

FINANCING PLAN

FOR THE PHILIPPINE BIODIVERSITY STRATEGY AND ACTION PLAN

BIODIVERSITY FINANCING INITIATIVE – PHILIPPINES
MAY 2016

This project is
co-funded by the
European Union



Federal Ministry for the
Environment, Nature Conservation,
Building and Nuclear Safety



Flanders
State of the Art



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Bundesamt für Umwelt BAFU
Office fédéral de l'environnement OFEV
Ufficio federale dell'ambiente UFAM
Uffizi federal d'ambient UFAM



Empowered lives.
Resilient nations.

Contents

Executive Summary.....	2
Financing Plan for the Philippine Biodiversity Strategy and Action Plan (NBSAP).....	3
I. Introduction.....	3
II. Methodology in preparing the financing plan.....	3
III. Summary results of the BIOFIN workbooks	4
3.1 Policy and Institutional Review	4
3.2 Public and Private Biodiversity Expenditure Review.....	17
3.3 Finance Needs Assessment.....	23
IV. Financing solutions towards implementation of NBSAP	32
4.1 Pre-feasibility assessment of financing options.....	32
4.2. Increased funding for the local government sector.....	38
4.5.1 Engaging and enhance partnership with private sector.....	47
V. The Post-BIOFIN scenario: A Call to Action	50
References	53

Executive Summary

The BIOFIN Financing Plan for the Philippines is based on insights gleaned from the results of the three BIOFIN workbooks: the Policy and Institutional Review; the Public and Private Biodiversity Expenditure Review; and the Finance Needs Assessment Plan. This plan acknowledges the importance of tapping additional financing to support NBSAP but is also cognizant of the parallel challenges that could not be addressed by generating financing alone. Thus, the Plan transcends the focus on generating additional resources but instead, identifies a range of “finance solutions” that leverage finance, fiscal and economic tools and strategies to improve the outcome of biodiversity objectives in the country. Financing solutions include a range of transformative actions that include generating more financing to fund the NBSAP or associated planning documents; appropriate attribution of biodiversity expenditures in the budget; attaining cost effective budget execution by eradicating overlaps in biodiversity functions; eradicating expenditures that continue to or aggravate dissipation of biodiversity resources; and paving the groundwork for a responsive policy environment through greater awareness on biodiversity and biodiversity financing and enhancing institutional support towards monitoring of NBSAP.

More than PHP 5 billion is targeted to be raised by BIOFIN within the six year medium term planning period conforming to the incoming administration of presumptive President Rodrigo Duterte. PHP 3 billion is to be sourced from increased public sector budget either through debt swaps, conservation incentives/ecological fiscal transfers, or through the flotation of a Sovereign Green Bond. Another 1.2 billion is to be tapped by working with local governments, civil society organizations and state universities and colleges to prepare and submit proposals eligible for funding under two earmarked funds: Energy Regulation 1-94 and the People’s Survival Fund. Through realignment of expenditures within the Department of Environment and Natural Resources, another PHP 0.5 billion pesos would be tagged as contributing to biodiversity with the entire effort of tagging resulting to better understanding of the pervasiveness of biodiversity in the agenda of the department. Lastly, traditional ODA sources shall be tapped amounting to PHP 0.6 billion, based on the historical uptake of grants.

Each financing solution is translated into a work program for BIOFIN that shall serve as guidance for implementation of Component 4 from hereon till end of 2017. In conclusion, the “call to action” invokes an area of work on financing solutions that “deliver better” and “avoid future expenditures” and recommends for the BIOFIN method to be applied in preparing for these next batch of financing solutions.

Financing Plan for the Philippine Biodiversity Strategy and Action Plan (NBSAP)

I. Introduction

The BIOFIN Financing Plan for the Philippines completes and crystallizes efforts initiated by the Project to “*construct a sound business case for increased investment in the sustainable and equitable management, protection and restoration of biodiversity and ecosystems*”. Using results arising from three components, i.e., Policy and Institutional Review, Public and Private Biodiversity Expenditure Review, and Costing of the National Biodiversity Strategy and Action Plan, the Financing Plan provides specific answers to enable funding streams to flow towards implementation of the NBSAP. It is the culmination of the BIOFIN approach as applied to the Philippine context and provides guidance on implementation of BIOFIN’s Component 4.

Based on insights gleaned from the results of the three BIOFIN workbooks, this plan acknowledges the importance of tapping additional financing to support NBSAP but is also cognizant of the parallel challenges that could not be addressed by generating financing alone. Thus, the Plan transcends the focus on generating additional resources but instead, identifies a range of “finance solutions” that leverage finance, fiscal and economic tools and strategies to improve the outcome of biodiversity objectives in the country. Financing solutions include a range of transformative actions that include generating more financing to fund the NBSAP or associated planning documents; appropriate attribution of biodiversity expenditures in the budget; attaining cost effective budget execution by eradicating overlaps in biodiversity functions; eradicating expenditures that continue to or aggravate dissipation of biodiversity resources; and paving the groundwork for a responsive policy environment through greater awareness on biodiversity and biodiversity financing and enhancing institutional support towards monitoring of NBSAP.

II. Methodology in preparing the financing plan

The development of the financing plan includes three phases: 1) prioritization of NBSAP actions and development of priority programs; 2) identification and pre-feasibility analysis of available funding options and 3) development of strategies to implement the financing solutions.

Prioritization of NBSAP actions was necessary given the longlist of actions (numbering more than 100), the varied timeframes, and the different levels of impacts on overall goals of NBSAP. Prioritization enables organizations to identify possible risks, benefits, challenges, and opportunities. The process helps in examining what actions will generate more impact and long-term value to warrant investment. It presents opportunity to assess respective organizational strategies and goals. Furthermore, prioritization provides insights on the right financial mechanism to tap in order to mobilize resources.

The participants of the workshop were assigned to groups based on their sector and expertise. Ideally, each group should have representation from government, academe, private sector, CSOs, and development organizations. Prioritization worksheets (modified Goals Achievement Matrix)

were developed by BIOFIN Philippines for each thematic sector. It contains NBSAP actions that were converted into projects. In giving scores to the activities/projects, the participants were asked to consider urgency of implementation of particular actions, impact with respect to NBSAP goals, and underlying cost. Participants are also expected to determine which among the actions and strategies will have greater contribution and impact towards the attainment of NBSAP Goals. Participants during the workshop were also asked on what are possible sources of funding or financing mechanism that will support the implementation of actions/projects.

A pre-feasibility criteria was used in selecting the financing options to be piloted by BIOFIN Philippines. Discussed within the BIOFIN Team, the following parameters were utilized: financial, legal, administrative, social and environmental criteria¹. The “short-list” of financing options were presented at the Concluding Workshop to garner reactions from workshop participants. Thereafter, a longer list of financing solutions was subjected to pre-feasibility parameters discussed in full in this report.

The financing solutions selected for implementation under BIOFIN’s Component 4 represent the results of the application of the feasibility parameters but also direct results from the workbook recommendations. BIOFIN’s workplan for Component 4 has been guided by the financing solutions selected; highlights of the workplan are presented in this report as well as amounts targeted for financing. Post-BIOFIN recommendations are outlined representing a “call to action” addressed to the NBSAP Focals for the Philippines and as a possible content for a possible next phase of BIOFIN.

III. Summary results of the BIOFIN workbooks

This chapter summarizes the key results and highlights of the three BIOFIN workbooks: the Policy and Institutional Review (PIR), the Public and Private Biodiversity Expenditure Review (PPBER) and the Financial Needs Assessment Review, otherwise referred to as the Costing and Gap Analysis Report. Each of the BIOFIN workbooks contribute to a logical process culminating in the identification of appropriate financing solutions given the policy and institutional context, the magnitude and source of financing gaps, and current and projected expenditure levels.

3.1 Policy and Institutional Review

The BIOFIN Policy and Institutional Review aims to identify opportunities for improving biodiversity finance, including ways to reduce the loss of biodiversity by addressing drivers at their root cause and recommending appropriate policy solutions.

to reduce costs and inefficiencies, to identify policy and institutional barriers for effective delivery, and to generate increased financial resources. The results of the Policy and Institutional Review help planners develop a clear set of recommendations for improving policies, practices, institutions and processes related to biodiversity and biodiversity finance. Directly contributing to the identification of financial solutions, the Policy and institutional review analyzed policies with automatic appropriations, i.e., earmarked funds, and examined how it can either be realigned for biodiversity or accessed by local governments.

¹ This was further improved to include 17 pre-feasibility criteria that was tested during the Regional Workshops in Latin America and Eurasia Pacific.

3.1.1 Identification of economic/development sectors and their policies and practices which are positive and negative drivers of biodiversity

Using guidance provided by the BIOFIN Workbook which sought to highlight the impact of main economic sectors on biodiversity, the below list was prepared.

- Industrial manufacturing and processing,
- Forestry and forest-related activities (including industrial, subsistence, small-scale),
- Agriculture (including small-scale, subsistence and commodity),
- Tourism and Recreation,
- Energy (including exploration, transportation, extraction practices),
- Transportation and Infrastructure,
- Water Management / Utilization,
- Fisheries (including artisanal, subsistence and commercial),
- Mining and extraction of materials (including commercial and small-scale operations),
- Human Settlements,
- Wildlife Management.

Discussions on these economic sectors focus on core policy provisions that regulate, manage, and define the management structures and responsibilities in policy implementation. Deficiencies in implementation, monitoring, and enforcement – resulting to negative impacts on biodiversity, are also discussed.

In the ***industrial and manufacturing sector***, waste disposal cost is cheap and incentives for waste reduction are either low or non-existent. Meanwhile the proliferation of wastes that clog waterbodies can be partially traced to poor packaging, i.e., use of non-biodegradable materials such as tetrapacks, Styrofoam and plastics. Lastly, there is poor industrial planning in as much as there are no comprehensive zoning policies with respect to location of industries. In the ***forestry sector***, the main forestry law in the Philippines has been enacted in 1975 but several executive issuances have been promulgated since. Of late, Executive Order 26, Series of 2011, or the National Greening Program (NGP), has been the centerpiece policy of the current administration. The NGP seeks to plant 1.5 billion trees in 1.5 million hectares of land from 2011-2016. Civil society critics of the NGP point out that the majority of trees being planted are exotic trees like mahogany, gmelina and rubber trees that are fast-growing but less adaptive to the Philippine environment. The rationale mentioned is that NGP is not just for reforestation but also for economic development and livelihood of upland farmers.

In the area of ***protected area management***, 5.5 million hectares of terrestrial and marine protected areas have been set aside but based on GIZ studies, management effectiveness remains mediocre with ratings at 58%. Enforcement capacity is weak, mainly because of the lack of manpower and resources for effective protection. For every 2,300 hectares of PA, only one person is paid to oversee protection and management. Entrance and user fee collections rates in PAs are also low and there is a lengthy bureaucratic process for fund release as fees are remitted to the national treasury before the share of each PA is sent back, a process of which takes around 6 months. Business plans have been developed for at least 18 PAs aiming for financial sustainability through on-site revenue generation and public-private sector partnership; unfortunately, the implementation of said business plans have not commenced.

Two policies have been highlighted in the discussions on the ***agrobiodiversity sector***, the organic agriculture law and the high value crops law. Overall, there is a perceived policy bias towards

production of high-value crops that could curtail the use of traditional food crops and encourage replacement of traditional varieties with those that are more popular for export. The bias is manifested further by provision of farm loans and crop insurance for these popular and high-yielding varieties.

Tourism was identified as an important biodiversity and economic sector, with an average contribution of 6% to GDP (2012 data). The tourism law recognizes a huge potential for ecotourism in protected areas with two hundred thirty-five (235) PAs overlapping with identified 78 priority tourism development areas of the Department of Tourism. Currently, ecotourism systems are not fully developed to capitalize on alternative revenue streams from ecotourism and ecosystem services. Insufficient costing of ecosystem services and policies are insufficient to ensure sustainable tourism to take place such carrying capacity, standards, lack of benefit sharing mechanism in ecotourism sites.

The **energy sector** focused on the slow uptake on renewable energy projects but also emphasized the potential for resource mobilization. In the **transport and infrastructure sector**, inappropriate siting of infrastructure projects and inability to apply green technology, were identified as threats to biodiversity. A possible source of financing for biodiversity was highlighted in the Motor Vehicle Users Charge which has a fund balance of 91 billion pesos. Further screening on this financial option is to be employed to assess the scope of application of the fund based on legal provisions.

The Water Code and Clean Water Act are two laws governing the management of **water resources** in the Philippines. Main areas of concern are watershed degradation, groundwater depletion and saline intrusion, and water quality due to uncontrolled industrial and agricultural development, inadequate waste disposal, and runoff. In the **fisheries sector**, overfishing and habitat degradation were highlighted as critical issues. User fee systems that reflect valuation of ecosystem services is recommended towards rationalized use especially at the local government level. Policies governing the **mining sector** highlight environmental safeguards and fees and royalties that may be derived from its operations. Mining is a major threat to biodiversity since most of the country's priority conservation areas sit on top of huge mineral reserves causing conflicts with prescribed land uses and management objectives. However, the economic significance of mining in terms of employment, exports, and government revenues cannot be denied. In the **human settlements sector**, the major challenge is the conversion of Forest to Agricultural Lands to residential settlements.

3.1.2. Determination of entry points for policy transformation including application of economic and financial triggers

One of the outcomes of the policy analysis is an identification of entry points for policy transformation.² These policy reform agenda have been blended and integrated with NBSAP targets thus allowing BIOFIN results to be included in the long term policy agenda for the Philippines. Highlights of the recommendations across NBSAP thematic sectors are hereby discussed.

