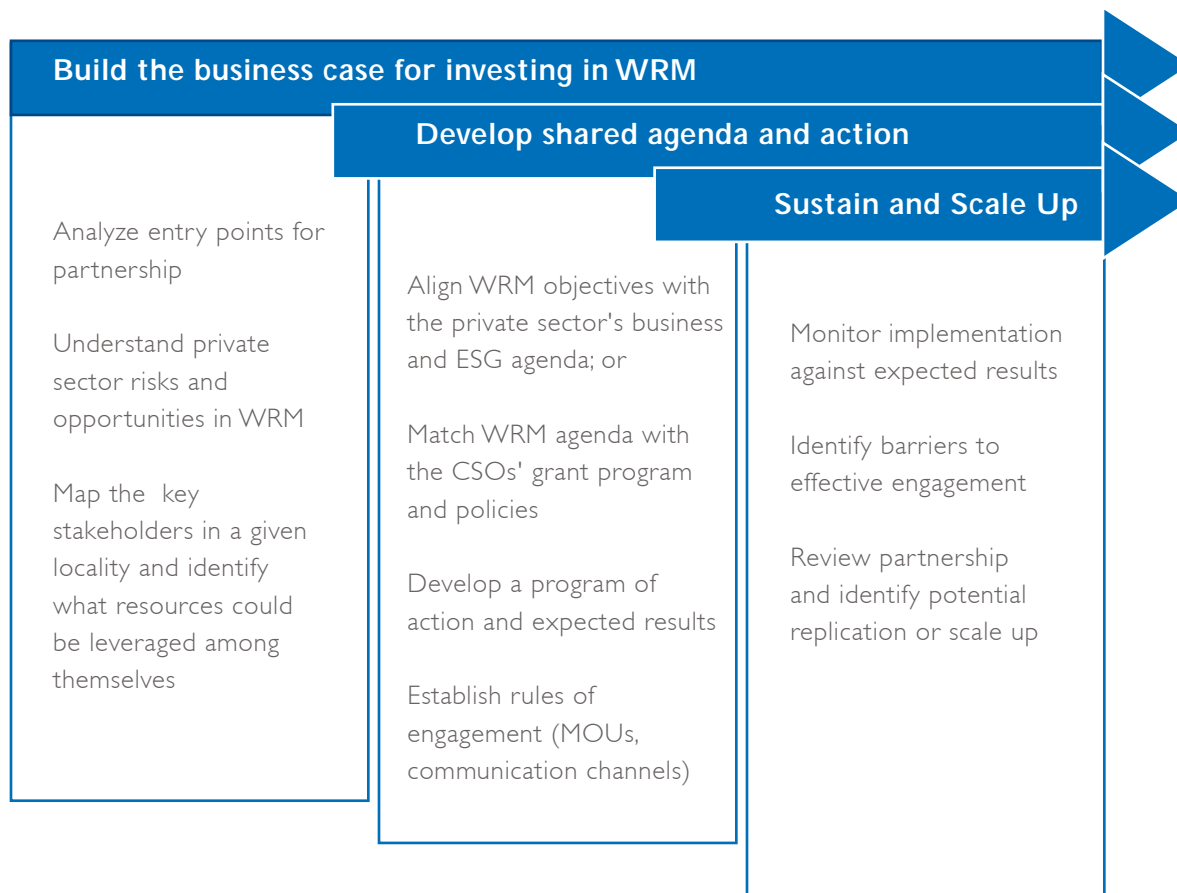
Section 8 of the ordinance covered the creation of the EPF fund as a special account under the general fund account of the LGU. The sources of funds include the EPF collections, donations, grants, and contributions specifically for watershed environmental protection. The fund is dedicated for the conservation, protection, and regeneration of the environment and natural resources within Bago City.

The mandatory collection of EPF started in early 2017. To date, however, only commercial/industrial establishments and LGU-operated resorts currently pay through their business permit applications and receipts, respectively. The collected fee (> PhP 3 million or US\$ 60,000) was used to support forest protection activities and other pressure-reduction strategies such as the production of 'green charcoal' with wood materials sourced from a woodlot outside the natural forest.

## Engaging the Private Sector and CSOs in WRM financing

LGUs can mobilize private investments for the WRM through the CSR route, commercial opportunities, or a combination of both. Making the business case, however, requires a deliberate process of engagement that addresses both the risks and opportunities to the private sector and identifies mutually beneficial relationships. Safe Water has facilitated partnerships with the private sector and CSOs following the engagement process illustrated in Figure 4.

**FIGURE 4.** PRIVATE SECTOR ENGAGEMENT PROCESS



Companies work with supplier communities to ensure the supply of raw materials while fulfilling their ESG commitments. An example is the Unilever Sustainable Agriculture Code (ULSAC) that Unilever mandates its supplier communities to adopt. ULSAC prescribes sustainable production and farming practices, some of which pertain to improving the water retention capacity of soil, using organic fertilizers or pesticides and adopting environmentally-friendly post-harvest techniques. In the Philippines, Unilever works through SMEs like

Sunlight Foods Corp. (SFC) that enter a contract-growing scheme with farming communities (e.g., for ube or purple yam production. Ube is Unilever's main ingredient in the production of its ice cream brand). SFC trains the farmers on good agricultural practices based on the ULSAC in collaboration with NGOs and Municipal Agricultural Offices. The scheme not only provides a reliable market and income for the communities but also enables them to participate in WRM activities (Box 10).

### **BOX 10. ENSURING A STABLE MARKET FOR UBE THROUGH CONTRACT GROWING AGREEMENT**

Safe Water collaborated with Sunlight Foods Corporation (SFC) to scale up ube (purple yam) demonstration farms for upland and lowland farmers, including Indigenous Peoples' and women's groups, in watershed communities of Puerto Princesa City and Southern Palawan. Safe Water brokered contract growing agreements between the farmers as ube suppliers and SFC as their market.

After distributing 7,500 kilograms of good quality ube planting materials, natural pesticides and fertilizers (i.e., neem oil, fish amino acid, and fermented juices) to farmers' groups, Safe Water and SFC trained 247 individuals (132 women and 115 men) from 32 local groups on organic methods of ube production so that farmers meet the standards required by SFC and Unilever:

Safe Water and SFC, together with the Institute for the Development of Educational and Ecological Alternatives, Inc. (IDEAS), also trained 24 individuals from three local associations in Quezon on ube processing (washing, cooking, peeling, packaging, and storage) to add value to the raw ube crop.

As a result of all the technical assistance provided (i.e., training, mentoring, actual farm development, and free seedlings), 2,281 members from 32 people's organizations now have ube farming as an alternative livelihood that could increase household income come harvest time.



SN Aboitiz Power (SNAP) harnesses the energy of flowing water to generate 641.5 MW of clean, renewable energy for its customers. Thus, improving watershed hydrology and watershed integrity is critical to its core business. SNAP implemented the Partnership in Uplifting Upland Natural Resources Livelihoods and Assets (PUNLA)–Upper Magat Watershed Management Program and focused on areas with excessive erosion in the Magat River (Box 11).

The Energy Development Corporation (EDC) as a geothermal company, on the other hand, is

dependent on a reliable supply of water underneath the Earth's surface. EDC recognizes that a healthy forest cover is vital to sustaining the underground reservoir three to four kilometers below the ground that provides geothermal energy. EDC launched its major reforestation project dubbed “BINHI: A Greening Legacy” (BINHI). BINHI targets establishing 10,000 hectares of forests over a period of ten years. BINHI is not only a broad-scale reforestation initiative; it is also a biodiversity restoration project and a Philippine native tree species propagation movement.

**BOX 11. THE SN ABOITIZ POWER PUNLA PROGRAM**

**PUNLA supports traditional and modern resource use and management systems**



Improve hydrological conditions through restoration and rehabilitation including rice terraces areas



Protection and rehabilitation of forest cover through forest restoration activities



Provide sustainable livelihoods by supporting agroforestry



Strengthening adherence and preservation of Indigenous cultural traditions and customs

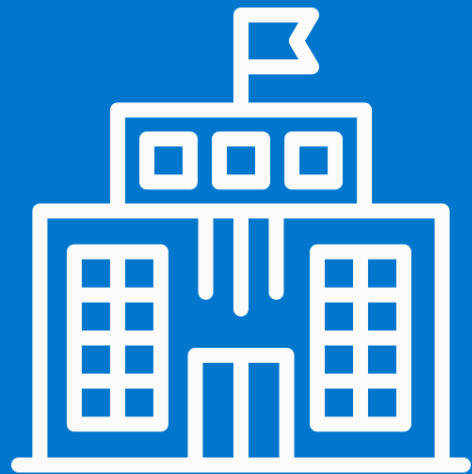


Promote sustainable resource use and conservation practices through capacity building activities

Source: E. Arceo, *Forest and Landscape Restoration*, July 1, 2021

# 04

## WRM FINANCING COORDINATING MECHANISMS



# WRM Financing Coordinating Mechanisms

NEDA is encouraged to get the NEDA Infrastructure Committee and Sub-Committee on Water Resources (SCWR), or the Water Resources Management Office (WRMO) chaired by DENR to support the WRM financing framework and policy to operationalize a parallel financing framework of the URAF–WSS for the Key Reform Agenda 4 (Balancing Water Supply and Demand) of the PWSSMP. DENR and the local government units (LGUs) will play a key role in the implementation of the WRM framework.

The coordinating mechanism for WRM financing will involve existing institutional structures or new ones that promote and implement the IWRM approach. These will include inter-agency committees and coordinating agencies (e.g. SCWR, WRMO, RBCs, and Protected Areas Management Boards) and technical working groups that will (a) ensure the integration of WRM alignment and complementarity in national, sectoral, and local plans; (b) shepherd resource allocation and financing for WRM PPAs; and (c) set up and operationalize the systems or procedures for institutionalizing partnerships and blended finance platforms, other enabling mechanisms, and monitoring and reporting.

At the national level, the WRM financing framework and implementation will be part of and aligned with the coordination and implementing structures of the National Water Security Roadmap, PWSSMP, PBSAP Financing Plan, Sustainable Financing Framework, and the National Climate Change Action Plan (NCCAP).