- Agrobiodiversity. Incentive systems can be formulated to recognize and sustain communities practicing heritage agriculture which concurrently harbor biodiversity, corresponding to NBSAP target on maintaining national important agricultural heritage systems. Another option is to tap direct investments from the private sector on support services such as marketing, transport, post harvest and other value addition. Current policy

² Table 2 in the Policy and Institutional Review. BIOFIN Philippines.

is strengthened to introduce independent risk assessment of planned programs and inclusion of GMO concerns in the EIA system. Certification systems – especially those including GMO products may require new policy prescriptions.

- Coastal sector. With regards policies on mangrove utilization, an amendment to remove perverse incentives was proposed. Currently, there is a policy to produce 1000 kg of fish/ha/year resulting to shift in more intensive aquaculture. Conversely, some incentives towards mangrove rehabilitation must be encouraged including, possibly some market based incentives, i.e., blue carbon market. A functional permitting/regulating access systems in LGUs in priority coastal and marine ecosystems/areas is put in place with the access fees based on measures of ecosystem services. Fisherfolk affected by spatial and temporal closures of fishing areas should be provided some economic safety net.
- Forest. Fees based on measures of ecosystem services likewise.

Additionally, opportunities to select financing solutions resulting from the causal chain analysis applied to the priority economic sectors are summarized in Table 1.

3.1.3. Identification of financing solutions: resource mobilization

Since the first versions of the BIOFIN workbook focused on a singular financing solution, i.e., resource mobilization, the supplementary policy report performed a pre-feasibility on four resource mobilization options. These are all earmarked funds from the energy, mining, and transport sectors. The pre-feasibility covered the legal, procedural, and partially, the financial feasibility of utilizing these funds for the purpose of biodiversity financing. Since this report allows for a broader perspective on financing solutions beyond resource mobilization alone, the option to tap these earmarked funds are re-examined and compared with other financing solutions.

A summary description of the funds are provided below.

- (1) Energy Regulation (ER) 1-94, as amended: ER 1-94, as amended, requires the generation company and/or energy resource developer to set aside one centavo per kilowatt hour (P0.01/kWh) of the total electricity sales as financial benefits to host communities. The P0.01/kWh is monitored through trust accounts established specific for EF (Electrification Fund), DLF (Development and Livelihood Fund) and RWMHEEF (Reforestation, Watershed Management, Health and/or Environmental Enhancement Fund) in the name of DOE and the generation company. Environmental enhancement projects such as construction of wastewater management facilities, material recovery facilities, purchase of dumptrucks and the like, as well as reforestation activities may be funded herein.
- (2) Malampaya Funds : The Malampaya funds represent the royalties that the government collects from the Malampaya gas project off Palawan Island.³ Started in 2002, the \$4.5-billion project involves the extraction of natural gas from the waters off Palawan. The service contract provides for a production-sharing scheme in which the government gets 60 percent of earnings from the operation, after deducting certain charges. PD 910 mandates that the fund be used to finance energy resource development and exploitation programs and projects of the government but allows the President of the Philippines to use the same for other purposes under his discretion. However, in November 2013, in the case of Belgica, et al vs. Ochoa, et al, the Supreme Court declared unconstitutional provisions of the law allowing the President to use the Malampaya fund for other purposes other than energy related projects. In effect, the Supreme Court declared that Malampaya Fund is reserved

³ What Went Before: Malampaya Fund Scam, Inquirer.net, 30 November 2014, <http://newsinfo.inquirer.net/653630/what-went-before-malampaya-fund-scam> (last accessed: 4 June 2015).

only for financing “energy resource development and exploitation” activities. As of 30 April 2015, some PhP168.2 Billion is available from the Malampaya gas fund.⁴ The components of this balance are remittances of PhP210 Billion less incurred expenses of P42 billion for the operations of the Malampaya natural gas project. According to the Treasury Bureau, the Malampaya Fund has been growing at around PhP2 Billion a month in recent years.⁵ However it has been reported that the government has not used the money since last year because of restrictions imposed by the Supreme Court.

- (3) Motor Vehicles User’s Charge (MVUC): One of the recommendations from the PIR workshop is to tap the MVUC for environmental projects related to transportation. The MVUC is imposed on owners of all types of motor vehicles and was integrated into the usual annual vehicle registration fees being collected by the Land Transportation Office. The MVUC collection has been placed in four special trust accounts earmarked for road maintenance and related projects.
- (4) Mining Taxes, Fees and Royalties from Mining : One of the recommendations from the PIR workshop is to look into tapping royalties and revenues derived by government from the mining industry for biodiversity conservation. As of end of 2014, the mining industry contributes to 0.7% of the Philippines Gross National Product. At least four types of taxes, fees and royalties are imposed on the mining sector, including fees charged by the DENR-MGB; excise taxes collected by the BIR; taxes collected by national agencies; and taxes collected by the local government units.

⁴ Malampaya fund scope expanded to include post-disaster repairs, Business World online, 1 June 2015, <http://www.bworldonline.com/content.php?section=Economy&title=malampaya-fund-scope-expanded-to-include-post-disaster-repairs&id=108943> (last accessed: 4 June 2015).

⁵ Malampaya Fund (Part 1): Limits to use of multibillion earnings, CNN Philippines, 4 June 2015, <http://cnnphilippines.com/investigative/2015/06/04/Malampaya-fund.html> (last accessed: 4 June 2015).

Table 1: Summary of Key Policies/Recommendations towards formulating financing solutions (adapted from the BIOFIN PIR Final Report)

Sector / Sub-sector	Policy	Recommendation	Actor(s) / Institution(s) Responsible	Actor(s) / Institution(s) Affected	Financial result(s) and instrument(s)
Industrial manufacturing and Processing	Waste Disposal Cost is cheap and incentives for waste reduction either do not exist or are low	Local officials to review fees to take into consideration the cost corresponding to environmental protection and restoration.	Local Government Units (LGUs), Department of Environment and Natural Resources (DENR)	Businesses engaged in the Industrial manufacturing and processing industry. End-users of products, community who will be affected with the cost.	Generate revenues/ Avoid future expenditures Fiscal/Regulatory reform
Forestry and Forest-related Activities	Low fees for permits/lease which (e.g., annual rental of 300 Philippine Pesos (PhP) /hectare on the 6th to 10th year for Socialized Industrial Forest Management Agreement (SIFMA) and PhP 150.00/hectare for 1-5 hectares for permits) which does not take into consideration the overall negative impact of harvesting timber	Congress/government to review possible increase in fees	Congress, government, DENR	Forest management grantees, timber industry and end-users who may be affected with additional cost	Generate revenues/ Avoid future expenditures Fiscal/Regulatory reform

Sector / Sub-sector	Policy	Recommendation	Actor(s) / Institution(s) Responsible	Actor(s) / Institution(s) Affected	Financial result(s) and instrument(s)
Agriculture and Agrobiodiversity	Incentives (loans, subsidies, etc.) in favor of high value crops and commercial varieties	Review related policies that focus on production to consider the promotion of traditional varieties	Department of Agriculture (DA)	Farmers, Higher Education Institutions (HEIs)	Result: Realign expenditures / Instrument: Fiscal/Regulatory reform
Tourism	Nominal entrance fees in ecotourism sites which may not properly reflect the required conservation costs	Look into loans/ grants for the development of ecotourism sites and review User fees/ Tourism Infrastructure and Enterprise Zone Authority (TIEZA) Fees/LGU Fees for the said purpose	Department of Tourism (DOT), DENR, BMB	Tourists	Result: Generate revenues / Instrument: Fiscal/Regulatory reform Market based instruments/Equity and debt
Energy	Funds from the environment [Use of Malampaya funds in relation to Presidential Decree (PD) 910] are used for non-environmental purposes	Tap Malampaya funds as possible source of funding for biodiversity projects	DENR	President, Energy Development Board	Result: Generate revenues / realign expenditures (are you looking to realign or add new resources?) Instrument: Fiscal/Regulatory (is this funded from budget resources?)
	Energy Regulation (ER) 1-94 – Financial Benefits to Host Communities [One-centavo per kilowatt-hour (P0.01/kWh) of the	Guide host communities on utilization of funds for the environment	DENR-BMB, Department of Energy (DOE), Energy Regulation Commission (ERC)	Host Communities	Result: Generate revenues / Deliver better Instrument: Regulatory

Sector / Sub-sector	Policy	Recommendation	Actor(s) / Institution(s) Responsible	Actor(s) / Institution(s) Affected	Financial result(s) and instrument(s)
	Electricity Sales] which may be tapped by host communities for environmental project				
Transportation and Infrastructure	Motor Vehicle User's Charge (MVUC) which are being levied by government against road users	Tap funds which may be utilized for environmental projects related to transportation	DENR, Metropolitan Manila Development Authority (MMDA)	Department of Public Works and Highways (DPWH), Department of Transportation and Communications (DOTC), road users	Result: Generate revenues/Realign expenditures (if allocated elsewhere) Instrument: Fiscal/Regulatory
	Fees and/or Penalties for Vessel Owners / management companies who may be found to violate guidelines on Ballast water		Maritime Industry Authority (MARINA), DOTC	Vessel owners / management companies	Result: Generate revenues / Avoid future expenditures Instrument: Fiscal/regulatory reform
Water Management / Utilization	Internal Revenue Allocation (IRA) Development Funds	Tap IRA for water resource management	DENR, National Water Resources Board (NWRB)	LGUs	Result: Generate revenues / Realign expenditures Instrument: Fiscal/Regulatory
Fisheries	Permit/Access Fees	Permit or Access Fees must reflect ecosystem services value	Bureau of Fisheries and Aquatic Resources (BFAR), DENR, LGUs	Businesses in the Fisheries industry, Fisher folks	Result: Generate revenues Instrument: Fiscal/Regulatory

Sector / Sub-sector	Policy	Recommendation	Actor(s) / Institution(s) Responsible	Actor(s) / Institution(s) Affected	Financial result(s) and instrument(s)
	Fiscal/economic incentives	Develop economic incentives for mangrove rehabilitation	BFAR, DENR, LGUs	Businesses in the Fisheries industry, Fisher folks	Result: Realign expenditures Instrument: Fiscal/regulatory reform/market based incentives
Mining	Royalties and revenues derived by government from development and utilization of mineral resources under Philippine Mining Act of 1995	Tap for biodiversity resource management	DENR, BMB	Mines and Geosciences Bureau (MGB), Mining communities	Result: Generate Revenue / Instrument: Fiscal/Regulatory reform
Human Settlements	Green technology is not integrated into Building, Sanitation, Plumbing and Water Codes/standards	Provide Incentives for the integration of green technology	DENR, LGU	Construction Industry	Result: Avoid future expenditures Instrument:Regulatory reform

Sector / Sub-sector	Policy	Recommendation	Actor(s) / Institution(s) Responsible	Actor(s) / Institution(s) Affected	Type of Financial Solution(s)
Industrial manufacturing and Processing	Waste Disposal Cost is cheap and incentives for waste reduction either do not exist or are low	Local officials to review fees to take into consideration the cost corresponding to environmental protection and restoration.	Local Government Units (LGUs), Department of Environment and Natural Resources (DENR)	Businesses engaged in the Industrial manufacturing and processing industry. End-users of products, community who will be affected with the cost.	Avoid future expenditures /regulatory reform
Forestry and Forest-related Activities	Low fees for permits/lease which (e.g., annual rental of 300 Philippine Pesos (PhP) /hectare on the 6th to 10th year for Socialized Industrial Forest Management Agreement (SIFMA) and PhP 150.00/hectare for 1-5 hectares for permits) which does not take into consideration the overall negative impact of harvesting timber	Congress/government to review possible increase in fees	Congress, government, DENR	Forest management grantees, timber industry and end-users who may be affected with additional cost	Avoid future expenditures /regulatory reform
Agriculture and Agrobiodiversity	Incentives (loans, subsidies, etc.) in favor of high value	Review related policies that focus on production to consider	Department of Agriculture (DA)	Farmers, Higher Education Institutions (HEIs)	Realign expenditures / regulatory reform

Sector / Sub-sector	Policy	Recommendation	Actor(s) / Institution(s) Responsible	Actor(s) / Institution(s) Affected	Type of Financial Solution(s)
	crops and commercial varieties	the promotion of traditional varieties			
Tourism	Nominal entrance fees in ecotourism sites which may not properly reflect the required conservation costs	Look into loans/ grants for the development of ecotourism sites and review User fees/ Tourism Infrastructure and Enterprise Zone Authority (TIEZA) Fees/LGU Fees for the said purpose	Department of Tourism (DOT), DENR, BMB	Tourists	Generate revenues / market based instruments
Energy	Funds from the environment [Use of Malampaya funds in relation to Presidential Decree (PD) 910] are used for non-environmental purposes	Tap Malampaya funds as possible source of funding for biodiversity projects	DENR	President, Energy Development Board	Generate revenues / policy reform
	Energy Regulation (ER) 1-94 – Financial Benefits to Host Communities [One-centavo per kilowatt-hour (P0.01/kWh) of the Electricity Sales] which may be tapped by host	Guide host communities on utilization of funds for the environment	DENR-BMB, Department of Energy (DOE), Energy Regulation Commission (ERC)	Host Communities	Generate revenues / improved access

Sector / Sub-sector	Policy	Recommendation	Actor(s) / Institution(s) Responsible	Actor(s) / Institution(s) Affected	Type of Financial Solution(s)
	communities for environmental project				
Transportation and Infrastructure	Motor Vehicle User's Charge (MVUC) which are being levied by government against road users	Tap funds which may be utilized for environmental projects related to transportation	DENR, Metropolitan Manila Development Authority (MMDA)	Department of Public Works and Highways (DPWH), Department of Transportation and Communications (DOTC), road users	Generate revenues / improved access
	Fees and/or Penalties for Vessel Owners / management companies who may be found to violate guidelines on Ballast water		Maritime Industry Authority (MARINA), DOTC	Vessel owners / management companies	Avoid future expenditures /regulatory reform
Water Management / Utilization	Internal Revenue Allocation (IRA) Development Funds	Tap IRA for water resource management	DENR, National Water Resources Board (NWRB)	LGUs	Generate revenues / improved access
Fisheries	Permit/Access Fees	Permit or Access Fees must reflect ecosystem services value	Bureau of Fisheries and Aquatic Resources (BFAR), DENR, LGUs	Businesses in the Fisheries industry, Fisher folks	Generate revenues / improved access
	Fiscal/economic incentives	Develop economic incentives for mangrove rehabilitation	BFAR, DENR, LGUs	Businesses in the Fisheries industry, Fisher folks	Realign expenditures / regulatory reform; market based incentives
Mining	Royalties and revenues derived by government from	Tap for biodiversity resource management	DENR, BMB	Mines and Geosciences Bureau (MGB), Mining communities	Realign expenditures / regulatory reform; market based incentives

Sector / Sub-sector	Policy	Recommendation	Actor(s) / Institution(s) Responsible	Actor(s) / Institution(s) Affected	Type of Financial Solution(s)
	development and utilization of mineral resources under Philippine Mining Act of 1995				
Human Settlements	Green technology is not integrated into Building, Sanitation, Plumbing and Water Codes/standards	Provide Incentives for the integration of green technology	DENR, LGU	Construction Industry	Avoid future expenditures /regulatory reform

3.2 Public and Private Biodiversity Expenditure Review

The Public and Private Biodiversity Expenditure Review (PPBER) estimates baseline funding levels for biodiversity and projects an estimate of future expenditures consistent with the time frame used in the costing of the NBSAP under a variety of scenarios. By comparing projected financing with the finance needs of the NBSAP, this procedure enables an estimate of financing gaps for the entire implementation period of the NBSAP allowing for better programming and investment planning.

The common scope of expenditure reviews work around the following questions:

- a. Where does the money come from?
- b. Where does the money go?
- c. What does it buy?
- d. How could spending be improved?

Key results of the PPBER report, which are used as inputs towards the development of financing solutions, are summarized in this section.

3.2.1. Affirmation of mandates of more than 60 institutions towards biodiversity

Previous consultations organized for NBSAP yielded a long list of around 60 institutions having direct and indirect contributions towards the achievement of the 20 Aichi targets. The PPBER expanded the institutional review conducted by the PIR by identifying and describing the specific mandates of these institutions with a role in biodiversity in the Philippines. Covered are national agencies categorized as follows: (i) economic sectors, including environmental agencies, agriculture, fisheries and agrarian reform, public works, tourism and trade and industry; (ii) social services sector, including social welfare, education, research and science; (iii) defense sector, namely the armed forces and police force; and lastly, (iv) general public services sector, which includes finance, budget, planning, foreign affairs, justice department, and the climate change office.

The list expands beyond the institutions identified in the PIR which focused on agencies tasked to implement or coordinate the major policies identified in the economic sectors driving biodiversity. This expanded analysis confirms the multiplicity of institutions, currently contributing to biodiversity spending, but also those institutions with non-specific biodiversity related mandates, which are potential sources of spending.

3.2.2. Estimating biodiversity spending for personnel

Personnel spending comprise one of three expense categories, together with maintenance and other operating expense (MOOE) and capital outlay. Personnel spending can be significant, i.e., upwards of 50% when considering that part of MOOE is used to pay contractual / project-based employees. BIOFIN instituted a simple survey that gauges how much agencies spend for biodiversity, at least for personnel expenses. The results of the survey provided BIOFIN with these estimates plus an insight into the divergence between the mandated biodiversity

functions of agencies, also gleaned through the institutional analysis described previously, and individual perceptions on biodiversity functions. From November 2014 to May 2015, BIOFIN arranged surveys with 18 agencies, mostly national government agencies, local governments, and one NGO (Table 2). Prior to the survey proper, there would be a presentation on NBSAP to frame the biodiversity angle.

Among the agencies with primary mandates towards biodiversity, the percentage of personnel performing biodiversity functions in a range of 91 to 100% averaged at 38%. These agencies include the Biodiversity Management Bureau, the Palawan Council for Sustainable Development and the Biodiversity Center of the Central Luzon State University. Meanwhile, agencies with biodiversity mandates including the Forest Management Bureau, the Environmental Management Bureau, and the regional and provincial offices of the DENR yielded a range of 35% to 41% of personnel saying that the biodiversity functions they perform take up only 1 to 20% of their time. This discrepancy indicates a huge gap in understanding of mandates, appreciation for the scope/meaning of biodiversity, and a clear opportunity for mainstreaming. Corollarily, such observations do not augur well for biodiversity budgeting and prioritization, in general.

Table 2. Personnel survey results of selected agencies and range of biodiversity-related functions

Agencies	Range of Biodiversity-Related Functions and Weighted Scores					
	0	1 to 20%	21 to 50%	51 to 75%	76 to 90%	91 to 100%
EMB	0.20	0.35	0.15	0.13	0.04	0.13
BMB	0.00	0.27	0.16	0.02	0.21	0.34
FMB	0.08	0.19	0.18	0.27	0.15	0.14
DENR Region 7	0.13	0.38	0.06	0.19	0.19	0.06
PCSD	0.00	0.00	0.15	0.22	0.26	0.37
DENR PENRO 4B	0.00	0.41	0.29	0.06	0.06	0.18
ERDB	0.19	0.12	0.12	0.12	0.35	0.12
PLGU PALAWAN	0.03	0.31	0.20	0.29	0.06	0.11
City of Puerto Princesa	0.11	0.48	0.11	0.11	0.07	0.11
San Vicente	0.04	0.17	0.13	0.17	0.35	0.13
PLGU Cebu	0.17	0.08	0.17	0.25	0.17	0.17
Alcoy	0.11	0.33	0.11	0.33	0.00	0.11
MMDA	0.00	0.41	0.19	0.26	0.11	0.04
Philrice	0.11	0.47	0.05	0.11	0.11	0.16
CLSU	0.13	0.19	0.06	0.06	0.13	0.44
NCIP	0.14	0.41	0.09	0.27	0.09	0.00
CCC	0.00	0.57	0.07	0.07	0.07	0.21
Haribon	0.00	0.47	0.00	0.06	0.29	0.18

3.2.3. Profiling of biodiversity expenditures: trends and projections

Biodiversity spending was estimated for national agencies, local governments and the private sector (civil society and corporate sector). For national agencies, time series data on budget appropriations was generated from the General Appropriations Act to allow comparison across different agencies, establish a time series, and provide sufficient degree of disaggregation (program level) upon which to base biodiversity spending. Meanwhile, biodiversity spending at the local government level was based on data provided by the Protected Area Management Enhancement (PAME) Project of *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)*. A total of 119 projects was analyzed that included existing and new protected areas covering watersheds, forests, marine, rivers, caves, species sanctuaries, etc. All expenses were considered in its totality as biodiversity spending as most of them were contributing to the Aichi targets. Private sector biodiversity spending includes spending by civil society organizations (NGOs) and the corporate sector. Two NGOs and five corporates provided biodiversity spending data; however, the numbers from the private sector were not extrapolated any further.

The level of biodiversity spending for national agencies and local governments is close to PHP 5 billion per year (Table 3). More than 60% of the funding is contributed by DENR and its attached agencies with another 25% comprised by ODA and locally funded projects and loan proceeds. The DA and the BFAR together contribute another 15% to biodiversity spending. Local government spending resulted in an average of PHP 517.8 million for a total of 1,490 municipalities. Local governments comprise 13% of the total while the other sectors contribute another 10%.

Figure 1 shows the disaggregation of biodiversity funding of the DENR (bureaus, agencies, projects and ODA) according to the nine NBSAP thematic sectors with the forestry and coastal sectors accounting for at least 60% of total funding. The funding priorities are more dispersed among the other sectoral agencies with the top sector being coastal and inland wetlands (Figure 2). The Coast Guard, the Department of Tourism and the Department of Science and Technology, mainly through its network of state colleges and universities, contribute the biggest chunk of funding. As for local government spending, all thematic sectors were given equal weights.

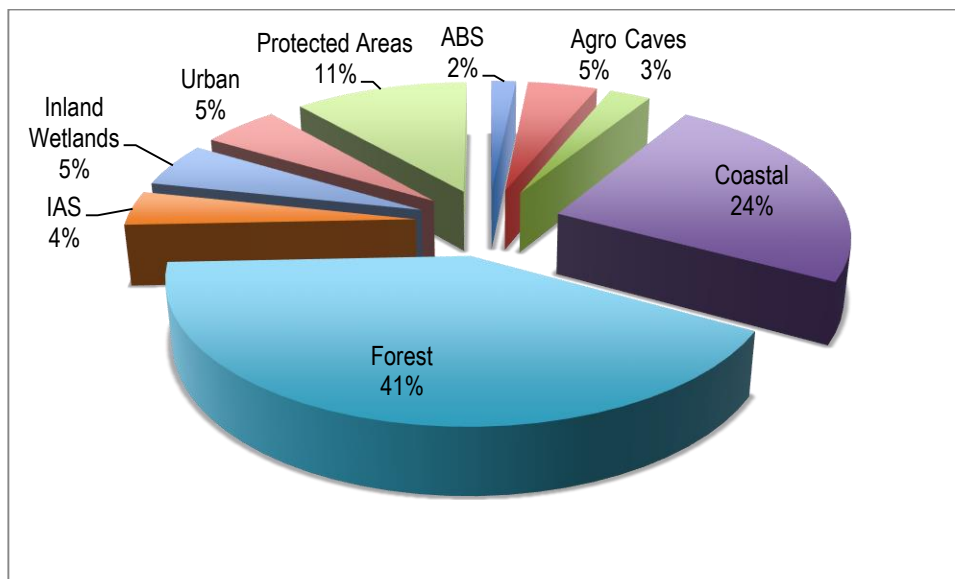


Figure 1. Distribution of biodiversity spending of the DENR according to NBSAP thematic sectors

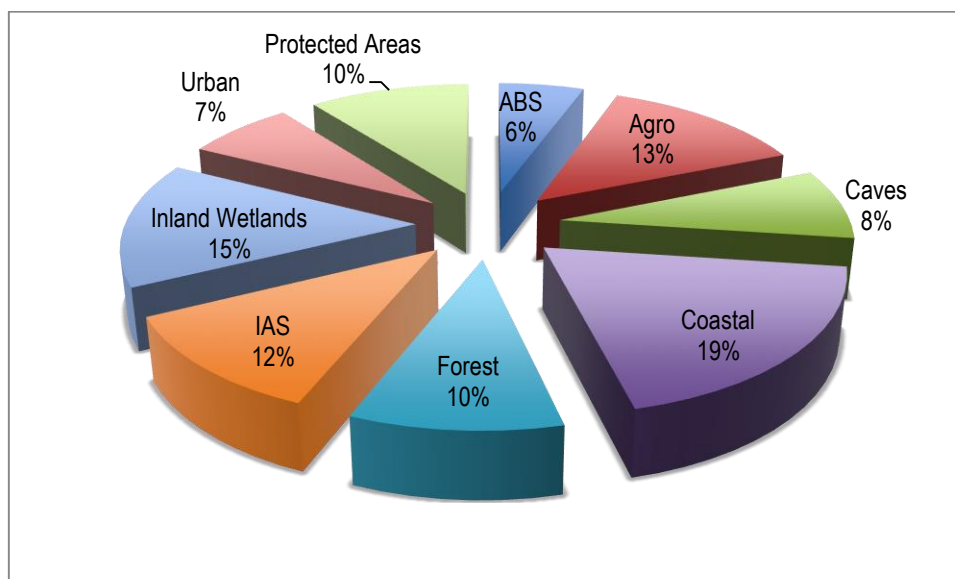


Figure 2. Distribution of biodiversity spending of the social sector, defense, and general services sector

Table 3. Summary biodiversity spending by national agencies and local governments from 2008-2013

National and local biodiversity spending	Average Biodiversity Spending from 2008-2013, in pesos
National government	
Economic Sector	4,042,028,105
DENR and attached agencies	1,943,951,956
DENR ODA	638,319,529

National and local biodiversity spending	Average Biodiversity Spending from 2008-2013, in pesos
DENR Locally funded projects and loan proceeds	615,082,333
DA and BFAR	762,725,508
Others	81,948,778
Social Sector	206,243,114
Defense Sector	34,812,129
General Public Services	76,304,027
International commitments	8,257,500
Local governments	571,813,634
TOTAL	4,939,458,509

GDP, measured at constant prices from 2008-2013, averaged 5.8 trillion pesos per year. Meanwhile the estimated biodiversity spending of all agencies (including ODA) is 0.08% of GDP for this period. The country's national budget stood at 1.6 trillion pesos for the same period: biodiversity spending represents 0.31% of the national budget. For example, biodiversity spending can be compared to the share of the Agriculture, Fishery and Forestry Sector contribution to the GDP, basic sectors which depend on biodiversity. These sectors' contribution to GDP from 2008-2013 is 11% while the fishery sector alone contributes 2.5% to GDP. Thus, income derived from the fishery sector is roughly 31 times the current biodiversity spending.