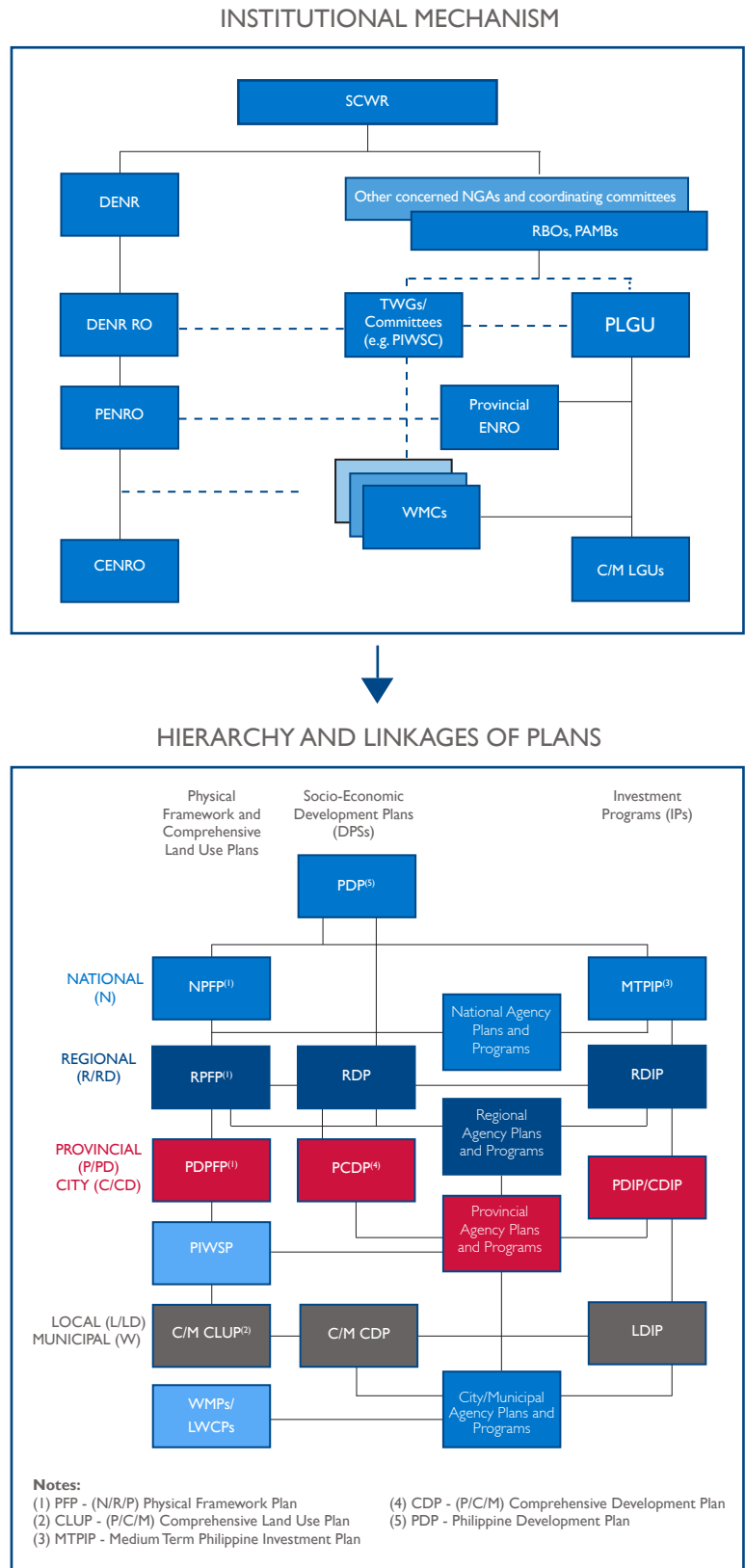
The DENR will be the key institution to lead and coordinate the implementation of the WRM financing mechanism with other national government agencies (NGAs) with water-related functions or with key roles that will impact WRM, e.g. DA's National Irrigation Authority and DA–BSWM, DPWH, Climate Change Commission (CCC), Department of Human Settlements and Urban Development. NG fund allocation through the NGP or a new financing mechanism like the IPAF will be lodged with the DENR. The CENROs and PENROs will coordinate with the LGUs regarding the priorities in allocating public funding for the implementation of watershed financing activities.

At the local level, the institutional mechanism will be anchored on the Provincial LGU that has the responsibility, oversight, and policy mandate in the management and maintenance of water resources under its jurisdiction to achieve water security for economic, environmental, and social development. The PLGUs will lead the formulation of the PIWSP. The PIWS Council will be established as its policy, governance and coordination body and the PIWSTWG or an existing functional body will serve as its technical arm to ensure that policies, plans, programs, and projects of all LGUs and relevant water-related bodies under its jurisdiction are aligned and interrelated. The PLGUs are key in coordinating the financial dimensions of implementing identified PPAs.

The proposed governance and coordination mechanism (Figure 5) has the following functions:

- guide the entire WRM financing process—from the assessment and diagnostics to policy formulation, implementation, monitoring, and review of financing instruments and mechanisms;
- lead a consultative process that engages all relevant stakeholders;
- adopt a range of tools to mainstream and incentivize/for mainstreaming and incentivizing mobilization of financing for sustainable WRM;
- establish accountability and facilitate capacity building to ensure that WRM PPAs are appropriately resourced; and
- monitor and review WRM financing flows.

**FIGURE 5. GOVERNANCE AND COORDINATION MECHANISM**



# 05

## RECOMMENDATIONS ON WRM FINANCING





# Recommendations on WRM Financing

Financing WRM entails a process. To mobilize financing, the following actions are recommended:

## 1. Identify WRM issues and priority measures.

The identification and assessment of the water resource situation (e.g., land cover, water availability, demand, and supply), analysis of the threats or risks, and diagnosis of the enabling environment (policy, institutional, operational barriers, and capacity needs) are needed to determine the priority measures, financing options, and investment program for WRM. Science- and evidence-based tools and methodologies such as baseline assessments, socio-economic profiles, hydrologic studies, water resource assessments (groundwater and surface water), vulnerability assessments, climate analysis, valuation of water ecosystems, and reference scenarios aid in determining and designing the menu of appropriate watershed management interventions such as forest protection and conservation, rehabilitation, restoration, or other land management practices for agricultural areas.

Results of the hydrologic studies and vulnerability risk assessments may point to the need to prioritize financing of reforestation projects to high recharge areas and those that have the greatest impact on vulnerable areas. Funding from NGP, for instance, may be directed to high recharge areas for reforestation.

- 2. Determine specific components of priority WRM interventions.** The specific components of the priority WRM interventions (e.g., forest protection, rehabilitation or restoration, or other land management practices) are determined and categorized into governance, stewardship, and infrastructure activities. Governance activities provide the enabling environment and are generally public goods provided and funded by the government from public resources (national and local government budgets). Stewardship activities, while also a public good, offer some scope for cost recovery from beneficiaries which can incentivize the involvement of communities and the private sector. Infrastructure investments support the implementation of governance and stewardship activities and may involve capital expenditures beyond what can be provided through public resources.
- 3. Prioritize protection and conservation interventions and governance aspects for public resources.** The conservation, management, and protection of forest resources and watersheds are the primary responsibilities of the government (DENR and LGUs). LGUs are specifically mandated to protect and conserve watersheds within their jurisdictions. These are priority areas for national government financing NG (NGP, IPAF) and local budgets given their primary mandates. A major part of protection and conservation involves establishing enabling mechanisms for

coordinated planning and management of water resources. This requires financing from national or local government budgets for basic administrative and management functions, planning, policy, legislation, enforcement, monitoring, and secretariat support for related TWGs and Task Forces such as PAMBs, WMCs, PIWSC, and other local bodies. The identified governance aspects of WRM (and other required investments) must be integrated into the regular planning, investment programming, and budgeting processes of national and local governments to ensure budgetary allocations for these activities.

Available resources from other agencies with related mandates on water management can be leveraged to optimize available public financing. For instance, the National Irrigation Administration's Integrated Master Plan includes sustainable watershed management as a strategic program for resilient irrigation management. NIA has IWMPs and programs for all watersheds in the country, regardless of their classification, size, use, and administrative jurisdiction. CCC and DA-BSWM can be leveraged to optimize available public financing.

#### **4. Scan for other funding opportunities.**

Public resources are limited, thus, other financing options need to be tapped to meet at least part of the future investment needs, particularly forest products development, which is mostly supported by private finance. The valuation of water resources is critical to identifying the resource requirements to implement priority WRM interventions and in matching available and potential financing options and schemes.<sup>29</sup>

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<sup>29</sup> Valuation assigns a monetary value on the marginal changes in benefits or costs of proposed actions (programs, projects, or activities), e.g. unit cost of forest rehabilitation, that would modify the flow of ecosystem goods and services affecting water availability from the status quo.

Proper resource valuation and costing of the associated interventions are essential, particularly in directing investments, designing financing schemes and economic instruments (e.g. water pricing, user fees and levies, payments for ecosystem services, and taxes on water depletion and pollution), determining counterpart contributions of stakeholders, and engaging the private sector and CSOs in WRM.

LGUs must be technically equipped to prepare the required studies and project proposals to mobilize funding opportunities. Adopting EIs, like user fees on water resources and PES which provide the most reliable and sustainable financing for WRM, entails assessment and valuation of water resources and extensive consultations and negotiations with providers and users. There are also several available commercial facilities to support the investment requirements of WRM. GFIs and other private commercial banks look for viable projects to fund and will require project proposals that show positive internal rates of returns for WRM investments requiring financing. MFIs also offer enterprise loans that can finance livelihood opportunities in watershed areas. LGUs can prioritize areas where MFI support will be most relevant (e.g. areas with residents earning below the poverty threshold, high rate of deforestation). Meanwhile, private companies, in support of their core business (to ensure supply and market chains) and as part of their CSR and sustainability programs, as well as CSOs, can engage with LGUs and communities in WRM. It is necessary to make investment profiles of suitable projects available, with relevant information and analysis, to attract private sector participation. LGUs can enter into MOAs with MFIs, private companies, and CSOs to undertake WRM-related programs.

**5. Match activities with appropriate financing sources, pitch for financing, and stakeholder/community engagement.**

Ensuring sustainable financing for WRM, with its various implementation aspects, entails matching priority activities with available and appropriate funding schemes and sources. Governance-related activities are prioritized for funding by public resources. Public resources for stewardship activities that directly protect and enhance the quantity and quality of water resources (e.g., forest conservation and protection, riverbank rehabilitation, flood management, ecosystem protection, and watershed and catchment management) may be complemented with livelihood activities for watershed protection funded by private investments, CSO funds or proceeds from EIs. Capital expenditures supporting WRM (e.g. provision of structures and facilities for developing and harnessing water resources) while large public expenditures can be supplemented with private sector investments, implementation of EIs, and community engagement for their sustainable operation and maintenance. Marketing pitches on WRM (highlighting WRM issues, gaps, and requirements) during provincial water security forums/ summits; business forums; Philippine Association of Water District conventions; provincial, city, and municipal leagues conventions; WMC meetings; and community consultations can help mobilize stakeholder engagement and financing for WRM. LGUs need to prepare advocacy and marketing materials that present evidence-based information to make the case for WRM.

**6. Monitor and prepare periodic reports of WRM interventions and investments.**

The system for monitoring and reporting WRM interventions needs to be established and should involve concerned bodies and entities such as PIWSC, TWGs, and LGUs. It is recommended that each LGU establish its own repository of WRM data. Monitoring and reporting of the status of projects and corresponding financing and investments mobilized, as well as their outputs, outcomes, and impacts, promote transparency and accountability of WRM interventions. Documentation also provides the bases for incentivizing, improving, and replicating more WRM interventions.

# 06

## CONCLUSIONS



# Conclusions

**WRM financing is informed by data and involves a stakeholder process.** WRM is founded on thorough watershed assessment and characterization. It uses science-based data and tools that inform the protection, conservation, and restoration needs and interventions that will require financing. Sources of financing for WRM will be determined by stakeholders who will be involved in the interventions based on cost-benefit options.

**Watershed management is a shared responsibility, hence, stakeholders from the national government to local communities share in financing WRM.** WRM is a public endeavor. Thus, it is incumbent on the DENR and LGUs, which are mandated to coordinate and implement watershed management, to finance the governance-related components, coordinate with partners, and mobilize resources for stewardship and infrastructure requirements.

**LGUs are the primary duty bearers for WRM financing.** WRM is most effectively undertaken at the local level. Thus, WRM is the primary responsibility of the LGUs. Poorly managed watersheds will ultimately impact their constituents through disrupted water supply, adverse effects on water quality, flooding, and other hazards. To address these concerns effectively, LGUs need to mobilize financing for WRM by:

- a) allocating more from their budgets;
- b) maximizing the use of economic instruments;
- c) accessing NG and other grant programs; and

- d) having a deliberate strategy for private sector and CSO engagement and harnessing community participation in WRM.

**National government resources are best tapped to support LGU governance activities for WRM.** National government budgets and grants and other public resources remain major sources of LGU support for WRM. Given limited national government resources, however, these are best used for governance activities that are public goods and services, integrating functions that create the enabling environment and critical activities that shape investments and efficiency of interventions for sustainable WRM. These enablers include:

- a) assessments, data management, and knowledge transfer;
- b) development of related WRM policies based on data;
- c) provision of capacity development and technical assistance;
- d) mobilizing watershed stakeholders to act and address the challenges in WRM through targeted advocacy and IEC; and
- e) monitoring and reporting WRM interventions including documenting good practices.

The process and criteria for allocating and prioritizing national government resources for WRM investments also need to be revisited. The NGP and PSF have set criteria for access but may need to be more targeted to LGUs needing more assistance

based on water security issues, (e.g., high forest cover loss, severity of water scarcity), “gap financing” for LGUs with existing WRM programs and projects for watershed protection and conservation. NG may need to rethink and consider these factors in the strategies to be integrated with the implementation of the Philippine Master Plan for Climate Resilient Forest Development (PMPCRFD) 2016-2028, the Philippine Development Plan 2023-2028 and the national investment programming and budgeting processes.

### **Commercial financing and private sector and CSO engagement to leverage LGU budgets.**

Government financial institutions, commercial banks, and MFIs have available financing windows that can augment LGU financing, especially for stewardship and infrastructure requirements of WRM. LGUs can also establish partnerships with and integrate MFI microenterprise financing with their community livelihood programs.

### **Market-based instruments offers sustainable watershed financing to national and local governments.**

Market-based instruments like water levies, fees, PES, etc. are proven sustainable sources of financing for watershed conservation and protection. If effectively implemented, proceeds from these instruments can be reinvested to finance specific watershed-related projects and activities of DENR and LGUs. LGUs can adopt economic instruments for cost recovery and loan repayments of viable stewardship and infrastructure projects, e.g., dedicate PES collections for loan repayment.

# ANNEXES / ATTACHMENTS

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## ANNEX I.

### MAJOR INSTITUTIONS AND ENTITIES INVOLVED IN WRM

INSTITUTION/ENTITY	MANDATE AND SCOPE
Department of Environment and Natural Resources (DENR)	<ul style="list-style-type: none"> <li>• E.O. 192 S. of 1987 mandates DENR “to conserve, manage, develop, and ensure proper use of the environment and natural resources. Specifically, its water management functions include recommending policies and programs for water resource use, watershed development among others.”</li> <li>• PD 705 (Revised Forestry Code): DENR, as part of its regulatory function, is mandated to impose charges, rentals, bonds, and fees for the different kinds of utilization, exploitation, occupation, possession, or activity inside forest lands, as well as the filing and processing of applications therefor, the issuance and renewal of license agreements, licenses, leases and permits, and for other services.</li> </ul>
Department of Agriculture (DA)/National Irrigation Authority	<ul style="list-style-type: none"> <li>• EO 116 S. 1987 mandates DA as the primary agency for agricultural development and food security with its water management functions focused on providing irrigation facilities.</li> </ul>
National Water Resources Board (NWRB)	<ul style="list-style-type: none"> <li>• PD 1067 (Water Code) S. of 1976 as amended by EO 124-A S. 1987 mandates NWRB to be the main administrator of the Water Code and as such undertake (1) policy formulation and coordination; (2) resource regulation including review and approval of policies, programs, and projects on the utilization, exploitation, development, control, conservation, and protection of water resources; and (3) economic regulation.</li> <li>• PD 1067 also mandates NWRB to issue water permits and extraction fees and impose penalties on water users.</li> </ul>
Local Government Units (LGUs)	<ul style="list-style-type: none"> <li>• RA 7160 (Local Government Code of 1991) mandates LGUs to provide “basic services and facilities including maintenance of WS systems (for barangays), water and soil resource utilization and conservation projects in addition to small water impounding projects, rainwater collectors, water supply systems (for municipalities), inter-municipal waterworks drainage, sewerage, flood control, and irrigation systems (for provinces)”.</li> <li>• RA 7160 also mandates LGUs to integrate environmental aspects in local development planning; implement environmental protection programs and projects; enforce laws and regulations; and impose taxes, user fees and levies legislated through local council on natural resource utilization and protection within their jurisdiction.</li> </ul>
Local Water Utilities Administration (LWUA) and Water Districts (WDs)	<ul style="list-style-type: none"> <li>• PD 198 (Provincial Water Utilities Act and Local Water Utilities Administration Law, 1973) mandates WDs to “purchase, construct, or acquire works, water, water rights, land, rights, and privileges necessary for the conveyance, supply, collection, treatment, and disposal of water and operate and maintain watersheds within its territorial boundaries.”</li> <li>• LWUA and WD's role in pricing/tariff setting of services, including incentives for water conservation, plays significantly in the financing of investments to improve water supply and demand management.</li> </ul>

INSTITUTION/ENTITY	MANDATE AND SCOPE
River Basin Control Office (RBCO)	<ul style="list-style-type: none"> <li>EO 816 created the RBCO under DENR to lead "the integrated planning, management, rehabilitation and development of country's river basins; serves as a policy coordination office for the implementation, monitoring, and evaluation of programs and projects within the country's river basins, central fund administrator for river basins appropriation provided under the DENR's budget, and central database management of relevant development initiatives within the river basins."</li> </ul>
PAMBs and PA Management Offices (PAMOs) headed by a PA Superintendents (PASus) at the site level	<ul style="list-style-type: none"> <li>RA 7586 (National Integrated Protected Areas System or NIPAS Act 1992) mandates the PAMBs as the main implementing entity in charge of establishing and managing of the NIPAS. It is also tasked with planning, resource protection, and general administration of designated protected areas (PAs) based on their General Management Plans. DENR AO 2005-21 sets the revised guidelines on the establishment and management of the Integrated Protected Area Fund (IPAF) to be used for watershed conservation and protection of the PAs. Common PA fees collected are entrance fees and facilities user fees that accrue to the IPAF. The PAMB retains 75% of the fees collected and remits 25% to the National Treasury.</li> </ul>
Councils (WMCs)	<ul style="list-style-type: none"> <li>LGUs are empowered to establish local bodies such as water councils and river basin authorities. These bodies do not necessarily require national-level legislation and can be established through LGU or inter-LGU legislative action, particularly when watersheds cover different municipalities/cities from different provinces. These bodies may vary in character, charter, or nature and could take the form of a cooperative, NGO network, or para-statal/semi-government/quasi-governmental body.</li> </ul>

## ANNEX 2.

### ECONOMIC INSTRUMENTS IMPLEMENTED FOR WRM IN THE PHILIPPINES

ECONOMIC INSTRUMENT/ DESCRIPTION	LEVIED BY	INSTRUMENT/ SPECIFIC TAX BASE	SUCCESS FACTORS/ USE OF PROCEEDS/
<p>Environmental charge approved by the Energy Regulatory Commission and as stipulated under Section 34 of the EPIRA law is to be used solely for watershed rehabilitation and management. It will be managed by NPC under existing arrangements. NPC manages eleven watershed areas with a total land area of 485,199 hectares through its Watershed Management Department.</p>	<p>National Government Through the National Power Corporation (NPC)</p>	<p>Environmental charge at 0.0025 per kWh of sales goes to the Reforestation, Watershed Management, Health, and/or Environmental Enhancement Fund.</p>	<p><b>Success Factors:</b></p> <ul style="list-style-type: none"> <li>• Family approach to forestry and agroforestry development in the watershed is adopted. The thrust is watershed protection and livelihood development to alleviate poverty in the uplands</li> <li>• Collaboration with other government agencies in the protection, development, and rehabilitation of the country's critical watersheds</li> </ul> <p><b>Use of Funds:</b></p> <ul style="list-style-type: none"> <li>• NPC undertakes:</li> <li>• Rehabilitation programs such as reforestation and agroforestry.</li> <li>• Propagation of high-value and good-quality seedlings of indigenous and fruit-bearing trees and re-vegetation of open areas</li> <li>• Watershed protection through foot patrolling and law enforcement in partnership with the Philippine Army, Philippine National Police, Philippine Coast Guard, LGUs</li> <li>• Conducts information and education campaigns and livelihood trainings</li> </ul> <p><b>Major Challenges:</b></p> <p>Overlapping functions with other government agencies implementing watershed management projects, programs, and activities</p>

## ANNEX 2.

### ECONOMIC INSTRUMENTS IMPLEMENTED FOR WRM IN THE PHILIPPINES

ECONOMIC INSTRUMENT/ DESCRIPTION	LEVIED BY	INSTRUMENT/ SPECIFIC TAX BASE	SUCCESS FACTORS/ USE OF PROCEEDS/
National wealth tax (mandatory) availed of by the LGU of Bakun for PES implementation in their locality	LGU of Bakun, through MOAs with local hydropower companies such as Hydroelectric Development Corporation (HEDCOR, Inc.), the Northern Mini Hydro Corporation, and the Luzon Hydropower Corporation (LHC)	<p>1% of the generated gross revenue of the local hydropower companies is given as financial benefit to host communities. Of this revenue, 50% goes to the electrification fund, 25% to the development and livelihood fund, and 25% for the watershed rehabilitation fund.</p> <p>The payment is distributed as follows: 10% to the host region, 30% to the host province; 25% to villages; and 35% to municipalities.</p>	<p><b>Success Factors:</b></p> <ul style="list-style-type: none"> <li>Increased awareness and understanding among buyers and sellers on the dynamic relationships of land use and watershed functions</li> <li>In-kind payments, such as electricity, scholarships for local students, farm trainings in tree planting, and construction of roads, benefited indigenous communities</li> <li>Role of the RUPES (Rewarding Upland Poor for Environmental Service) Program in engaging stakeholders in creating effective market-based mechanisms to improve livelihoods, reduce poverty, and promote natural resource conservation</li> </ul> <p><b>Use of Funds:</b></p> <ul style="list-style-type: none"> <li>Agroforestry and reforestation projects within the watershed</li> <li>Provision of agricultural support services</li> <li>Formulation of their ADSDPP</li> <li>Voluntary benefits used for prioritized infrastructure projects such as roads and bridges, as well as social development and livelihood assistance</li> </ul>
Voluntary payment from net sales of local hydropower companies for the Bakun Watershed		3% of net sales as voluntary payment to the LGU to support community development.	<p><b>Major Challenges:</b></p> <ul style="list-style-type: none"> <li>Payments of hydropower companies not allocated properly for the protection and conservation of the Bakun watershed;</li> <li>Fund utilization lacks transparency;</li> <li>Service providers (e.g., indigenous communities) were not properly rewarded</li> <li>Payments have not directly translated into an increase in ecosystem service provision</li> <li>Payment allocation guided by political motives instead of targeting the ecosystem service-producing areas</li> <li>Lack of technical capacity of the local government agencies to: (1) generate data on land-use impacts and water resources, which hampered local decision-making; and (2) adopt appropriate farming systems to protect the soil and improve water flow in the watershed</li> <li>Higher transaction costs (e.g., costly information requirements, conduct of stakeholders' consultations and negotiations) due to difficulty in measuring baseline conditions and the underlying processes in ecosystem services provision</li> </ul>