3.2.4. Expenditure projections

Several expenditure scenarios were developed based on a selected suite of assumptions (Figure 3).

- Scenario 1, Business-as-Usual. In this scenario, the biodiversity agenda is not yet mainstreamed thereby encountering resistance in securing additional budgets. Scenario 1 assumes that the DENR budget, consisting of all its core and non-core biodiversity bureaus, ODA funds, and locally funded projects, is faced with a budget cap or ceiling. Growth in budgets are forthcoming only through inflationary increases to account for mandatories (salaries, utilities, and other fixed costs). This scenario essentially characterizes the current budgeting practice and the challenges associated with arguing for more biodiversity spending. Other government agencies with biodiversity functions are ignored in this scenario as well as LGU budgets. The total budget for Scenario 1 is PHP 3.2 billion at baseline and PHP 58.5 for the full duration of NBSAP.
- Scenario 2, Successful Mainstreaming. Scenario 2 sees a successful mainstreaming of biodiversity; thus, indicating contributions of other national agencies and local governments. No ODA monies are included in this scenario. Total budget is PHP 4.3 billion at baseline.
- Scenario 3, Successful Mainstreaming Extends to Global Community. Under this scenario, mainstreaming is successful up to the global level; thus including ODA

funds. The annual increments up to 2028 are also based on inflation rates as used in Scenario 1. Total budget envelope under Scenario 3 is PHP 4.9 billion.

- d. Scenario 4, Successful Mainstreaming and Increased investments among Core Agencies. This scenario looks at an increase in budgets of the DENR agencies and locally funded projects by an annual average of 10% for the duration of NBSAP implementation. Other sectors are also seen to contribute to implementation of NBSAP albeit no increases are incorporated for these agencies outside of the DENR. Likewise ODA funds are maintained at 2015 levels, i.e., no increase.

A comparison across the four scenarios indicate that Scenario 4 is the superior scenario and will require mainstreaming across the core biodiversity agencies coupled with an increase in budget. The assumed increase at 10% is minimal and is only 6% net after accounting for inflation of 4%. However, the sufficiency of funds will require a comparison with required costs of NBSAP. Estimates of financing gaps are contained in the result of Workbook 2 B.

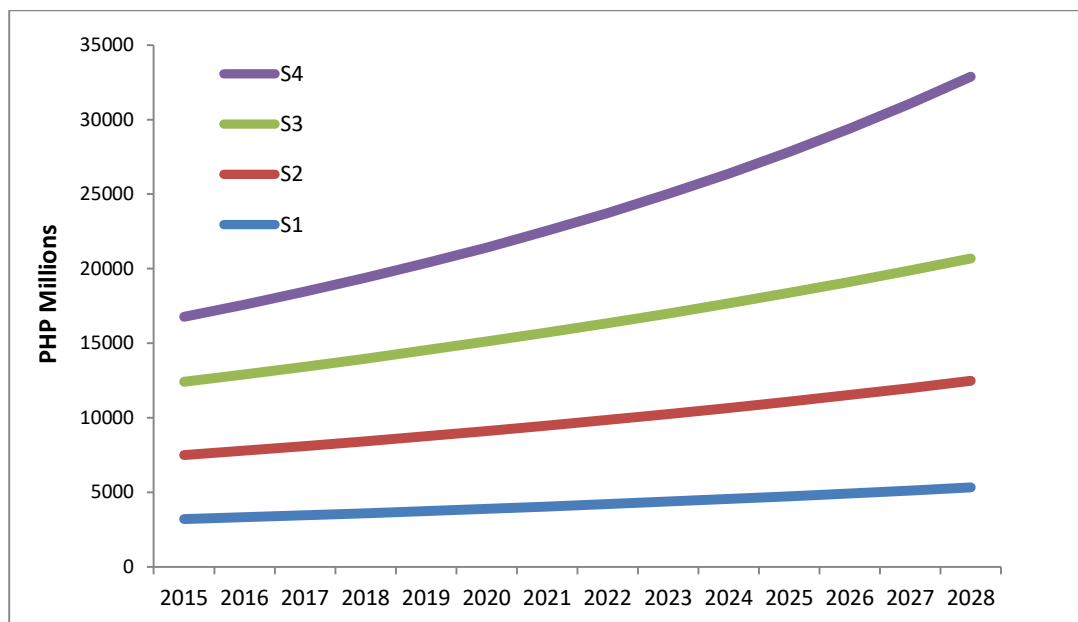


Figure 3. Comparison of budgets under varying scenarios

3.3 Finance Needs Assessment

3.3.1 Estimation of NBSAP Implementation costs

The Philippine Biodiversity Strategy and Action Plan (NBSAP) is the country's roadmap to conserve its biodiversity and critical ecosystem services. It contains information such as direct and enabling actions, targets and indicators, and includes agencies and offices that are responsible for specific actions/activities. As a tool for "transformation", the process, method, and value of the National Biodiversity Strategy and Action Plan (NBSAP), is envisaged to feed into the decision making context, to help make a better business case for conservation policies, financing and investment choices. This current version of the NBSAP is the third iteration. No attempts to cost the previous two versions have been made. The costing process itself, implemented during the final leg of consultations and refinement of NBSAP, served as a "reality check" for the actions and targets.

The total estimated cost for implementing NBSAP from 2015-2028 ranges from USD 7.4 billion (low scenario) to USD 8.6 billion (high scenario) (Table 4). Forty percent (40%) or USD2.9 billion (low) of the total cost was computed to prevent habitat loss and overexploitation, protection of protected areas of both terrestrial and marine ecosystems. It is followed by Forest with a total of USD1.45 billion (low) to address habitat loss and over exploitation. The cost to prevent habitat loss, over exploitation, pollution and climate change in Inland Wetlands was estimated at USD1.4 billion (low) or 19%. Protection strategies account for 41% of the total estimated cost or USD3.4 billion dollars. While USD3.9 billion (46%) is attributed to Restoration strategies. Using the Low Scenario, an average of PHP23.87 billion (USD 530 million) is required to implement NBSAP on a yearly basis from 2015-2028.

Table 4. Implementation costs of NBSAP from 2015-2028

Thematic Area	Low		High		%
	PhP	USD	PhP	USD	
Access and Benefit-Sharing	1,437,360,154	31,941,337	1,822,595,204	40,502,116	0.4%
Agrobiodiversity	11,356,883,888	252,375,198	13,091,891,532	290,930,923	3.4%
Cave and Cave Systems	5,368,174,648	119,292,770	7,626,725,164	169,482,781	1.6%
Coastal and Marine	48,576,116,779	1,079,469,262	56,051,484,392	1,245,588,542	14.5%
Forest	65,356,084,522	1,452,357,434	76,364,772,082	1,696,994,935	19.6%
Inland Wetlands	63,067,716,972	1,401,504,822	73,303,949,949	1,628,976,666	18.9%
Invasive Alien Species	4,202,653,618	93,392,303	4,963,062,630	110,290,281	1.3%
Protected Areas	132,015,846,086	2,933,685,469	151,552,269,403	3,367,828,209	39.5%
Urban Biodiversity	2,795,344,022	62,118,756	3,742,528,502	83,167,300	0.8%
TOTAL	334,176,180,690	7,426,137,349	388,519,278,860	8,633,761,752	100%

3.3.2 Analysis of biodiversity finance gaps

Using the different scenarios, the estimated biodiversity appropriation from government agencies ranges from USD1.3 billion to USD2.5 billion from 2015-2028 (Table 5). Eighty seven per cent (87%) is attributed to DENR and 8% from the DA and BFAR. The remainder is distributed among 34 agencies and LGUs. With a total of USD 7.4 billion cost of implementing NBSAP, the Philippines have a total financing gap ranging from USD4.9 billion to USD6 billion.

Table 5. Summary of estimated biodiversity appropriations per Scenario

Scenario	Estimated Appropriations (USD)			Total
	Short-term	Medium Term	Long-term	
Scenario 1	144,913,952	326,267,757	828,207,084	1,299,388,793
Scenario 2	194,943,745	438,907,763	1,114,135,583	1,747,987,091
Scenario 3	224,731,989	518,564,508	1,401,512,331	2,144,808,829
Scenario 4	226,594,700	553,749,028	1,748,824,223	2,529,167,951

Figure 5 illustrates the trend of financing gap over the 14-year period. On the average, the implementation of NBSAP results to an annual financing gap ranging from USD349 million to USD437 million.

Across thematic areas (depending on the Scenario), the results showed that NBSAP will have a cumulative funding gap ranging from USD3.1 billion to USD3.5 billion from Year 2015 to 2021. During this period, the projected appropriations of the government agencies are only USD561 million to USD944 million versus the USD4 billion estimated cost of activities identified in the NBSAP.

A comparison across the four scenarios indicate that Scenario 4 is the superior scenario and will require mainstreaming across the core and non-core biodiversity agencies, external funding, private sector funding, to result in budgetary increases. The assumed increase at 10% is minimal and is only 6% net after accounting for inflation of 4%. However, the sufficiency of funds will require a comparison with required costs of NBSAP. Estimates of financing gaps are contained in the result of Workbook 2 B.

Looking deeper into the thematic areas, only ABS, IAS, and Urban Biodiversity have financial surpluses from 2015 to 2028⁶. The Protected Area sector garnered the biggest financing gap of about USD 2.7 billion followed by Inland Wetlands at USD 1.3 billion.

⁶ Only Urban Biodiversity have financing surplus using ALL Scenarios. While ABS and IAS have financing surplus using Scenario 2, 3, and 4.

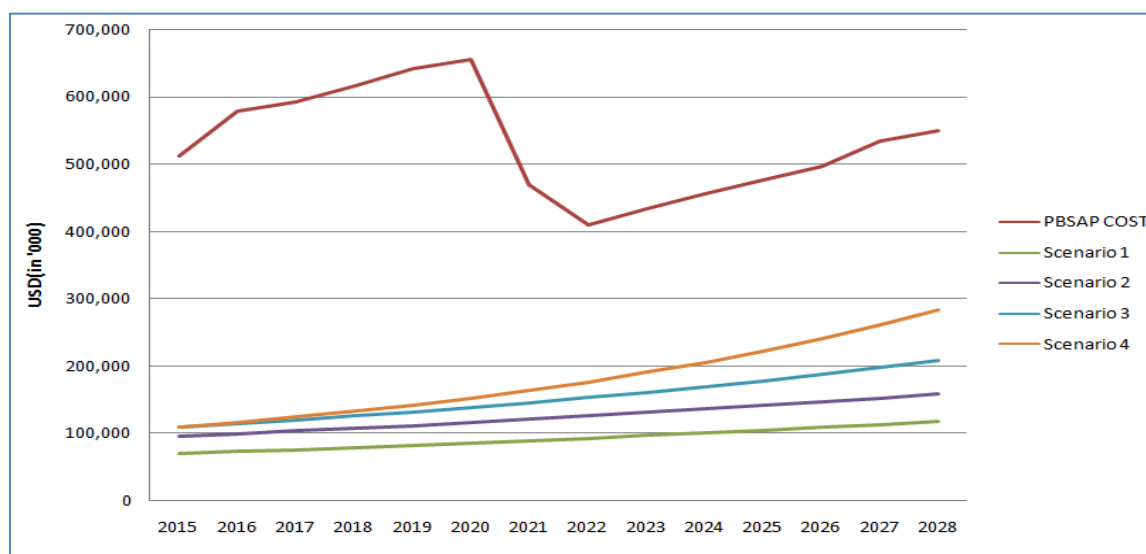


Figure 5. Trend of Biodiversity Financing Gap and Surplus

3.3.3 NBSAP priority programs and medium- term budget requirements

BIOFIN organized two prioritization workshops (June 17, 2016 (ABS and IAS) and July 9-10, 2016 (Forest, Coastal and Marine, Pas, Urban, Agrobiodiversity)) which resulted in a list of prioritized activities per thematic sector. The prioritization criteria was developed by the BIOFIN team consistent with each activity's likely contribution to the overarching goals of NBSAP. In developing a financing plan for NBSAP, activities are packaged into coherent "Programmes" with similar overarching objectives or focus. The inclusion of activities in each program were influenced either by (i) priority rankings resulting from the workshop and /or (ii) the associated cost, with the latter responding more to the BIOFIN objective of closing the financing gap for the NBSAP. Each of the programs feature direct and supporting actions, similar to the NBSAP activity classification. Sources of funds for the activities have been generated likewise from the prioritization workshops and further analysis of BIOFIN.

Table 5. NBSAP Priority programs and summary description

Program Title	Description
Banking on biodiversity: a program on genetic research and wealth generation in protected areas	The program will demonstrate that the wealth arising from biodiversity resources (ecosystems, species, and genetic resources) can in fact be realized in the short term in the form of benefits accruing to communities who earn livelihoods, corporate sector from commercialization of specific goods, and the public sector through permits, patents, and personal and corporate income taxes.
Optimizing potential of protected area for ecotourism	The focus of this program is on ecotourism in protected areas and aiming for on-site revenue generation. Specific features such as caves and wetlands within protected areas shall likewise be included in this program.

Program Title	Description
Biodiversity and water management	The program uses a watershed management approach to ensure that freshwater sustains economic activities such as agriculture and aquaculture and maintains critical ecosystem services such as those provided by peatlands and other wetlands.
Improving resilience, reducing vulnerabilities	This program is NBSAP's response to climate change. It focuses on maintaining healthy habitats to reduce vulnerabilities and spans the coastal, forest, inland sectors plus examines threats posed by invasive alien species.
Celebrating urban biodiversity	This program demonstrates how biodiversity can be integrated into urban settings through mainstreaming into land use plans. Incentives and recognition can be provided through the proposed city biodiversity index.

A total of PHP 75 billion is required for the five priority programs of NBSAP from 2016-2022, representing around 22 % of total NBSAP costs up to 2028 (Table 6). Programs 3 and 5 comprise 82% of total program costs for the period. The main expenditure item from Program 3 is the rehabilitation of wetlands while that of Program 5 comprise the restoration of forestlands.

Table 6 also summarizes three major sources of funds for NBSAP implementation : public sector, ODA, and the private sector. These sources of funds have emerged from the participants' inputs during the prioritization workshops and from the PIR and PPBER outputs. Thus, each major action can be assigned to any of the three funding sources or a combination thereof. Public sector covers both national agencies and local governments. At the national level, the PPBER identifies core and non-core biodiversity agencies which are current funders and/or potential funders of NBSAP. The academe, particularly state funded colleges and universities, are considered as components of public sector funding.

As to the distribution of costs across public, ODA, and private sector, the ratio used for projects that can be funded only by the public sector and ODA is 60:40. The larger share of nationally generated funding is explained by the fact that biodiversity is a public good and that a number of biodiversity resources, such as genetic resources, species, and ecosystems benefit, and should benefit, first and foremost the citizens of each country. From a global perspective, such resources may also be considered as global public goods due to its potential for research such as the development of genetic material and ecosystem connectivities. For projects that can be funded also by the private sector either through grants, donations, or investments, the percentage assignment is 20%. Where the incidence of cost can be shared between national and local government, the ratio is 50:50.

Table 6. Priority actions of the NBSAP in the medium term and sources / estimated funding requirements, in pesos

Development of NBSAP Priority Programs	NBSAP Costs, Total	NBSAP Costs , 2016-2022	Public	Donor	Private	Public / National	Public / Local
Program 1 : Banking on biodiversity: a program on genetic research and wealth generation in protected areas							
ABS							
Characterize biological and genetic resources (ABS)	1,078,836,172	486,101,056	291,660,633	194,440,422		291,660,633	
Improvement and maintenance of existing Genebanks (ABS)	187,861,084	109,730,681	65,838,409	43,892,273		65,838,409	
Agrobiodiversity							
Increase the number of in situ and ex situ sites that conserve and propagate diverse indigenous species and varieties (P)	8,435,838,001	3,393,097,288	1,357,238,915	1,357,238,915	678,619,458	678,619,458	678,619,458
Increase the number of communities practicing heritage agriculture that adopt dynamic and gender-sensitive conservation programs which sustain important traditional varieties (E)	2,395,231,433	1,044,461,669	417,784,667	417,784,667	208,892,334	208,892,334	208,892,334
Incorporate agrobiodiversity concerns in enhanced CLUPs and other LGU programs (BM)	462,222,603	201,625,877	120,975,526	80,650,351		60,487,763	60,487,763
Terrestrial							
Facilitate the provision of biodiversity friendly livelihood to the locals	5,010,697,476	2,185,713,691	874,285,477	874,285,477	437,142,738	437,142,738	437,142,738
Supporting Actions							
ABS							
Build capacity of key agencies for ABS implementation (ABS)	126,875,464	56,867,159	22,746,864	22,746,864		22,746,864	
Agrobiodiversity							
Formulate and implement agricultural policies to support agrobiodiversity and biodiversity-friendly mainstream agriculture	63,591,850	27,478,551	10,991,420	10,991,420		10,991,420	
Terrestrial							

Financing Plan for the NBSAP
The Biodiversity Finance Initiative

Development of NBSAP Priority Programs	NBSAP Costs, Total	NBSAP Costs , 2016-2022	Public	Donor	Private	Public / National	Public / Local
Strengthen capacity for conservation research and expertise	181,112,056	79,002,794	31,601,118	31,601,118		31,601,118	
TOTAL , Program 1	17,942,266,140	7,584,078,767	3,193,123,029	3,033,631,507	1,324,654,530	1,807,980,737	1,385,142,293
Program 2 : Optimizing potential of protected area for ecotourism							
Caves							
Develop selected caves as sustainably managed, gender-sensitive ecotourism destinations/attractions (R)	2,628,766,395	1,124,815,303	449,926,121	449,926,121	224,963,061	224,963,061	224,963,061
Conduct cave survey, assessment, and classification providing equal opportunities for both women and men to participate (E)	705,970,485	627,962,114	376,777,268	251,184,846		376,777,268	
Protected area							
Facilitate the provision of biodiversity friendly livelihood to the locals							
Supporting/ Enabling Actions							
Caves							
Enhance basic and applied research on caves (E)	847,508,625	369,691,295	221,814,777	147,876,518		221,814,777	
Improve human capacity and capability in the assessment, management and monitoring of caves	62,968,143	27,206,484	16,323,891	10,882,594		16,323,891	
Protected area							
Improve capacities of local stakeholders including IPs, women and youth and communities to control and limit overexploitation and destructive practices on agriculture and forestry resources	797,171,024	695,467,100	278,186,840	278,186,840	139,093,420	139,093,420	139,093,420
TOTAL , Program 2	5,042,384,672	2,845,142,297	1,343,028,897	1,138,056,919	364,056,481	978,972,417	364,056,481
Program 3 : Biodiversity and Water Resource Management							

Financing Plan for the NBSAP
The Biodiversity Finance Initiative

Development of NBSAP Priority Programs	NBSAP Costs, Total	NBSAP Costs , 2016-2022	Public	Donor	Private	Public / National	Public / Local
Inland Wetlands							
Rehabilitate priority inland wetlands including peatlands (R)	50,156,854,196	27,952,091,129	11,180,836,451	11,180,836,451	5,590,418,226	5,590,418,226	5,590,418,226
Establish baseline data and conduct bio-physical and socio-cultural including gender assessment and monitoring of freshwater wetlands using the ridge to reef framework (E)	5,037,647,470	2,194,712,787	1,316,827,672	877,885,115		1,316,827,672	
Implement sustainable aquaculture practices in inland wetlands (SU)	3,144,121,846	1,255,771,790	502,308,716	502,308,716	251,154,358	251,154,358	251,154,358
Adopt appropriate watershed protection and plantation management by mainstreaming native species in reforestation projects especially in priority wetlands such as Agusan Marsh and Candaba Marsh	582,661,864	347,489,351	138,995,740	138,995,740	69,497,870	69,497,870	69,497,870
Forest							
Undertake research studies that will support current conservation efforts	783,945,280	341,964,355	205,178,613	136,785,742		205,178,613	
TOTAL, Program 3	59,705,230,655	32,092,029,411	13,344,147,193	12,836,811,764	5,911,070,454	7,433,076,739	5,911,070,454
Program 4: Celebrating urban biodiversity							
Establish models of urban biodiversity conservation and enhancement as part of overall local environmental governance (BM)	2,631,431,490	1,147,855,336	459,142,134	459,142,134	229,571,067	229,571,067	229,571,067
Establish a City Biodiversity Index adapted to Philippine conditions (based on agreed upon international framework e.g. Singapore City Biodiv index) to guide LGU actions	163,912,531	71,500,199	28,600,079	28,600,079	14,300,040	14,300,040	14,300,040
TOTAL , Program 4	2,795,344,022	1,219,355,535	487,742,214	487,742,214	243,871,107	243,871,107	243,871,107
Program 5 : Improving resilience, reducing vulnerabilities							
IAS							

Financing Plan for the NBSAP
The Biodiversity Finance Initiative

Development of NBSAP Priority Programs	NBSAP Costs, Total	NBSAP Costs , 2016-2022	Public	Donor	Private	Public / National	Public / Local
Reduce the impacts of widespread IAS by containing and reducing the spread of invasive populations and minimizing their harmful effects (SU)	1,908,348,273	832,439,589	499,463,753	332,975,836		249,731,877	249,731,877
Rehabilitate areas (in particular areas of high biodiversity value) where IAS have been contained or eradicated (R)	1,239,166,659	565,462,487	226,184,995	226,184,995	113,092,497	113,092,497	113,092,497
Identify, report, and promptly respond to newly introduced IAS by eradicating or containing them before they become widespread (SU)	773,695,195	337,493,171	337,493,171			168,746,586	168,746,586
Coastal							
Assess vulnerability and climate risk of coastal areas to storm surge, flooding, coastal erosion and sea level rise increase in SST and ocean acidification due to climate change	667,521,661	521,416,306	312,849,784	208,566,522		156,424,892	156,424,892
Integrate effects of climate change impacts in plans and programs for biodiversity conservation and sustainable use of coastal and marine resources	407,108,185	304,737,861	182,842,716	121,895,144		91,421,358	91,421,358
Restore habitats using ecologically based, appropriate site specific technology	240,314,085	158,350,726	95,010,436	63,340,290		47,505,218	47,505,218
Forest							
Restore degraded habitats, where technically appropriate	57,501,911,324	26,314,652,719	15,788,791,632	10,525,861,088		7,894,395,816	7,894,395,816
Mainstream biodiversity conservation into national and local planning processes	2,709,503,347	1,181,911,019	472,764,408	472,764,408	236,382,204	236,382,204	236,382,204
Adopt existing and develop new technologies to reduce utilization of existing resources	161,895,006	55,872,209	22,348,884	22,348,884	11,174,442	11,174,442	11,174,442
Inland Wetlands							

Financing Plan for the NBSAP
The Biodiversity Finance Initiative

Development of NBSAP Priority Programs	NBSAP Costs, Total	NBSAP Costs , 2016-2022	Public	Donor	Private	Public / National	Public / Local
Conduct a study to identify vulnerable species for climate change effects on inland wetlands	10,250,000	5,250,000	3,150,000	2,100,000		3,150,000	
Conduct research and development studies on specific climate change mitigation functions of inland wetlands prioritizing Ramsar sites	12,000,000	-	-	-			
Adopt green technology to promote sanitation in inland wetlands	840,223,290	358,879,437	143,551,775	143,551,775	71,775,887	71775887	71775887
TOTAL , Program 5	66,471,937,025	30,636,465,525	18,084,451,553	12,119,588,942	432,425,031	9,043,800,777	9,040,650,777
TOTAL, ALL NBSAP Priority Programs	151,957,162,514	74,377,071,534	36,452,492,886	29,615,831,345	8,276,077,602	19,507,701,776	16,944,791,111

IV. Financing solutions towards implementation of NBSAP

Gleaning from the results of the BIOFIN methodology, the financing solutions required to achieve the biodiversity goals are varied, non-exclusive, and more importantly, not emphasizing a one-track solution on creating new sources of revenues. With the latter, BIOFIN recognizes that some modifications in existing policy frameworks and expenditure patterns can achieve a more significant, and more lasting solution than merely focusing on creating new revenues. These financial results are as follows:

1. Generate revenues, i.e. any existing or innovative mechanism or instrument (e.g. impact investment vehicles, environmental taxes, etc.) that can generate and/or leverage financial resources allocable to biodiversity;
2. Realign current expenditures, i.e. any measure that can re-orient existing financial flows towards biodiversity (e.g. by eliminating energy subsidies and using these freed resources to build renewable energy infrastructures instead);
3. Avoid the need for future biodiversity expenditures, thus freeing up future resources for investment in other areas, i.e. any measure that can prevent or reduce future investment needs by eliminating/amending existing counter-productive policies and expenditures (e.g. a tax on the use of renewable resources such water or fines for stopping alien invasive species from entering countries).
4. Deliver financial resources more effectively/efficiently, i.e. any measure or instrument that can enhance cost-effectiveness/efficiency, synergies and/or favour a more equitable distribution of resources (e.g. biodiversity business challenge funds, national conservation funds, etc.).

What follows is a pre-feasibility assessment of financing options and further discussion on how BIOFIN Component 4 shall implement these options. The financing catalogue prepared by UNDP (Catalogue of Financial Solutions) provides a menu of options. In addition, the results of the PIR, PPBER and FNA have also resulted to crucial financing solutions discussed here.

4.1 Pre-feasibility assessment of financing options

BIOFIN developed a pre-feasibility criteria for screening prospective financing solutions. These criteria were tested at two regional workshops: the Latin America Workshop in January 2016 and the Eurasia Pacific Workshop in March 2016. A total of 19 parameters were in the original list; however in the foregoing pre-feasibility, two parameters were excluded: first is the parameter that defined the existence of the financing solution and second is the consolidation of two seemingly similar parameters that pertain to political will and political risks. Acknowledgement of a pre-feasibility stage implies that specific financing options may still require further feasibility as guidance for future BIOFIN action.

A listing of parameters for evaluation is as follows:

1. Will the solution generate, leverage, save, or realign a large volume of resources?

2. Will the financing sources be stable and predictable?
3. Do the persons or entities paying have a willingness and ability to pay?
4. Are there significant financial risks? E.g. exchange rate, lack of investors, etc.
5. Are start up costs onerous?
6. Will successful implementation or expansion of the solution contribute to GDP, Jobs, Poverty Reduction?
7. Does the solution address market failures?
8. Will the financing allocations remain targeted towards biodiversity over time?
9. Are there risks to biodiversity created by the solution? If yes, how challenging would it be to create adequate safeguards?
10. Will there be a positive social impact?
11. Is there significant risk of unintended negative social consequences?
12. Will the solution be viewed as equitable and will there be fair access to the solution?
13. Are there any major political risks to consider?
14. Is there strong buy-in from key actors and stakeholders?
15. Do the managing actors have sufficient capacity to lead the process? Or can they rapidly acquire it?
16. Is the solution legally feasible? How challenging will the legal requirements be?
17. Is the solution coherent with existing mechanisms and institutional architecture, can synergies be achieved?