## ANNEX 2.

### ECONOMIC INSTRUMENTS IMPLEMENTED FOR WRM IN THE PHILIPPINES

ECONOMIC INSTRUMENT/ DESCRIPTION	LEVIED BY	INSTRUMENT/ SPECIFIC TAX BASE	SUCCESS FACTORS/ USE OF PROCEEDS/
<p>Water charges by the Libona Municipality to all water users through PES Ordinance 15-17</p>	<p>Municipality of Libona, Bukidnon</p>	<p>Water charges  PhP250.00/month charge for commercial, industrial, agro-industrial, and agricultural groundwater users. All collections are deposited to the Watershed Trust Fund.</p>	<p><b>Success Factors:</b></p> <ul style="list-style-type: none"> <li>Equipping municipal staff with science-based information to prioritize rehabilitation and help determine a reasonable “fee” for the various water users in the municipality</li> <li>PES institutionalization through a local ordinance for sustainable financing to rehabilitate its degraded ecosystem at scale</li> </ul> <p><b>Use of Funds:</b></p> <ul style="list-style-type: none"> <li>Pilot study: riparian planting of 3.5 has and involved the community’s women’s group organized by Libona LGU</li> <li>Monitoring by the LGU with support from an NGO of the ‘pay for performance mechanisms’ where payments are tied to surviving seedlings planted</li> <li>Rehabilitation of the nearby forest and riparian areas affected by massive soil erosion and land conversion.</li> </ul> <p><b>Major Challenges:</b></p> <ul style="list-style-type: none"> <li>Lack of data on industry users of water and specific land conditions that could inform needed critical rehabilitation efforts</li> <li>Lack of financing options for watershed rehabilitation</li> <li>PES took 3.5 years to implement</li> </ul>

## ANNEX 2.

### ECONOMIC INSTRUMENTS IMPLEMENTED FOR WRM IN THE PHILIPPINES

ECONOMIC INSTRUMENT/ DESCRIPTION	LEVIED BY	INSTRUMENT/ SPECIFIC TAX BASE	SUCCESS FACTORS/ USE OF PROCEEDS/
<p>User's fee through an Environmental Agreement with the Water District to fund the 2014 to 2018 implementation of the Community Development Plan (CDP) for the MILALITTRA to protect and rehabilitate the Kalatungan Watershed in Cagayan de Oro City—The IP organization serves as providers of ecosystem services.</p>	<p>Miarayon Lapok Lirongan Tinaytayan Talaandig Tribal Association (MILALITTRA) with support from the Xavier Science Foundation (XSF) that serves as a Fund Manager</p>	<p>User's fee through an Environmental Agreement with the Water District<sup>30</sup> (i.e. adopt a watershed). Xavier Science assisted the IP Association to develop a package of activities to be sold to the Water District.</p> <p>PhP 20,000/ha/year in 5 years or Php 1 million contribution for 10 has for 5 years</p>	<p><b>Success Factors:</b></p> <ul style="list-style-type: none"> <li>• Inclusive decision-making and community-centered interventions (Indigenous Peoples as forest managers)</li> <li>• Lowland multi-sector collaboration through the formation of the CDORBMC</li> <li>• Built capacities of the community for forest protection and livelihood</li> <li>• Readiness of potential beneficiaries to recognize and reward conservation efforts of upstream communities</li> <li>• Enactment of a City Ordinance (13682-2019) for the promotion of environmental rehabilitation and Conservation Network, Creating the Ecological Service and Protection Committee (ESPC)</li> </ul> <p><b>Use of Funds:</b></p> <ul style="list-style-type: none"> <li>• Reforestation activities for the water District (e.g. 1M for 10 has in 5 years)</li> <li>• Agroforestry, contour farming, sustainable reforestation and rain forestation farming.</li> </ul> <p><b>Major Challenges:</b></p> <ul style="list-style-type: none"> <li>• Transparency and accountability to allay concerns of ES buyers (e.g., industries and coops)</li> <li>• Indigenous community lacks the capacity to lead a business because they are used to the traditional system of natural resource management</li> <li>• Unanticipated impacts of the El Niño phenomenon (e.g., forest fires)</li> <li>• Lack of sustainable social marketing component, hence no sustained efforts towards resource mobilization or awareness raising.</li> </ul>

<sup>30</sup> Under PD 198, the Water District is pursuing the development of a city ordinance mandating them to collect a monthly fee of PHP 5 per household. The fee would then be transferred to the local government and used for watershed protection and conservation.

## ATTACHMENT A

### PUBLIC SPECIAL FUNDS

Source/ Provider/ Administrator/ Legal Basis	Eligible Partners/ Recipients/ Activities Supported	Eligibility Criteria and Application/ Approval Process
<p>People's Survival Fund (PSF)/Department of Finance (DOF) as Project Secretariat</p> <p>RA 10174 s. 2012 (Amending the Climate Change Act and Establishing the People's Survival Fund or PSF)</p>	<p>The PSF is a long-term finance stream or replenishable fund under the General Appropriations Act (GAA) for adaptation and mitigation programs and projects based on the National Strategic Framework on Climate Change (NSFCC) and the National Climate Change Action Plan (NCCAP).</p> <p>At least PhPI billion is annually programmed into the PSF, which is sourced from the national budget. The allocation may be augmented by mobilizing external funding sources such as counterpart local government units (LGUs), the private sector, and individuals who support adaptation initiatives. National Government appropriations are subject to review and evaluation by the Office of the President and the Department of Budget and Management (DBM) based on the accomplishments of the PSF and other concerned LGUs.</p> <p>Eligible LGU and civil society organizations (CSOs) projects for grant financing include:</p> <ol style="list-style-type: none"> <li>1. Adaptation activities in the areas of water resources management, land management, agriculture and fisheries, health, infrastructure development, and natural ecosystems;</li> <li>2. Improvement in the monitoring of vector-borne diseases triggered by climate change;</li> <li>3. Forecasting and early warning systems;</li> <li>4. Institutional development for preventive measures, planning, preparedness, and management of climate change impacts;</li> <li>5. Establishing or strengthening regional centers and information networks to support climate change adaptation initiatives, and projects;</li> <li>6. Guaranteeing risk insurance needs for farmers, agricultural workers, and other stakeholders; and</li> <li>7. Community adaptation support programs by local organizations accredited by the CCC.</li> </ol>	<p>Eligibility criteria for LGUs:</p> <ol style="list-style-type: none"> <li>1. Poverty incidence (40%)</li> <li>2. Exposure to climate-related risks (30%)</li> <li>3. Presence of identified and delineated key biodiversity areas (30%)</li> </ol> <p>Eligibility criteria for local/ community organizations:</p> <ol style="list-style-type: none"> <li>1. Validated Certificate of Accreditation under DILG MC 2013-70, DSWD-DBM-COA Joint Resolution 2014-01 or Climate Change Commission (CCC) accreditation</li> </ol> <p>Application requirements to be submitted to the PSF Project Secretariat (DOF):</p> <ol style="list-style-type: none"> <li>1. Letter of intent (addressed to the Chair of the PSF Board, the Secretary of the DOF, with the PSF Secretariat copy-furnished)</li> <li>2. Project proposal (following prescribed template in the PSF-Proponent's Handbook<sup>1</sup>)</li> <li>3. Annual Investment Plan (AIP)</li> <li>4. Adaptation references (any of the following: Climate Risk and Vulnerability Assessments, enhanced Climate Change Adaptation-Disaster Risk Reduction [CCA-DRR] Comprehensive Land Use/ Development plans or Local Climate Change Action Plan)</li> </ol>

<sup>1</sup> "Proponent's Handbook: A Guide on How to Access the People's Survival Fund," Climate Change Commission, <https://niccdies.climate.gov.ph/files/documents/PSF%20Proponents%20Handbook%20v3.pdf>.



Source/ Provider/ Administrator/ Legal Basis	Eligible Partners/ Recipients/ Activities Supported	Eligibility Criteria and Application/ Approval Process
		<p>Other requirements once the proponent passes the initial screening by the PSF Technical Committee will be submitted (refer to PSF–Proponent’s Handbook).</p> <p>The last call for proposals was in 2016 and generated 42 proposals, which were received by DOF/ CCC. The PSF Board Secretariat is currently prioritizing project proposals submitted in 2017–2018, which are being enhanced to address comments made by PSF’s technical experts. In the meantime, interested applicants may try to access assistance from CCC, which offers capacity building programs to local governments.</p>
<p>Integrated Protected Area Fund (IPAF)/ National Treasury appropriated through the GAA of DENR</p> <p>RA 7586 as amended by RA 11038 s. 2017 (Declaring Integrated Protected Areas and Providing for their Management)</p>	<p>The Integrated Protected Area Fund (IPAF) was created to be the regular source of funds for planning activities, resource protection, and general administration of designated protected areas (PAs).</p> <p>The IPAF includes all incomes generated from the operations of the PAs from the management of wild flora and fauna such as PA taxes from the sale and export of flora, fauna, and other resources; proceeds from the lease of multiple-use areas; donations and contributions from enterprises directly benefiting from the PA; and other fees and incomes, including fines, penalties, and compensation for damages derived from the operation of the PA. The incomes accrue to the IPAF managed by the national government.</p> <p>Seventy-five percent (75%) of the fund goes to the PAMB of each PA. The remaining 25% is deposited into the General Fund of the National Treasury to finance PA projects.</p>	<p>The PAMB decides on budget allocations and approves funding proposals for the allocation and utilization of the fund under the GAA based on the approved PA General Management Plans.</p> <p>LGUs within the PA are represented in the PAMBs and may appropriate their National Tax Allotment or NTA (formerly called Internal Revenue Allotment or IRA) for the PA. LGU funds for the PA are exempted from the 25% remittance requirement for the IPAF.</p> <p>DENR AO 2005-21 sets the revised guidelines on the establishment and management of the IPAF.</p>