Instead of using a range of scores from 1 to 5, this method used three rankings only, i.e., High (H), Medium (M) and Low (L), and counted the number of “High” ranks. In all cases, the “H” rank was applied to reflect a desirable outcome; thus, when a question is framed in the negative, the response merits an “H” when the actual result is also negative. For example, the question on “are start-up costs onerous” will have an “H” rating if the start costs are not onerous.

18 financing solutions has been analysed at the pre-feasibility stage with summary results presented in Table 7 below. Annex 1 contains the full scoring sheet for all financing solutions considered.

Table 7. Summary scores of financing solutions

Financing Solutions	Number of High Ratings
1) Earmarked Funds Related to Environment / Climate Change	13
2) Earmarked Funds Unrelated to Environment	11
3) User Fees	12
4) Fines and Penalties	5
5) Bioprospecting	7
6) Mining Royalties	4
7) Commemorative License Plates	6
8) CSR	7
9) Lottery Winnings	5
10) Official Development Assistance	10

Financing Solutions	Number of High Ratings
11) Debt for Nature Swaps	10
12) Ecological Fiscal Transfers	4
13) Crowdfunding	4
14) Green tax	7
15) Bonds	7
16) Incentives for public budget execution	10
17) Conservation Incentives	7
18) Certification	9
19) Sovereign Wealth Funds	7

Solutions #1 and #2, Earmarked Funds, have been identified and analysed in the PIR as possible sources of realignment or new funding. With respect to the latter, a particular interest is better access to these funds by local governments.

Two funds have been identified as those pertaining to environment : Energy Regulation 1-94 and the Malampaya Fund whereas the Motor Vehicle Users Charge has been identified as an earmarked fund with no specific provision for biodiversity or environment, for that matter. Added to the list of earmarked funds is the People's Survival Fund, which was created to assist local governments to invest in climate adaptation strategies. Both types of earmarked funds resulted in a High Rating based on the criteria applied. Earmarked funds for the environment and climate change resulted in a superior feasibility compared to earmarked funds not directly linked to biodiversity because of two factors: (1) financing towards biodiversity may not be stable and (2) realignment from some social programs may result to negative backlash from affected sectors.

Solution #10, **Official Development Assistance (ODA)**, resulted in 10 High Ratings. Tapping ODA is justified given the global benefits arising from sustainable management of biodiversity resources. The Philippines has excellent project implementation skills with respect to projects funded through ODA and has demonstrated successes. A high volume of resources can be generated through ODA and the primary objective of biodiversity can be ensured and/or coupled with relevant programs such as climate adaptation. Virtually all ratings of Solution # 11, **Debt for Nature Swaps**, mirrors those of ODA. The sources of funding are both foreign with the difference being that the Finance department takes on a lead role in the debt swap as opposed to traditional ODAs, which are developed by the institution seeking the grant or technical assistance.

Solution #16, **Incentives for Public Budget Execution**, garnered 10 High Ratings. The solution refers to actions that incentivize spending of committed funds for the purposes for which appropriated. Effective budget execution is a percentage of annual public budget allocations that can vary from as low as 40% as high as 90%. From the Expenditure Review study, there was a significant divergence between execution and allocation rates of the Bureau of Fisheries and Aquatic Resources (BFAR). BFAR was not able to move Php 442 million of its capital outlay under the National Fisheries Program (NFP) in 2011 for land improvement, office buildings and other

structures such as tissue culture lab, seaweed nurseries, and sea cages. In 2012, another PHP 100 million was the unobligated amount again arising from MOOE and CO allotments under the NFP. Accomplishment records for 2012 indicate a performance level of 24%, for seaweed seedling dispersal; 33% for market research activities; 31% for postharvest equipment and facilities for groups. In 2013, the unobligated amounts are estimated at 30%. Such disparities indicate poor implementation capacity, poor planning, and significant space for budget realignments.

Providing incentives (bonuses) to government agencies, which register spending from 90% and upwards of total allocation, have resulted in higher spending rates, generally; thus, improving service delivery. From Manasan (2012), the suite of government incentives related to budget execution, performance based management, and incentives are reinstated from the PER in Box 1.

Box 1. Excerpts from the BIOFIN Philippines Expenditure Review

"First, Administrative Order No. 25 ("Creating an Inter-Agency Task Force on the Harmonization of National Government Performance Monitoring, Information and Reporting Systems") aims to streamline and simplify all existing monitoring and reporting requirements and processes into a single Results-Based Performance Management System (RBPMS).

Second, the Department of Budget and Management (DBM) will deepen the implementation of the Organizational Performance Indicator Framework (OPIF) by requiring all departments and agencies to review and recast, if necessary, their major final outputs (MFOs) and performance targets, so as to better link them with the strategic objectives of the Social Contract.

Third, government has also adopted a performance-based incentive system that aims to reward the good performance of public servants, thereby giving them more impetus to pursue excellence in their respective jobs.

Fourth, the General Appropriations Act (GAA) will serve as the budget release document starting with the implementation of the 2013 budget. This move is aimed at minimizing delays in project implementation due to bottlenecks in the processing of requests for the release of allotments. In line with this, government agencies have been advised to conduct pre-procurement activities in the fourth quarter of 2012, in anticipation of Congress' approval of this proposed Budget so that contracts can then be awarded on the first working day of the following fiscal year.

Fifth, all appropriations will have a validity of one year starting in 2013. This measure is meant to improve the predictability of the budget execution process as the system moves away from a policy that allows the carry-over of appropriations for maintenance expenditures and capital outlays to the following fiscal year.

Sixth, the administration introduced the bottom-up budgeting approach (BUB) in order to provide the grassroots with a voice in the allocation of public funds. Under the BUB, the 609 poorest municipalities were asked to develop Local Poverty Reduction Action Plans with local communities and civil society organizations in their jurisdictions. These plans were then submitted to the national budget for inclusion in the 2013 budget. A total of 593 of these municipalities submitted plans for community determined, anti-poverty interventions (such as agriculture and fisheries support, potable water supply, public healthcare, and basic education) worth a total of P8.37 billion"

Solution #3 on User Fees, resulted in 13 High Ratings. User fees contemplated in this solution refer to user fees applied in Protected Areas under the National Integrated Protected Area System (NIPAS), which is under the jurisdiction of the Department of Environment. Rationalizing said user fees in protected areas based on willingness to pay studies and resource rent studies have been studied thoroughly and require no further justification (Padilla, Rosales et al, 2000). Similarly, business plans for 18 protected areas have also been developed (DENR and REECS 2014). These business plans have identified sources of revenues, including user fees, from touristic activities in protected areas. Thus, full implementation of **Solution #3** is likely to contribute to financial sustainability in protected areas.

User fees can also be implemented by local governments as they are mandated to enact local policies and impose local taxes and fees such as user fees for natural resources use; however, political, financial, and social circumstances vary across each local government which makes for estimation and implementation of user fee systems based on a minimum semblance of resource values difficult especially for a project such as BIOFIN without reach at the local level.

Solution # 18, Certification garnered 9 High Ratings. Using the template of a “green product” or “green service”, certification schemes generate a price margin signifying a willingness to pay for sustainably managed commodities. For example, consumers are willing to pay the margins for organic products or sustainably caught fish. Certification schemes are also viewed as contributing towards correction of market failures especially if the incremental price reflect the “real cost” of harvesting or producing the commodity and when sufficient profits are plowed back into the business, creates demand for more labor.

Solutions with intermediate ranks include those with “high” ratings numbering from 5 to 8, including **Bioprospecting, Commemorative license plates, Lottery winnings, green tax, bonds, sovereign wealth funds, conservation incentives, and Corporate Social Responsibility (CSR) spending**. **Commemorative license plates, Solution #7**, can be a potential source of funds for biodiversity. Vanity plates are valued at PHP 25,000 per plate or USD 555. Assuming that 1% of private motor vehicle owners opt to apply for vanity plates, this would raise at least PHP 1.6 Billion pesos per year. However, the low ratings are attributable to unstable financing allocations as the amounts generated would depend on the demand for vanity license plates and unknown agreement of those allocating the expenditures towards biodiversity. Similar to this is **Solution # 9, Lottery Winnings**, which result in a fairly similar rating except that the prospective earnings from lottery is lower and that there is a perceived resistance in terms of realigning traditional uses, ie., mainly social services especially health, to biodiversity. CSR spending garnered “High” ratings in terms of having a positive social impact and minimal risk in terms of unintended negative social consequences. No political risks are evident with respect to private sector funds and there is usually strong buy-in prior to any investments. However, CSR funds garnered “Medium” ratings in terms of amounts of funds that can be leveraged as this seems to be a “case to case” situation and cannot be easily generalized.

Nevertheless there is interest amongst the private sector BIOFIN has worked with in directly contributing to the NBSAP actions.

Conservation Finance Incentives can be coupled with CSR funding to achieve better synergies. Conservation finance incentives are direct or indirect incentive that is offered to business for advancing conservation outcomes, e.g. utilising less natural capital such as land or water or contributing to particular actions of the NBSAP. There is great potential to leverage NBSAP funding through such incentive schemes but further feasibility is required especially on whether there are legal requirements towards the granting of incentives, amount and/or form of incentives, and more importantly, monitoring of compliance to agreements.

Green taxes, green bonds, and sovereign wealth funds may provide a stable and significant source of financing. In the case of green taxes, the Philippines is relatively unprepared to implement such progressive taxation. The Bureau of Internal Revenue Commissioner Kim Henares admitted the challenges in the administration and design of environment taxes include the absence of region-wide regulatory institutions and systems that manage as well as monitor ecological impact; constrained sources of financing; different economic and governance structures; diverse mix of resources; limited access to skilled labor and technology; poor infrastructure, uncertain policies and laws concerning land and its taxation. Issuance of bonds for biodiversity is one of the agenda items for discussion with the Department of Finance. This bond may be a composite of corporations that are certified as sustainably managed or contributing to the NBSAP goals.

Solutions with the lowest number of “High” ratings, i.e., a score of 4 High ratings and less include **Fines and Penalties, Mining Royalties, Crowd funding, Ecological Fiscal transfers, and lottery winnings**. Solution #4 on **Fines and Penalties** resulted to 2 High Ratings and 5 Low Ratings when evaluated as a solution towards generating revenues. Among the parameters that garnered “high” ratings are the legal and institutional framework that defines the actions that may be penalized and the corresponding amounts. As a source of revenue for biodiversity, relying on fines and penalties may, in fact, be counterproductive, especially in situations where the penalties are lower than the prospective profits from engaging in illegal activities. Such has been the case, for example, in commercial fishing or poaching in municipal waters. Prior to the amendment of the Fisheries Code, commercial vessels are fined PHP 10,000 (at USD 45:1, this is equivalent to USD 222) per violation which includes fishing in municipal waters, i.e., within 15 km from shoreline. Assuming that a boat catches at least 1 ton of fish at P 40 per kilo, the catch is valued at PHP 400,000, which results to a wide divergence between the penalty and the reward. Another issue related to this solution is the requirement to undergo the full judicial process which is a lengthy procedure. As a source of financing, fines and penalties are also viewed as relatively unstable with attendant deleterious impacts on biodiversity. Crowdfunding generated a low rating in terms of financial resources leveraged mainly because the mechanisms target disposable incomes. Likewise, the stability of financing and willingness to pay is not secure.

Ecological fiscal transfers, Solution # 12 redistribute tax revenues among government levels, from national and regional governments to local jurisdictions according to agreed principles and priorities. Integrating ecological services means developing conservation indices (e.g. size/quality of protected areas) part of the fiscal allocation formula to reward investments in conservation and to incentivize the expansion of protected areas. **A Sovereign wealth fund** is a state-owned investment fund that is established from balance of payments surpluses, foreign currency operations and other transfers. These funds usually invest in regulated capital and equity market to achieve a market return. Their investment policies and criteria can be oriented towards green finance.

4.2. Increased funding for the local government sector

4.2.1 Increasing access to earmarked funds: Energy Regulation (ER) 1-94, Malampaya Fund, and the People's Survival Fund

The PIR has identified **ER1-94** as a fund which can be tapped for by local government units for (i) environmental enhancement projects; (ii) reforestation and watershed management projects; and (iii) health related projects. ER 1-94, as amended, requires the generation company and/or energy resource developer to set aside **one centavo per kilowatt hour (P0.01/kWh) of the total electricity sales as financial benefits to host communities**. The P0.01/kWh is monitored through trust accounts established specific for EF (Electrification Fund), DLF (Development and Livelihood Fund) and RWMHEEF (Reforestation, Watershed Management, Health and/or Environmental Enhancement Fund) in the name of DOE and the generation company.

Current funding available from ER 1-94 trust funds amount to more than PHP 1.2 billion (Table 7). Data secured from the Department of Energy indicate a very low take-up, i.e., Php 30 million as of 2013 and 2014 representing 4% of the total amount available. Upon closer examination of the projects crafted under this funding facility, there are no reforestation activities (possibly because of the NGP) – they are mostly water management and sewerage systems.