Source/ Provider/ Administrator/ Legal Basis	Eligible Partners/ Recipients/ Activities Supported	Eligibility Criteria and Application/ Approval Process
<p>Local Disaster Risk Reduction and Management Fund (LDRRMF)/LGU Fund</p> <p>RA 10121 s. 2009 (Philippine Disaster Risk Reduction and Management Act of 2010)</p>	<p>Section 21 of RA 10121 states that not less than five percent (5%) of the estimated revenue from regular sources shall be set aside as the LDRRMF to support disaster risk management activities such as but not limited to: pre-disaster preparedness programs, including training, purchasing life-saving rescue equipment, supplies and medicines; post-disaster activities; and the payment of premiums on calamity insurance.</p> <p>Of the amount appropriated for the LDRRMF, 30% shall be allocated as Quick Response Fund (QRF) or stand-by fund for relief and recovery programs to normalize the situation and living conditions of people in communities or areas stricken by disasters, calamities, epidemics, or complex emergencies, as quickly as possible.</p> <p>Unexpended LDRRMF shall accrue to a special trust fund solely for the purpose of supporting disaster risk reduction and management activities of the LDRRMFs within the next five years.</p>	<p>Projects to be funded by the LDRRMF should be included in the Annual Investment Plan (AIP).</p>

## ATTACHMENT B

### WRM-RELATED PROGRAMS OF COMMERCIAL BANKS

Source/ Provider/ Administrator/ Legal Basis	Eligible Partners/ Recipients/ Activities Supported	Eligibility Criteria and Application/ Approval Process
<p>Green Financing Program of the Development Bank of the Philippines (DBP)</p>	<p>This is an umbrella program to support DBP's strategic thrust of environmental protection and the country's green growth strategy. The program was designed primarily to provide financing and technical assistance to assist strategic sectors, industries, and LGUs in adopting environment-friendly processes and technologies and incorporating climate change adaptation and mitigation and disaster risk reduction measures.</p> <p>Eligible borrowers include: private corporations/enterprises; LGUs, Government Owned and Controlled Corporations (GOCCs), government agencies (where allowed), water districts/private service providers, cooperatives/associations, and participating financial institutions (PFIs)/ microfinance institutions (MFIs).</p> <p>Eligible projects include: resource conservation, resource efficiency and cleaner production; climate change adaptation and mitigation and disaster risk reduction; water pollution prevention and control; solid and hazardous waste management; and other environmental/green projects/initiatives.</p> <p>Eligible loan purpose:</p> <ol style="list-style-type: none"> <li>1. Capital investments</li> <li>2. Initial working capital</li> <li>3. Consulting services such as cost of eco-design, feasibility study preparation, and detailed engineering design</li> <li>4. Transaction costs for Clean Development Mechanism (CDM) and other carbon crediting mechanism</li> <li>5. Refinancing</li> </ol>	<p>Eligible criteria:</p> <ol style="list-style-type: none"> <li>1. Projects that promote cleaner and healthier environment and reduce carbon footprint</li> <li>2. Financing for private and public sector investments that will help comply with environmental laws, regulations, and standards</li> <li>3. Improvement of adaptive capacities of communities to enable them to address environmental hazards, including climate risks</li> </ol> <p>DBP's regular lending procedures and approval process will apply.</p>

Source/ Provider/ Administrator/ Legal Basis	Eligible Partners/ Recipients/ Activities Supported	Eligibility Criteria and Application/ Approval Process
<p>Agro-forestry Plantation Program (APP)<sup>2</sup> of the DBP</p>	<p>The facility provides market-based credit financing for the development, expansion, harvesting, processing, maintenance, and protection of industrial forest-based plantations in qualified private and public land with 5 to 40,000 hectares of open area.</p> <p>Eligible borrowers include LGUs, People's Organizations (POs) and plantation operators/ tenure holders who are registered with the Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI), Department of Labor and Employment (DOLE), or Cooperative Development Authority (CDA).</p> <p>Eligible projects include:</p> <ol style="list-style-type: none"> <li>1. Plantation development</li> <li>2. Plantation expansion</li> <li>3. Plantation maintenance and protection</li> <li>4. Acquisition of pre-harvest and post-harvest facilities e.g., processing plant, kiln</li> <li>5. Harvesting of mature species</li> <li>6. Establishment of facilities e.g., lookout tower, bunkhouse, water system, fire lines</li> <li>7. Development of project site as an eco-tourism destination</li> </ol> <p>Eligible loan purpose:</p> <ol style="list-style-type: none"> <li>1. Working capital</li> <li>2. Acquisition of machinery and equipment</li> <li>3. Construction/establishment of facilities</li> </ol>	<p>Eligible Criteria:</p> <ol style="list-style-type: none"> <li>1. For Public Lands <ol style="list-style-type: none"> <li>a) With valid tenurial agreement with the DENR (e.g. Socialized Industrial Forest Management Agreement or SIFMA, Integrated Forest Management Agreement or IFMA), Community-Based Forest Management Agreement or CBFMA)</li> <li>b) With approved Comprehensive Development and Management Plan (CDMP)/Indicative Management Plan (IMP)/ Community Resource Management Framework (CRMF), and Five-Year Work Plan (FYWP).</li> </ol> </li> <li>2. For Private Lands: <ol style="list-style-type: none"> <li>a) With Certificate of Tree Plantation Ownership from DENR</li> </ol> </li> </ol> <p>Refer to the link below for loan terms and conditions.<sup>3</sup></p>

<sup>2</sup> "Agroforestry Plantation Program," Development Bank of the Philippines, <https://www.dbp.ph/developmental-banking/micro-small-and-medium-enterprises/sustainable-agribusiness-financing-program-safp/tree-plantation-financing-program-tpfp/>.

<sup>3</sup> "Agroforestry Plantation Program," Development Bank of the Philippines, <https://www.dbp.ph/wp-content/uploads/2021/01/APP.pdf>

Source/ Provider/ Administrator/ Legal Basis	Eligible Partners/ Recipients/ Activities Supported	Eligibility Criteria and Application/ Approval Process
Forest Program of the DBP <sup>4</sup>	<p>A DBP grant/CSR program that aims to achieve the following:</p> <ol style="list-style-type: none"> <li>1. Support and encourage greening and reforestation of the country</li> <li>2. Provide rural livelihood opportunities</li> <li>3. Prevent soil/coastal erosion, absorb rainfall, and conserve water</li> <li>4. Promote biodiversity, protect and restore habitat, and mitigate climate change</li> <li>5. Serve as a natural guard against strong wave incursion</li> <li>6. Increase knowledge in technical planting requirements, and environmental protection</li> <li>7. Strengthen organizations of selected DBP Forest Partners in terms of information, capability and experiences</li> </ol> <p>Eligible Forest Partners:</p> <ol style="list-style-type: none"> <li>1. State universities and colleges</li> <li>2. Local Government Units (LGUs)</li> <li>3. People's organizations (POs) that have a Community-Based Forest Management Agreement (CBFMA) with DENR</li> <li>4. Other government agencies managing large forest areas</li> </ol> <p>Eligible areas:</p> <ol style="list-style-type: none"> <li>1. 100% Cost of Planting Stocks (PS)</li> <li>2. 40% Cost of PS for site preparation, plantation establishment, maintenance and protection</li> <li>3. 10% Cost of PS for mortality</li> <li>4. 10% Cost of PS for livelihood assistance</li> <li>5. Rehabilitation of existing projects that may be approved by the DBP Management Committee</li> </ol>	<p>Priority areas:</p> <ol style="list-style-type: none"> <li>1. Urban parks/ communities and typhoon-stricken area/s</li> <li>2. Project sites with a slope of 18 percent and above</li> <li>3. Not subject to land use change</li> <li>4. Areas proven to be compatible with certain high-value fruit trees</li> <li>5. Accessible to easily bring in planting stocks, facilitate monitoring and deliver produce to markets</li> <li>6. Partner has tenurial control over the project area</li> <li>7. Rehabilitation of existing forest project sites of good standing forest partners/successfully implemented projects</li> <li>8. High poverty incidence</li> <li>9. DBP community</li> <li>10. Areas linked with DBP clients or borrowers (e.g., DBP-funded water supply projects or hydropower projects sites needing reforestation, or rehabilitation of coastal mangrove areas)</li> </ol>
Gawad Sibol Program of the Land Bank of the Philippines (LBP)	<p>LBP and the DENR entered a partnership that aims to reinforce the mutual objective of promoting environmental protection through planting forest and fruit-bearing trees nationwide.</p> <p>Formerly known as the "Adopt-A-Watershed Program", the Gawad Sibol Program has now afforded financial opportunities for communities, especially those in remote areas. It empowered partner POs, allowing them to contribute to the growth of their respective communities.</p>	

<sup>4</sup> DBP Forest Program," Development Bank of the Philippines, <https://www.dbp.ph/corporate-social-responsibility-programs/dbp-forest-program/>.

## ATTACHMENT C

### DEVELOPMENT ASSISTANCE

Source/ Provider/ Administrator/ Legal Basis	Eligible Partners/ Recipients/ Activities Supported	Eligibility Criteria and Application/ Approval Process
<p>Green Climate Fund (GCF)<sup>5</sup></p>	<p>GCF is a global fund established to support developing countries in achieving their Nationally Determined Contributions (NDC) towards low-emissions, climate-resilient pathways through implementation of low-carbon and climate-resilient initiatives.</p> <p>The fund may be tapped as a: a) concessional loan, b) grant, c) equity, or d) guarantee. A maximum of US\$10 million for grant proposals and \$250 million per project can be funded.</p> <p>The Department of Finance (DOF) serves as the GCF's National Designated Authorities (NDA) or focal point that provides broad strategic oversight of the GCF's activities in the country and identifies the country's priorities for financing.</p> <p>The Development of the Philippines (DBP) and Landbank of the Philippines (LBP) have been approved as Direct Access Entities (DAEs) that work closely with NDAs and executing agencies to develop project concept notes and full funding proposals. DAEs also oversee, supervise, manage, and monitor their respective GCF-approved projects and programs.</p> <p>DBP priority sectors for mitigation:</p> <ol style="list-style-type: none"> <li>1. Energy efficiency</li> <li>2. Green transport</li> <li>3. Resource conservation</li> <li>4. Reforestation/sustainable forest management</li> </ol> <p>DBP priority sectors for adaptation:</p> <ol style="list-style-type: none"> <li>1. Renewable energy in off-grid/underserved areas</li> <li>2. Climate resilient water infrastructure systems</li> <li>3. Climate-smart buildings</li> <li>4. Ecosystem-based adaptation</li> </ol> <p>LBP priority projects/programs:</p> <ol style="list-style-type: none"> <li>1. Sustainable transport</li> <li>2. Climate resilient agriculture</li> <li>3. Off-grid renewable energy</li> <li>4. Ensuring climate resilient water supply</li> <li>5. Energy generation and access</li> </ol>	<p>LGUs can access GCF resources through the DAEs (DBP and LBP).<sup>6</sup></p> <p>Proposals are assessed based on the following investment criteria and indicators:</p> <ol style="list-style-type: none"> <li>1. Impact potential</li> <li>2. Paradigm shift</li> <li>3. Sustainable development potential</li> <li>4. Needs of the recipient</li> <li>5. Country ownership/ alignment with NDCs</li> <li>6. Efficiency and effectiveness (cost per ton of CO2 equivalent, ratio of co-financing, expected rates of return, application of best practices)</li> </ol>

<sup>5</sup> <https://www.greenclimate.fund/countries/philippines>

<sup>6</sup> "Access Funding" Green Climate Fund, <https://www.greenclimate.fund/projects/process>.

Source/ Provider/ Administrator/ Legal Basis	Eligible Partners/ Recipients/ Activities Supported	Eligibility Criteria and Application/ Approval Process
Global Environment Facility (GEF) Small Grants Programme (SGP)	<p>This is a grant facility that supports biodiversity conservation initiatives of non-government organizations (NGOs), people's organizations (POs), and community-based organizations (CBOs) with grants of up to US\$ 50,000. The SGP is a global corporate programme of the GEF, implemented on behalf of the GEF partnership by the United Nations Development Programme (UNDP).</p> <p>The programme provides grants of up to \$ 50,000 directly to local communities, including indigenous people (IPs), CBOs, and NGOs, for projects in biodiversity, climate change mitigation and adaptation, land degradation and sustainable forest management, international waters, and chemicals.</p> <p>The Philippines was one of the pilot countries of SGP and was introduced by UNDP Manila to Philippine NGOs in 1992. It has funded 292 projects with grant support amounting to US\$ 9,409,778.87 since its inception.</p> <p>Eligible proponents:</p> <ol style="list-style-type: none"> <li>1. NGOs</li> <li>2. POs</li> <li>3. CBOs</li> </ol> <p>Eligible projects:</p> <ol style="list-style-type: none"> <li>1. Biodiversity</li> <li>2. Capacity development</li> <li>3. Chemicals and waste</li> <li>4. Climate change</li> <li>5. Multifocal area</li> </ol>	
Grant Assistance for Grassroots Human Security Projects (GGP) <sup>7</sup>	<p>The GGP supports small-scale projects directly benefiting the grassroots level as well as contributing to the socio-economic development of developing countries. GGP was launched in 1989 in the Philippines. As of March 2021, 548 small-scale grassroots projects have been implemented. GGP can support a project amounting to a maximum of PHP4 million.</p> <p>Eligible proponents:</p> <ol style="list-style-type: none"> <li>1. NGOs</li> <li>2. LGUs</li> <li>3. Educational institutions</li> <li>4. Other non-profit organizations</li> </ol>	<p>GGP prioritizes proposals with a hard component (facility/ equipment) rather than a soft component (seminar/training), and stand-alone facilities over extensions of existing facilities.</p> <p>Selection criteria:</p> <ol style="list-style-type: none"> <li>1. Capability of the the proponent</li> <li>2. Project feasibility</li> <li>3. Sustainability</li> <li>4. Cost Effectiveness</li> <li>5. Necessity, urgency and impact</li> </ol>

<sup>7</sup> "Grant Assistance for Grassroots Human Security Projects (GGP)," Embassy of Japan in the Philippines, <http://www.ph.emb-japan.go.jp/bilateral/oda/grassroots.html>.

Source/ Provider/ Administrator/ Legal Basis	Eligible Partners/ Recipients/ Activities Supported	Eligibility Criteria and Application/ Approval Process
	<p>Cooperatives are ineligible but they may coordinate with their respective LGUs or NGOs to become the proponents and beneficiaries of a project.</p> <p>Eligible activities:</p> <ol style="list-style-type: none"> <li>1. Education</li> <li>2. Health</li> <li>3. Water system (Levels I and II only)</li> <li>4. Agriculture</li> <li>5. Social welfare</li> <li>6. Capacity building</li> <li>7. Disaster management</li> <li>8. Waste management</li> <li>9. Others</li> </ol>	<p>Deadline of GGP proposal submission to the Japanese Embassy is the end of February and June every year through email at <a href="mailto:ggp@ma.mofa.go.jp">ggp@ma.mofa.go.jp</a>.</p> <p>Processing of application (from submission to approval) takes eight months to one year.</p>



## ATTACHMENT D

### PRIVATE SECTOR FINANCING

COMPANY	DESCRIPTION	PROGRAMS / SERVICES	PRODUCTS / TYPE OF FINANCING	SECTOR FOCUS	WEBSITE
<b>INVESTORS</b>					
Oikocredit	Social impact investor and worldwide cooperative with over four decades of experience in promoting sustainable development through investments.	<ul style="list-style-type: none"> <li>• Caters to established and start-up businesses</li> <li>• Loans to MFIs, fair trade organizations, small farmers cooperatives, small community-based enterprises</li> <li>• Technical assistance support to enhance capacity and improve delivery systems</li> </ul>	<ul style="list-style-type: none"> <li>• Loans</li> <li>• Equity investments</li> <li>• Grants</li> <li>• €2m and €10m for each partner</li> <li>• (approx. PhP 116.9 million–584.6 million)</li> </ul>	<ul style="list-style-type: none"> <li>• Financial inclusion</li> <li>• Agriculture</li> <li>• Renewable energy</li> </ul>	<a href="https://www.oikocredit.coop/en/">https://www.oikocredit.coop/en/</a>
Foundation for a Sustainable Society Inc. (FSSI)	Established in 1995, FSSI is a social investment organization committed to support the development of empowered and sustainable communities through social enterprises that are community-oriented, ecologically sound, and economically viable.	<ul style="list-style-type: none"> <li>• Caters to established and start-up social enterprises through their Social Enterprise Investment Fund (SEIF)</li> <li>• Business development services</li> <li>• Value chain development services</li> <li>• Promotion of triple bottom line (3BL) strategies</li> </ul>	<p>Loans</p> <ul style="list-style-type: none"> <li>• Microfinance program</li> <li>• Start-up enterprise</li> <li>• Agri-credit</li> <li>• Business development</li> </ul> <p>Developmental Deposit</p> <ul style="list-style-type: none"> <li>• Invests in community financial intermediaries to help strengthen their financial condition and sustain their financial services to small community financial intermediaries</li> </ul>	<ul style="list-style-type: none"> <li>• Agro-enterprise</li> <li>• Renewable energy</li> </ul>	<a href="https://fssi.com.ph/">https://fssi.com.ph/</a>

COMPANY	DESCRIPTION	PROGRAMS / SERVICES	PRODUCTS / TYPE OF FINANCING	SECTOR FOCUS	WEBSITE
			Equity <ul style="list-style-type: none"> <li>• Venture capital in a social enterprise</li> </ul> Grant <ul style="list-style-type: none"> <li>• Start-up enterprise grant</li> <li>• Capacity building grant</li> <li>• Advocacy grant</li> </ul>		
Peace and Equity Foundation (PEF)	Founded in October 2001, PEF is the steward of an endowment fund and registered as a non-stock, nonprofit organization based in Quezon City, Philippines.	<ul style="list-style-type: none"> <li>• Supports CSOs (civil society organizations) such as cooperatives, people's organizations, NGOs, faith-based groups, and similar entities</li> <li>• Develops and supports partnerships with registered for-profit organizations and young social entrepreneurs</li> <li>• Capacity building on financial management, market development, and business governance</li> </ul>	Financing <ul style="list-style-type: none"> <li>• Term loan</li> <li>• Credit lines</li> <li>• Joint ventures</li> <li>• Equity partnerships</li> <li>• Grants for non-revenue activities</li> </ul>	<ul style="list-style-type: none"> <li>• Agricultural social enterprises (with focus on cacao, coffee, coconut, cane sugar)</li> <li>• Basic social services (water, health, housing, renewable energy)</li> <li>• Disaster risk reduction, relief, and rehabilitation</li> </ul>	<a href="https://pef.ph/">https://pef.ph/</a>

COMPANY	DESCRIPTION	PROGRAMS / SERVICES	PRODUCTS / TYPE OF FINANCING	SECTOR FOCUS	WEBSITE
<b>VENTURE CAPITALISTS AND ANGEL INVESTORS</b>					
Manila Angel Investors Network	Established in 2019 as a not-for-profit organization, it is the largest network of committed private investors in the Philippines with over 100 high-net worth individuals (HNWI)	<ul style="list-style-type: none"> <li>• Caters to pre-seed, seed stage or start-up stage</li> <li>• Focused on high growth, post MVP (minimum viable product) start-ups</li> <li>• Provides mentorship and market access</li> </ul>	Committed to invest a minimum of US\$ 20,000 annually and has a committed capital to deploy of US\$1 million every year	<ul style="list-style-type: none"> <li>• Sector: agnostic</li> <li>• Investment interest is varied</li> </ul>	<a href="https://www.main.ph/">https://www.main.ph/</a>
Philippine Venture Capital Investment Group (PhilVenCap)	Created for entrepreneurs looking for start-up and expansion capital for equity. It links the entrepreneurs with business angels who provide capital for equity and other non-financial resources. It opens discussions on emerging trends and the related potential business opportunities that these trends offer.	<p>Conducts monthly forums where small and medium enterprises (SMEs) present their business propositions to angel investors.</p> <p>Also supports other organizations focused on advocacy projects.</p>	Not indicated	Not indicated	<a href="https://www.philvencap.com/">https://www.philvencap.com/</a>

COMPANY	DESCRIPTION	PROGRAMS / SERVICES	PRODUCTS / TYPE OF FINANCING	SECTOR FOCUS	WEBSITE
<b>INCUBATORS AND ACCELERATORS</b>					
Villgro Philippines	<p>Villgro was established in 2001 by Paul Basil as a pioneering social enterprise incubator in India.</p> <p>Villgro Philippines is an early-stage impact incubator with 20 years' experience.</p>	<p>Provides the following:</p> <ul style="list-style-type: none"> <li>• Early-stage strategic advisory to validate and test models</li> <li>• Tailored funding to absorb risks</li> <li>• Hands-on mentorship to navigate key challenges</li> <li>• Networks to spur business growth</li> <li>• Investment readiness to unlock follow-on capital</li> </ul>	<ul style="list-style-type: none"> <li>• Incubation/mentoring support</li> <li>• Funding</li> </ul>	<ul style="list-style-type: none"> <li>• Agriculture (access to market for agricultural and fisheries commodities, products, and services to increase farm productivity; tech solutions to make farming profitable for smallholder farmers)</li> <li>• Health</li> <li>• Climate action</li> <li>• Education</li> </ul>	<a href="https://www.main.ph/">https://www.main.ph/</a>
Start-up Village	<p>Launched by the Philippine Development Foundation (PhilDev) and Asian Institute of Management in June 2016</p> <p>Provides start-ups with world-class mentorship, training, and support network to grow and build their businesses</p>	<p>World-class training Mentoring/coaching Support network</p>	<ul style="list-style-type: none"> <li>• Hands-on customized management, training, and mentorship programs based on actual start-up needs</li> <li>• Rent-free, dedicated office space and facilities located at the heart of Makati City</li> <li>• Resources and services from exclusive shared-services program partners</li> <li>• Exclusive roadshows, demo days, and networking activities for business development and investment</li> </ul>	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Agriculture</li> <li>• Health</li> <li>• AI</li> <li>• Internet of Things (IoT)</li> <li>• Deep technology, science, or engineering solutions to the neglected problems of an emerging world</li> </ul>	<a href="https://aim.edu/dado-banatao-incubator">https://aim.edu/dado-banatao-incubator</a>