The **Malampaya Fund** is another earmarked fund which shall undergo a deeper feasibility analysis, especially with respect to the legal aspect. According to the Bureau of Treasury (BTr), the total amount deposited by the Department of Energy (DOE) in the Malampaya Fund from March 25, 2002, to September 30, 2013, amounted to P179.338 billion while total Special Allotment Release Order (SARO) releases against the Malampaya Fund during the same period reached P42.050 billion, leaving a balance of P137.288 billion, which is available in the National Treasury.

As funds under SAGF 151, the Malampaya Fund is used to finance energy-related programs of the Department of Energy (DOE) and/or pay off National Government obligations provided for in the General Appropriations Act (GAA). Further, E.O. 848 issued on October 13, 2009, Authorizing the Use of the Special Account in the General Fund (Fund 151) of the Department of Energy for Purposes as may be directed by the President of the Philippines.

From 2004 to 2009, the Malampaya account funded P303 million of energy-related projects, as opposed to P23.3 billion of non-energy related projects. Under the Aquino administration, the Malampaya fund backed P18.45 billion worth of energy-related projects and did not fund any projects unrelated to energy. Similar to other Special Accounts under the General Fund, the use of Malampaya Fund is automatically appropriated every year, and all releases are governed by SAGF procedures.

Due to an adverse Supreme Court ruling on the use of the Malampaya Fund for non-energy related projects and projects certified by the President, BIOFIN will assess the legal impediments towards utilizing the fund for biodiversity-related work, especially so that there could be links between energy generation (for example, watershed and hydropower) and ecosystem services from biodiversity. **The amount available from the Malampaya Fund that remains untapped is so huge that even a 1% utilization rate applied to the 2013 balance of PHP 137 billion yields at least PHP 1.3 billion a year.**

Lastly, the **People's Survival Fund (PSF)** is a fund set up by government amounting to PHP 100 billion. The fund has been set up to assist local governments in climate adaptation and mitigation works. The take up has been close to zero to date.

Table 8 below shows a number of priority actions of NBSAP which can tap into both the DLF and the RWMHEEF of ER 1-94. The total amount that can qualify for ER 1-94 funding amounts to PHP 10 billion for the midterm period and PHP 1.7 billion per year. Likewise the programs that can utilize the PSF are indicated. Due to the broad coverage of climate adaptation, these programs identified from NBSAP are broad, too, i.e., ranging from ABS, maintenance and propagation of indigenous farm and forest species, livelihoods, vulnerability assessments, and restoration of habitat. A total of PHP 6.5 billion per year may qualify for PSF funding with the bulk of this amount required by restoration of inland wetlands (and peatlands).

BIOFIN will target an increase in utilization of the DLF and RWMHEEF funds from the current 4% to about 15% or roughly **PHP 201 Million Pesos to finance community based forestry/reforestation, conservation, mangrove reforestation, and protected area livelihood support.** BIOFIN will work with the BMB, ongoing projects of the BMB/DENR with site-based operations, and NGOs, through the provision of technical assistance in preparing cost proposals, screening, and advocacy with the Department of Energy. From the PSF, **BIOFIN will target 1% of the fund, i.e., PHP 1 billion pesos per year.** Pending further legal analysis, it is not possible to identify prospective usage of the Malampaya Fund.

Table 7. Available funding from ER 1-94 for the Development and Livelihood Fund and Reforestation and Water Resources fund

	DLF	RWMHEEF
Luzon	449,595,295.57	438,628,340.66
Visayas	102,238,183.63	104,660,451.91
Mindanao	122,415,746.52	123,111,653.12
Total	674,249,225.72	666,400,445.69

Table 8. NBSAP priority programs and budgets and prospective utilization under ER 1-94 and PSF

NBSAP Programs	ER 1 -94	PSF
Program 1 : Banking on biodiversity: a program on genetic research and wealth generation in protected areas		
Characterize biological and genetic resources (ABS)		
Improvement and maintenance of existing Genebanks (ABS)		
Increase the number of in situ and ex situ sites that conserve and propagate diverse indigenous species and varieties (P)		
Increase the number of communities practicing heritage agriculture that adopt dynamic and gender-sensitive conservation programs which sustain important traditional varieties (E)		
Incorporate agrobiodiversity concerns in enhanced CLUPs and other LGU programs (BM)		
Facilitate the provision of biodiversity friendly livelihood to the locals		
Build capacity of key agencies for ABS implementation (ABS)		
Formulate and implement agricultural policies to support agrobiodiversity and biodiversity-friendly mainstream agriculture		
Strengthen capacity for conservation research and expertise		
Program 2 : Optimizing potential of protected area for ecotourism		
Develop selected caves as sustainably managed, gender-sensitive ecotourism destinations/attractions (R)		
Conduct cave survey, assessment, and classification providing equal opportunities for both women and men to participate (E)		
Facilitate the provision of biodiversity friendly livelihood to the locals		
Enhance basic and applied research on caves (E)		
Improve human capacity and capability in the assessment, management and monitoring of caves		
Improve capacities of local stakeholders including IPs, women and youth and communities to control and limit overexploitation and destructive practices on agriculture and forestry resources		
Program 3 : Biodiversity and Water Resource Management		

Rehabilitate priority inland wetlands including peatlands (R)		
Establish baseline data and conduct bio-physical and socio-cultural including gender assessment and monitoring of freshwater wetlands using the ridge to reef framework (E)		
Implement sustainable aquaculture practices in inland wetlands (SU)		
Adopt appropriate watershed protection and plantation management by mainstreaming native species in reforestation projects especially in priority wetlands such as Agusan Marsh and Candaba Marsh		
Undertake research studies that will support current conservation efforts		
Program 4: Celebrating urban biodiversity		
Establish models of urban biodiversity conservation and enhancement as part of overall local environmental governance (BM)		
Establish a City Biodiversity Index adapted to Philippine conditions (based on agreed upon international framework e.g. Singapore City Biodiv index) to guide LGU actions		
Program 5 : Improving resilience, reducing vulnerabilities		
Reduce the impacts of widespread IAS by containing and reducing the spread of invasive populations and minimizing their harmful effects (SU)		
Rehabilitate areas (in particular areas of high biodiversity value) where IAS have been contained or eradicated (R)		
Identify, report, and promptly respond to newly introduced IAS by eradicating or containing them before they become widespread (SU)		
Assess vulnerability and climate risk of coastal areas to storm surge, flooding, coastal erosion and sea level rise increase in SST and ocean acidification due to climate change		
Integrate effects of climate change impacts in plans and programs for biodiversity conservation and sustainable use of coastal and marine resources		
Restore habitats using ecologically based, appropriate site specific technology		
Restore degraded habitats, where technically appropriate		
Mainstream biodiversity conservation into national and local planning processes		

Adopt existing and develop new technologies to reduce utilization of existing resources		
Conduct a study to identify vulnerable species for climate change effects on inland wetlands		
Conduct research and development studies on specific climate change mitigation functions of inland wetlands prioritizing Ramsar sites		
Adopt green technology to promote sanitation in inland wetlands		
Amount targetted for medium term planning period	Php 200 million	PHP 1 billion

4.2.2. BIOFIN work program

To realize the targeted amounts within the medium term planning period, BIOFIN shall implement the following actions for the remainder of the project, ie., through end of 2017.

- 1) Conduct further legal feasibility analysis towards use of Malampaya Fund
- 2) Prepare policy brief outlining pro's and con's of tapping the Malampaya Fund
- 3) Continue engagement with the Department of Energy to ensure a correct process in accessing ER 1-94 funds
- 4) Forge partnerships with site-based projects such as GIZ-PAME and USAID B-WISER and assess applicability of ER 1-94
- 5) Develop project proposal templates
- 6) Collaborate with other government agencies such as the Department of Social Welfare and Development, Climate Change Commission, the National Anti-Poverty Commission and Department of Finance to ensure a correct process in accessing the People's Survival Fund
- 7) Develop a framework whereby climate adaptation can be linked to biodiversity

4.3. Increased official development assistance (ODA)

4.3.1. Background on ODA financing

Using the premise that the biodiversity attributes of the Philippines can transcend to global benefits, tapping ODA shall continue to be one of the strategies to fund the NBSAP.

Based on distribution of program costs, ODA funding requirements during the medium term period totals PHP 30 billion or USD 107 million per year (Table 6). The list was further pared down to account for pipeline ODA projects including the GEF proposal for Wealth Generation that would potentially fund ABS related programs, the upcoming Biodiversity Corridor program, as well as the US Government program focusing on wildlife species conservation and sustainable livelihood. Residual priority programs are listed in Table 9. Funds that may be tapped from ODA totals USD 50 million or PHP 638 million for the entire medium term planning period. BIOFIN's target was based on the historical access to ODA funding of the DENR covering the years 2008-

2014. Further discussions with the Biodiversity Management Bureau and partner institutions will result to identification of project concepts from the list presented in Table 9.

Table 9. NBSAP priority programs and budgets targetted for ODA funding

NBSAP Priority Program	Financing needed from donor funding (in US\$)
Facilitate the provision of biodiversity friendly livelihood to the locals	19,006,206
Build capacity of key agencies for ABS implementation (ABS)	494,497
Develop selected caves as sustainably managed, gender-sensitive ecotourism destinations/attractions (R)	15,241,543
Rehabilitate priority inland wetlands including peatlands (R)	243,061,662
Adopt appropriate watershed protection and plantation management by mainstreaming native species in reforestation projects especially in priority wetlands such as Agusan Marsh and Candaba Marsh	3,021,647
Establish models of urban biodiversity conservation and enhancement as part of overall local environmental governance (BM)	9,981,351
Establish a City Biodiversity Index adapted to Philippine conditions (based on agreed upon international framework e.g. Singapore City Biodiv index) to guide LGU actions	621,741
Assess vulnerability and climate risk of coastal areas to storm surge, flooding, coastal erosion and sea level rise increase in SST and ocean acidification due to climate change	4,534,055
Integrate effects of climate change impacts in plans and programs for biodiversity conservation and sustainable use of coastal and marine resources	2,649,894
Restore habitats using ecologically based, appropriate site specific technology	1,376,963
Conduct a study to identify vulnerable species for climate change effects on inland wetlands	45,652
Adopt green technology to promote sanitation in inland wetlands	3,120,691
Amount targetted for medium term planning period	USD 50 million or PHP 638 million

4.3.2 BIOFIN Work Program

BIOFIN's strategy to obtain targeted ODA funding shall include:

- 1) Work with DENR-BMB and other NBSAP partners including the private sector, to further prioritize and align NBSAP priority actions
- 2) Co-organize a donors roundtable for biodiversity funding involving core and non-core government agencies, CSOs, and academic institutions
- 3) Hire a short term consultant to assist in the preparation of project proposals

4.4 Strategies towards increasing funding for national agencies

A basic but critical BIOFIN strategy is to effect a (i) budget realignment and (ii) budget increase, which shall be supported by a more effective (iii) mainstreaming strategy. These actions are deemed critical because it represents the transformation that BIOFIN envisions. One aspect of the transformation features a better appreciation and deeper understanding of the nuances of biodiversity (especially in relation to the larger environment sector and the even broader climate change sector).

Expenditure requirement from the national agencies to implement the NBSAP priority programs in the medium term amount to almost PHP 20 billion over the medium term planning period or about PHP 3 billion per year. Using 2016 budget of PHP 3.002 trillion as benchmark, the biodiversity requirements comprise only 1% of the total budget.

4.4.1 Realigning expenditures

The DENR is the country's main proponent of biodiversity, contributing more than 60% or about PHP 2 billion yearly to biodiversity spending. BMB, the main bureau tasked to manage the biodiversity sector, comprises an average of 4% relative to the total budget of the DENR. However, the inclusion of the budgets of the Ecosystems Research and Development Bureau (ERDB) and the Forest Management Bureau (FMB) raises the biodiversity spending to about 16% of DENR's budget. This is not a simple play of numbers because, in fact, both the ERDB and FMB have inherent biodiversity functions although they do not regard it as such (especially so for the FMB). This is also reflected in the personnel survey results which show that perceptions regarding biodiversity roles are less than what the institution is mandated to perform. About **PHP 485 million** may represent some budget realignment within the DENR alone. Biodiversity tagging is the main strategy envisioned by BIOFIN to achieve this realignment.

Building on the results generated from the PPBER and lessons learned from the processes of Climate Change Expenditure Tagging (CCET), BIOFIN Philippines will work with the Department of Budget and Management (DBM) and Bureaus under the DENR to conduct biodiversity tagging exercises. The objective is to identify programs, activities and projects of each Bureau that are responsive to biodiversity. This will provide a finer resolution of biodiversity-related expenditures and at the same time provide a process that will educate the Bureaus about biodiversity. Results are expected to start the discussion of possible budget realignment and attribution of spending to biodiversity. One concrete example is a possible realignment within the National Greening Program, a flagship program of the Aquino administration, which was extended to the incoming administration. With a prospective budget of PHP 9 billion pesos, some of the reforestation activities can be aligned to satisfy the biodiversity targets.