COMPANY	DESCRIPTION	PROGRAMS / SERVICES	PRODUCTS / TYPE OF FINANCING	SECTOR FOCUS	WEBSITE
Xchange	Invests in organizations—both for-profit and non-profit—whose core mission is the creation of value for marginalized communities in the Philippines.	<ul style="list-style-type: none"> <li>• Early-stage social enterprises</li> <li>• Provide expertise on enterprise management and finance</li> </ul>	Provides capital and incubation support	Not indicated	<a href="http://xchange.ph/">http://xchange.ph/</a>
Impact Hub Manila	Founded in 2015, it is an impact-first venture builder focused on supporting purpose-driven entrepreneurs with ideas that will positively change the lives of Filipinos.	<ul style="list-style-type: none"> <li>• Support start-ups, talents, corporations and organizations with a wide range of training programs and consulting services</li> <li>• Offers networking and memberships</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborative workspaces</li> <li>• Curated events</li> <li>• Training programs</li> <li>• Funding</li> </ul>	Not indicated	<a href="https://manila.impacthub.net/">https://manila.impacthub.net/</a>
Launchgarage Inc. (Launchgarage Innovation Hub)	Start-up acceleration program launched in 2012 by Philippine-based venture capital firm Kickstart Ventures and local applications engineering firm ProudCloud	Venue for open collaboration, knowledge sharing, and events	Early-stage funding	<ul style="list-style-type: none"> <li>• Fintech</li> <li>• Agritech</li> <li>• Aquatech</li> <li>• BPO enterprise software solutions</li> </ul>	<a href="https://www.launchgarage.com/">https://www.launchgarage.com/</a>
IdeaSpace Foundation	Non-profit organization running founder-focused programs for early-stage tech start-up founders solving emerging market issues	<ul style="list-style-type: none"> <li>• Community engagement—support system for founders and start-ups under the acceleration and Opportunity Fund programs</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunity Fund—focuses on investing in start-ups within and outside the IdeaSpace community, providing micro funds for early-stage start-ups across various industries</li> </ul>	Tech-based solutions	<a href="https://ideaspacefoundation.org/">https://ideaspacefoundation.org/</a>

COMPANY	DESCRIPTION	PROGRAMS / SERVICES	PRODUCTS / TYPE OF FINANCING	SECTOR FOCUS	WEBSITE
	<p>Founded in 2012 and by backed by Metro Pacific Investment Corp.</p> <p>Provides education, mentoring, and coaching to develop and strengthen their product, service, and team</p>	<ul style="list-style-type: none"> <li>External Relations— handles marketing and communications for all IdeaSpace start-up support programs and donor and partner engagement</li> </ul>	<ul style="list-style-type: none"> <li>Equity Investment—for top three start-ups of the year-long Acceleration Program</li> </ul>		
QBO Innovation Hub	<p>A platform supporting Filipino start-ups</p> <p>Connects and develops the start-up ecosystem, forward tech, and innovation</p>	<ul style="list-style-type: none"> <li>Co-working space</li> <li>Regular networking events</li> <li>Introductory classes on the fundamentals of a start-up</li> <li>Specialized workshops on latest tools and trends and relevant topics to remain competitive</li> <li>Mentorship and expert advice on legal, financial, marketing, and design concerns from top professional firms</li> </ul>	SHOWQCASE (investor pitch—pitch ideas to top angel investors, venture capitalists, and corporations for funding and partnerships)	Not indicated	<a href="https://www.qbo.com.ph/">https://www.qbo.com.ph/</a>

COMPANY	DESCRIPTION	PROGRAMS / SERVICES	PRODUCTS / TYPE OF FINANCING	SECTOR FOCUS	WEBSITE
SIBOL (Startup Innovation and Business Opportunity Linkage ) Labs – UPLB	<p>Envisioned to be a prime-mover of the agri start-up ecosystem in CALABARZON and in the country</p> <p>A leading agri-incubator producing world-class agritech start-ups</p> <p>Awarded Best Incubator Community Program during the DOST-QBO Startup Incubator Awards</p>	<ul style="list-style-type: none"> <li>• Design thinking workshops and seminars on technopreneurship</li> <li>• Establish partnerships with local and international key players on start-up accelerator programs</li> </ul>	Incubation support	Agri-tech	<a href="https://www.facebook.com/uplbsibolinnovationhub">https://www.facebook.com/uplbsibolinnovationhub</a>

## ATTACHMENT E

### PAYMENTS FOR ECOSYSTEM SERVICES (PES)

Financing is one of the challenges in watershed protection and conservation. While the importance of water resources management is fully recognized, it has received meager government budgetary support. The government has been constantly looking for options to generate additional resources to fund conservation efforts. One such option is the establishment of Payments for Ecosystem Services (PES) for watershed conservation.

Consistent with its integrated and inclusive water security framework of increasing access to resilient water supply and sanitation services and improving water resources management, the USAID Safe Water Project has been promoting the adoption of PES as a conservation financing scheme in critical watershed areas in the project sites: 1) Mount Irawan in Puerto Princesa City; 2) Buayan-Malungon River Basin (BMRB) upstream of General Santos City; and 3) Bago River Watershed in Negros Occidental.

#### What is PES?

The PES is an innovative financing scheme which involves payments in the form of fees or charges for using a natural resource in return for a guaranteed flow of ecosystem goods and services (EGS).

PES is based on three basic principles:

1. *User's Pay Principle*—those who use or consume ecosystem services must pay
2. *Polluters Pay Principle*—those who damage the ecosystem must pay for its restoration
3. *Providers Get Principle*—those who protect, manage, restore, and regulate uses in an ecosystem gets paid for their work. Thus, PES is often based on what users and polluters pay.

### Who are the Ecosystem Goods and Services (EGS) Providers and Users

➤ **EGS providers** are those who protect, manage, regulate, and restore a designated conservation area that serve as the natural EGS source

- ❖ Whoever preserves, manages or maintains an ecosystem and its services should be compensated or paid for
- ❖ DENR with PAMB and PAMO in protected areas, watershed reservations
- ❖ Conservation managers or holders of reservation areas
- ❖ LGUs and communities in the conservation areas

➤ **EGS Users** – Enterprises, Businesses, Individual Users, Livelihood owners

The diagram illustrates a watershed with a river flowing from a forested upstream area to a downstream urban area. Key elements include: 'Upstream community stewards and providers of watershed services' (represented by a tree icon); 'Incentives' (represented by a blue circle with 'e.g., cash, assistance, materials'); 'Balances upstream and downstream interests' (represented by a scale icon); 'Payments' (represented by a gold coin icon); 'Downstream water users' (represented by a house icon); and 'Watershed services' (represented by a list of services: 'e.g., water purification, flood risk mitigation, aquifer recharge, carbon sequestration, biodiversity services, etc.').



PES is used to finance watershed conservation, protection, restoration, regulation, and management based on an agreed re-investment plan involving the providers and users of EGS.

## What is the legal basis for PES?

*Republic Act (R.A.) 7160 (or the Local Government Code)* empowers provinces, cities, and municipalities, among others, to: a) generate resources through charges and fees, taxes, and rentals; b) allocate funds through an appropriate ordinance; and c) enter into agreements, including contractual arrangements, for the implementation of their development plans, program objectives and priorities.

Section 3 of the Local Government Code states that local government units (LGUs) share the responsibility with the national government in the management and maintenance of ecological balance of watersheds within their territorial jurisdiction. This includes the management of communal forests and community watersheds and the establishment of greenbelts and tree parks within their territorial jurisdiction.

*R.A. 7586 (or the National Integrated Protected Areas System Act of 1992, amended by R.A. 11038 or the Expanded NIPAS Act of 2018)*. The law defines the scope and activities related to the protection and conservation of designated protected areas (PAs) that fall under the NIPAS. It sets the determination of system-wide fees and charges for the sustainable financing of PAs. All incomes generated from fees and charges from the use of resources and operation of PAs, including contributions from industries and facilities directly benefiting from the PA, accrue to the Integrated Protected Areas Fund. This is a trust fund for the protection, maintenance, administration, and management of the system as endorsed by the Protected Areas Management Boards (PAMBs) and authorized by the Department of Environment and Natural Resources (DENR). Section 15 of RA 11038 establishes the Protected Area-Retained Income Account (PA-RIA) that is managed by the PAMB.

*R.A. 9136 (or the EPIRA Law)*. Section 65 of the law requires participants in the generation, distribution and transmission sub-sectors of the energy industry to comply with all environmental laws, rules, regulations, and standards promulgated by the DENR, including the establishment of an environmental guarantee fund which will be used solely for watershed protection and conservation.

*Specific or Area-based PAMB Resolutions*. Examples include: Resolution of PAMB of Mt. Matalinhagan Protected Landscape (MMPL), local ordinance and agreements, or contracts between the board or management of a conservation area and the users of ecosystem services.

## Why adopt PES?

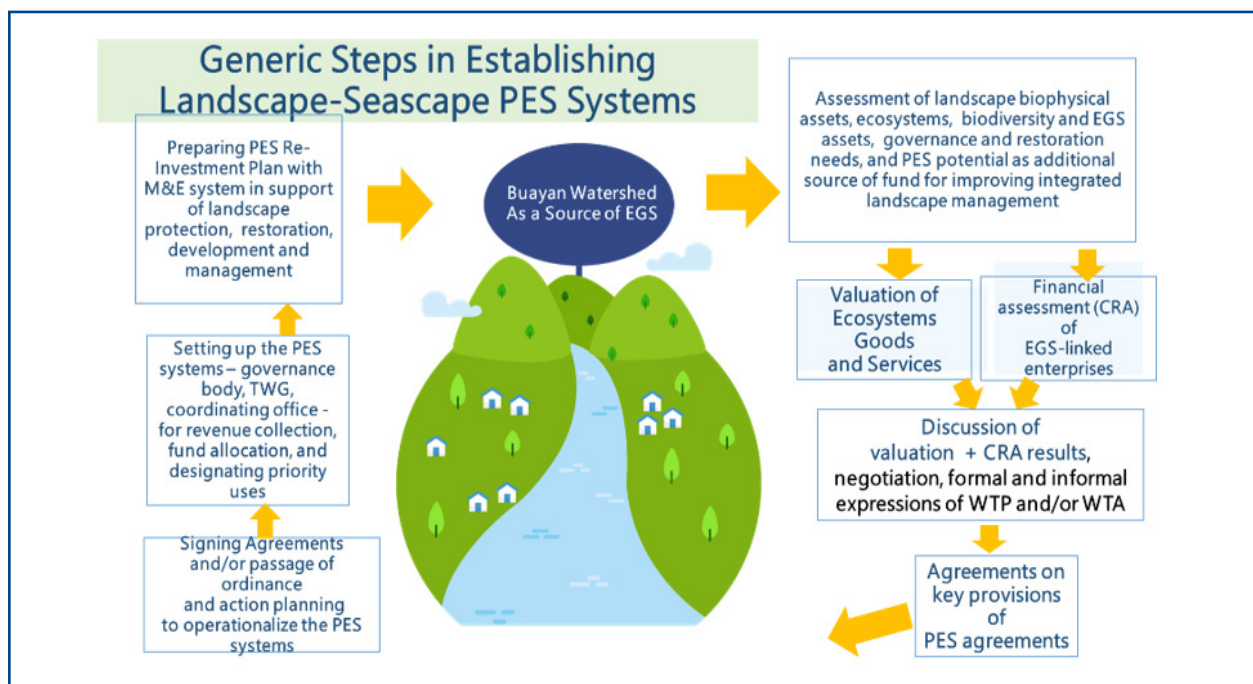
Financing mobilized through PES can help:

- conserve the ecosystem goods and services that the watershed provides to society;
- address existing threats to watersheds; and
- ensure a sustained flow of ecosystem goods and services to ENR-linked<sup>8</sup> enterprises for the operation of their businesses.

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<sup>8</sup> Environment and natural resources (or ENR)

## What does it entail to establish a PES?



### The steps to establish a PES include:

1. Organization and Mobilization of the Technical Working Group (TWG) on the PES<sup>9</sup> through the issuance of a local ordinance and TWG action planning to operationalize the PES. The TWG will be responsible for the preparation, review, negotiation, finalization, legitimization, and approval of the PES agreement and schemes.
2. Assessment of the target landscape (e.g., a watershed or a river basin) to include the hydrological conditions, biodiversity and EGS assets of the watersheds, uses of the EGS and the governance, management and restoration needs.
3. Conduct of cost-based valuation (CBV) and cost and revenue analysis (CRA). On the side of the provider/seller; the valuation of ecosystem services will consider the current and desired land cover across different management zones. On the side of the buyer/user; the financial assessment of EGS-linked enterprises will be undertaken through the CRA to determine the users' capacity to pay.
4. Drafting of PES Agreement/Memorandum of Agreement or Understanding (Ordinance or MOA/MOU). The results of the CBV and CRA will be used as basis for negotiation among the parties to get a consensus on the key provisions of the PES agreements, whether mandatory through an ordinance or voluntary through an MOA.

<sup>9</sup> The TWG can be a new team or a committee under an existing LGU Planning TWG or Task Force. The suggested members of the Core Team can include the Office of the provincial, city, or municipal (PICIM) local chief executive (Governor or Mayor) and representative/s from Sangguniang Panlalawigan/Sangguniang Bayan Committees on Environment, Agriculture, and Zoning, Planning and Development. The Technical Team can be composed of the PICIM Environment and Natural Resources (ENR) Office; PICIM Project Development Office; PICIM Agriculturist's Office; CIM Economic Enterprise Development Office (EEDO); CIM Budget Office; CIM Accountant/Assessor's Office; CIM Engineer's Office; and representatives from the DENR Environment and Natural Resources Office (ENRO); National Commission on Indigenous Peoples (NCIP); water districts and operators; ENR-linked enterprises; civil society organizations (CSOs); and non-government organizations (NGOs).

5. Setting up of the PES systems for revenue collection or fund allocation. A financial management system for revenue collection will be set up based on the designated priority uses/activities. This process may require ring-fencing of PES collections.
6. Re-Investment Planning and Use of PES revenues. The priority restoration area(s) and strategy (watershed restoration plan) will be identified as subject for re-investment planning given the projected PES revenues that will be collected.

### **What are the options for PES collection?**

1. Adoption of an ordinance to collect PES. The collected PES is treated as a general fund account, can be ring-fenced, and requires the formulation of financial management guidelines.
2. Through an MOA or voluntary payment of PES. The PES is treated as a trust fund account and requires the formulation of financial management guidelines for its use.
3. Issuance of an ordinance with MOA from the private sector or voluntary payment or contribution to the PES fund. The collected PES is treated as a general fund account, can be ring-fenced, and requires the formulation of financial management guidelines.

### **How are PES collected and managed?**

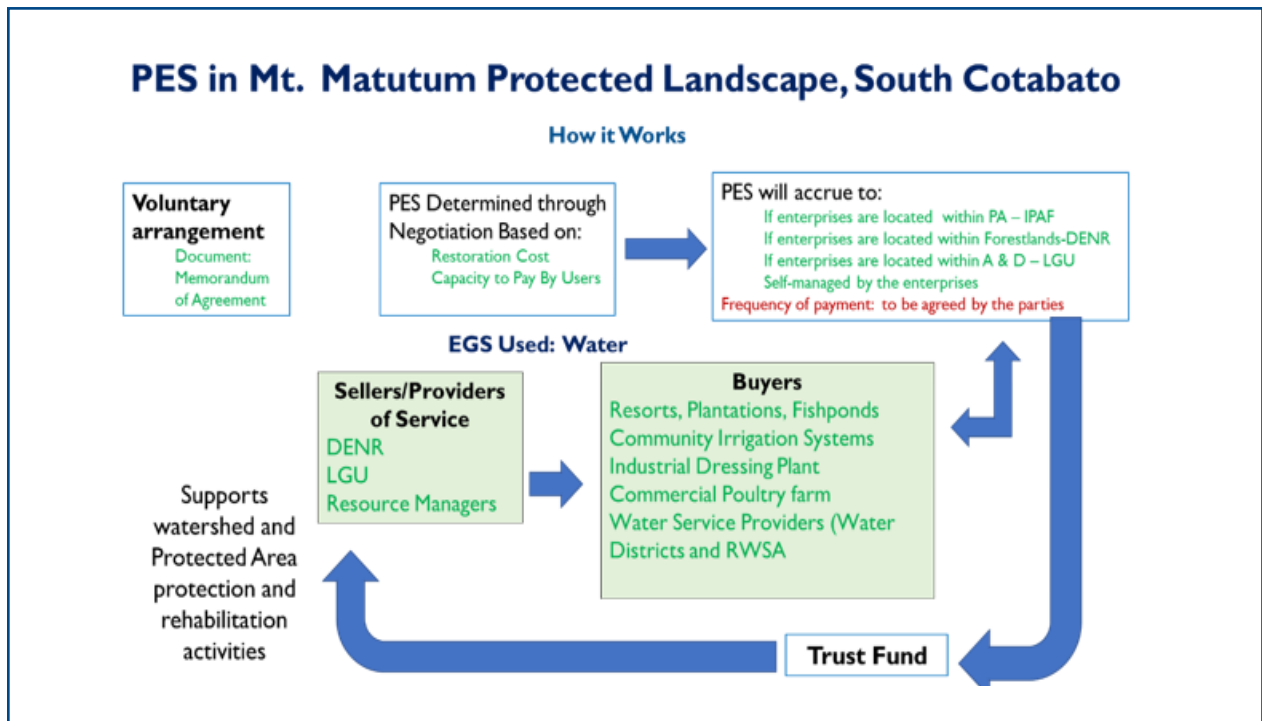
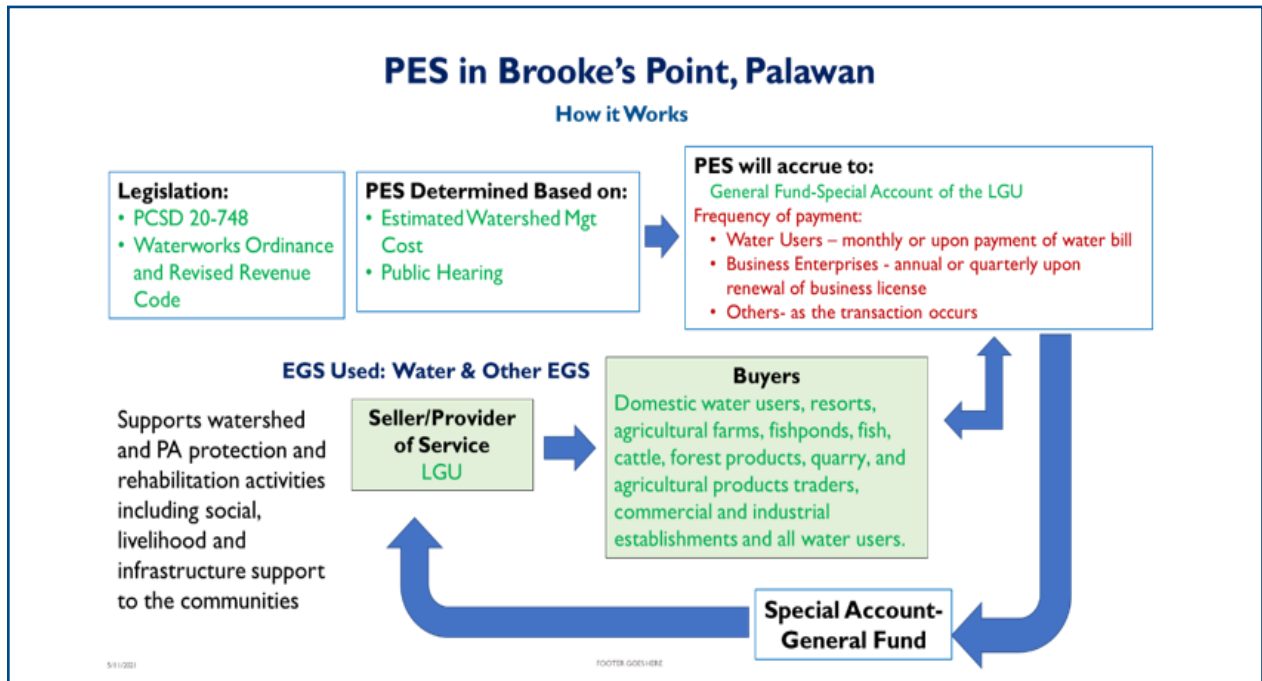
- If in a PA, PES is collected as users' and/or polluters' fees or charges by LGU and/or DENR and placed under the IPAF with clearly defined sharing and use of funds.
- If within LGU territorial jurisdiction, PES is collected and managed by LGUs following an agreed plan on how to collect, manage, account, and use the fund for conservation.
- It can be committed and managed by the user enterprise or business itself (e.g. as part of the water tariff), and disbursed based on an agreed re-investment plan. The collection and use of the fund is reported to the PAMB or a governance body at the LGU level.
- It can be committed by various users (e.g. as entrance or recreational fees) and collected by the LGU but managed, disbursed, properly accounted for, and accounted to the PAMB or LGU governance body.

### **How are PES re-invested?**

Depending on the LGU Re-investment Plan, the PES fund can be re-invested in the following:

- Watershed protection and management
- Nursery establishment
- Watershed restoration
- Easement regulation including relocation of households along the riverbanks
- Provision of basic infrastructures (water supply systems, water impoundments, sanitary toilets in upstream communities to prevent open defecation, trading posts, etc.)
- Provision of livelihood programs and social services

## Examples of PES implementation





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