Like the CCET, one of the desired outcomes of this exercise is the development of expenditure forms that will be submitted to DBM during budget preparation, and application thereof once the National Expenditure Program (NEP) and the General Appropriations Act (GAA) are approved. Furthermore, it is hoped that this will become institutionalized through an administrative order covering the DENR agencies

4.4.2 Increasing public sector budgets

Based on an analysis of time series of budgets from 2008-2013 among agencies contributing to the 20 Aichi targets, the baseline financing for biodiversity in the Philippines was estimated at PHP 5 billion (or USD 110 million). This estimate comprises budgets of core biodiversity agencies notably the DENR and the DA-BFAR, non-core agencies including the social sector, general services sector, and defense sector agencies, as well as local governments. The baseline financing for biodiversity represents 0.08% of GDP and 0.31% of the national budget for this period of analysis. A further comparison of this spending with ecosystem services derived from active and passive use of biodiversity resources indicates a significantly low investment to benefits ratio. From 2008-2013, the budget of the DENR was observed to be increasing at the rate of 23% per year while the biodiversity budget has been increasing at a faster rate of 34% per year for the same period.

As a local and global public good, financing of biodiversity relies heavily on public financing. As can be seen by the data generated for the Philippines, biodiversity is underprovided by national governments due to reasons observed as follows: lack of understanding and appreciation especially for its economic value, competing uses of public funds, and disparate distribution of mandates across a vast swathe of agencies. Thus, a core strategy towards increasing public investments is “helping make the business case”. Such strategy will consist of policy statements directed at decision makers and will be underpinned by information that resonates with them including impacts on incomes, returns on investments, employment generation, and trade. BIOFIN will also examine traditional and innovative funding sources to increase public sector funding.

Foremost in the agenda is the formulation of a debt swap for biodiversity. Since 1987, over US \$1 billion in environmental funding have been generated through debt for nature (DFN), benefiting nearly 30 countries. In a sense, DFN transactions represent “win-win-win” solutions, where benefits accrue to debtors, creditors, and important ecosystems of debtor countries. A recent debt swap between the Philippines and Italy totalled 3 million euros and was designed to address poverty reduction and sustainable development. BIOFIN will also discuss the feasibility of the flotation of a ROP Sovereign Green Bond towards funding NBSAP actions. Lastly, feasibility for a conservation incentive / ecological fiscal transfer shall be broached, possibly linked to climate adaptation and mitigation. ***The public sector budget requirement of PHP 3 billion per year is targetted and will be used as benchmark for discussions with the DOF.***

4.4.3. Mainstreaming

Lastly, mainstreaming strategies to pave the way for greater policy support shall be promoted by BIOFIN. From the PPBER study, expenditure scenarios developed have assumed successful mainstreaming as a prerequisite for increased financing in the public sector for both core and non-core biodiversity agencies as well as from foreign financing.

The National Economic Development Authority (NEDA) is the main government agency mandated to coordinate the formulation and the implementation of development plans and investment programs. NEDA is tasked to start the pre-work of drafting the Philippine Development Plan (up to 2022) for the next Presidential term. It will serve as the basis of the Philippine Investment Plan (PIP) and all other regional, provincial, and local development plans and investment programs.

NEDA has already identified possible entry points of mainstreaming biodiversity strategies in the PDP and PIP¹. BIOFIN also sees it as an opportunity to make biodiversity strategies significant in designing the macroeconomic policy and making it as the competitive advantage of the country. Furthermore, mainstreaming provides opportunity to cascade biodiversity strategies into the various levels (national, regional, local) of development plans and investment programs. Thus, ensuring budgetary allocations on the identified key national government agencies and local governments.

In a recent dialogue with NEDA, it was recommended to BIOFIN to work hand-in-hand with the DENR Central Planning Unit and other Sectoral Committees to ensure that biodiversity strategies are introduced in the drafting of almost all chapters of the PDP. Moreover, the identified actions and activities (especially the big ticket items) are assigned to appropriate sector where the DENR have no mandate to implement.

BIOFIN will also continue discussions with NEDA on the improvements regarding the T 21 (Threshold 21) model which was prepared for NEDA by the Millenium Institute. Said T 21 model shall be used for the medium term planning and at present, consists of several sectors which are supported by back-end models. Unfortunately, the biodiversity sector is only represented by aquaculture. BIOFIN will determine whether (i) such models exist for the biodiversity sector, eg. Forestry, coastal habitats, capture fisheries, freshwater consumption, etc and (ii) whether the T 21 system can accommodate additional sectoral models.

4.4.4. BIOFIN workprogram

BIOFIN will implement the following activities to fulfill the targets towards realignment and/or increase in public sector budgets and provide an enhanced policy environment and greater awareness concerning biodiversity issues, to facilitate a higher level of investments and efficiency in spending.

1) *Realigning expenditures*

- a. Conduct a series of biodiversity tagging workshops within the DENR
- b. Prepare a policy paper to institutionalize biodiversity tagging within the DENR
- c. Organize discussions with the Department of Budget and Management to assess feasibility of government – wide tagging program or possible piggy backing to climate change expenditure tagging program

2) *Increasing public sector budgets*

- a. Preparation of policy briefs for incoming policy makers. Shortly after the elections, a “white paper” shall be prepared that presents the business case on

¹ Presented by NEDA during the Forum on Biodiversity Financing Space and NBSAP Prioritization Workshop. 9 July 2015.

why the country needs to invest more in environment and biodiversity. The white paper will be released as an Opinion/Editorial in the national dailies. Other policy pieces emanating from the work on earmarked funds and biodiversity tagging shall likewise be used to heighten the need for investments in biodiversity.

- b. Determine NBSAP priorities for public sector funding
- c. Conduct series of discussions with the Department of Finance to assess the feasibility and next steps for possible (i) debt swaps and / or the (ii) issuance of a Sovereign Green Bond; (iii) conservation incentives/ecological fiscal transfer for local governments.
- d. Organization of a financial round table with the participation of DOF, investment bankers, venture capitalists, and BIOFIN Global Team Experts

3) **Mainstreaming**

- a. Organize discussions with NEDA on the T21 model and status of PDP
- b. Participate in meetings regarding PDP discussions
- e. Organize expert group meeting to determine whether sectoral and subsectoral models can be incorporated into T 21.

4.5 **Private sector engagement**

4.5.1 Engaging and enhance partnership with private sector

NBSAP priority programs identified for potential private sector funding amounts to a total of PHP 8.3 billion for the entire medium term period or an average of PHP 1.4 billion per year. Part of this amount is expected to come from private sector – including businesses, financial institutions, venture capital, foundations, philanthropies, privately run academic institutions, for profit and not-for-profit organizations. Private sector contribution to NBSAP implementation may be in the form of grants (for example the Corporate Social Responsibility Programs), direct investments, or public-private sector partnerships. A listing of these priority programs is provided in Table 10.

Table 10. Possible NBSAP Priority Programs for private sector funding

Program 1 : Banking on biodiversity: a program on genetic research and wealth generation in protected areas	Funding requirement in Pesos
Agrobiodiversity	
Increase the number of in situ and ex situ sites that conserve and propagate diverse indigenous species and varieties (P)	678,619,458
Increase the number of communities practicing heritage agriculture that adopt dynamic and gender-sensitive conservation programs which sustain important traditional varieties (E)	208,892,334
Terrestrial	
Facilitate the provision of biodiversity friendly livelihood to the locals	437,142,738

Program 2 : Optimizing potential of protected area for ecotourism	
Caves	
Develop selected caves as sustainably managed, gender-sensitive ecotourism destinations/attractions (R)	224,963,061
Protected area	
Improve capacities of local stakeholders including IPs, women and youth and communities to control and limit overexploitation and destructive practices on agriculture and forestry resources	139,093,420
Program 3 : Biodiversity and Water Resource Management	
Inland Wetlands	
Rehabilitate priority inland wetlands including peatlands (R)	5,590,418,226
Implement sustainable aquaculture practices in inland wetlands (SU)	251,154,358
Adopt appropriate watershed protection and plantation management by mainstreaming native species in reforestation projects especially in priority wetlands such as Agusan Marsh and Candaba Marsh	69,497,870
Forest	
Undertake research studies that will support current conservation efforts	
Program 4: Celebrating urban biodiversity	
Establish models of urban biodiversity conservation and enhancement as part of overall local environmental governance (BM)	229,571,067
Establish a City Biodiversity Index adapted to Philippine conditions (based on agreed upon international framework e.g. Singapore City Biodiv index) to guide LGU actions	14,300,040
Program 5 : Improving resilience, reducing vulnerabilities	
IAS	
Rehabilitate areas (in particular areas of high biodiversity value) where IAS have been contained or eradicated (R)	113,092,497
Mainstream biodiversity conservation into national and local planning processes	236,382,204
Adopt existing and develop new technologies to reduce utilization of existing resources	11,174,442
Inland Wetlands	
Adopt green technology to promote sanitation in inland wetlands	71,775,887

Using the results of the PBPER, the range of biodiversity spending for two environmental NGOs is USD 500,000 / year to USD 2.3 million per year while that of the private sector is USD 1,500 /

year to USD 300,000 per year. While not used to extrapolate the total funding from the private sector, the numbers generated in this exercise indicate that a huge resource can be mobilized in the private sector.

BIOFIN intends to enhance its collaboration with the private sector through its partners. The Philippine Business for the Environment (PBE)² is one of the private sector organizations that BIOFIN has been working with. PBE already requested BIOFIN to present the PPBER process and result to its members. The organization expressed its interest to replicate the process among its member companies and see how they can contribute towards bridging the financing gap.

A particular area of interest, which has gained some traction within the DENR, is the privatization of services in protected area using the public-private partnership (PPP) template. Using ecotourism as a banner program in protected areas, private sector investments can be secured towards the business plans developed for 18 Pas. Another area is direct investments in heritage agriculture and impact investing. At the minimum, PBE members can use the NBSAP as a guide or menu towards selecting CSR projects.

4.5.2. BIOFIN work program

- 1) In collaboration with PBE, pre selection of NBSAP priority programs for possible private sector investment
- 2) Convene small meetings and workshops to further develop project concepts with descriptions, identification of sites, products and services as well as investment requirements
- 3) Review and resubmission of DENR administrative order defining the scope of the public-private partnership in the environment sector and partnership with the AIM Research Lab
- 4) Organization of “marketplace” with private sector

4.6 Summary of BIOFIN Targets

BIOFIN is aiming for the following financial targets for the solutions discussed.

Financing solution	Targets for the medium term period, 2016-2022	
	Philippine Pesos	USD Equivalent (USD 1 = PHP 45)
Increased access to earmarked fund: ER 1-94	200 Million	4.4 million
Increased access to earmarked fund: PSF	1 billion	22.2 million
Increased access to earmarked fund: Malampaya Fund	Not determined pending further legal feasibility	
Realignment of expenditures within the DENR	485 million	10.8 million

² PBE is a non-profit industry association with about 60 members that believe in long-term financial performance is determined by the ability to manage its natural and social capitals and that it can only succeed if the community where it belongs also succeeds.

Increasing public sector budget (debt swap, conservation incentives / ecological fiscal transfer, ROP Sovereign Green Bond)	3 billion	66.6 million
ODA	638 million	14.2 million
Private Sector	Not yet estimated	-

The Post-BIOFIN scenario: A Call to Action

BIOFIN component 4 is to be implemented henceforth until 2017. This section focuses on the residual actions arising from the BIOFIN method for which Component 4 will not be able to accommodate due to resource and time constraints. This section is a “Call to Action” to the NBSAP Focal for the Philippines, i.e, the NBSAP Project Board and the NBSAP Secretariat, mapping out actions to continue the advocacy to generate more investments towards biodiversity and examine financial and economic triggers that prevent biodiversity targets to be achieved. Continuation of initiatives to enhance general awareness on biodiversity and improving the policy and institutional context for NBSAP implementation are likewise emphasized.

A. Continue initiatives to seek financing solutions

Financing solutions covered in this report focus on *(i) creating additional / new sources of revenues and (ii) realignment of expenditures*. The initiative started by BIOFIN should be continued and enhanced. First, a more exhaustive study of earmarked funds (environment and non-environment) should be done to unearth other sources of potential financing particularly in the agricultural sector. Second, and as emphasized in Section 4, User Fees are potentially a source of revenues for protected areas and a key towards financing of protected areas especially when said fees are imbued with appropriate measures of resource rents. Policies that support retention or ring fencing of earnings should also be clarified and implementation strengthened. Needless to say, this report recognizes the proliferation of studies on user fees and user fees as components of business plans developed for several protected areas. Action is required.

Third, discussions with the Department of Finance should be held on a regular basis following through the list of options suggested for biodiversity financing. Some of the financing mechanisms identified require the development of standards and the requisite policy support. For example, implementation of conservation incentives and ecological fiscal transfers will require such standards and full consultation on likely consequences. Institutional preparation for such mechanisms should also be addressed. Other potential mechanisms can be iterations of those already piloted may be developed. Others can be entirely new – such as green taxes.

Lastly, the initiative on biodiversity tagging should be institutionalized within the DENR, at first instance, and adapted by the DBM to cover non-core biodiversity agencies, in much the same way it embraced the climate change tagging. Policy support and institutional preparation are again required here.

Avoiding future expenditures and Delivering Better are two broad categories of financing solutions the Philippines is unable to address – largely because of preparedness and also

because more in-depth studies are required. The issue of subsidies has been flagged in the PIR but these are mostly found in the agricultural sector, i.e., incentives for high value crops to the detriment of native species. The impact of high value crops and plantation agriculture to biodiversity should be studied and valued. Within the DENR are some “self-inflicted wounds” resulting from policies that require amendment, i.e., foreshore land use and rules governing the Environmental Impact Assessment system, both of which result to negative impacts on biodiversity.

Delivering better refers to effectiveness and efficiency in delivering biodiversity services. Attainment of targets using minimal resources or at least equivalent to industry or regional standard is the key towards efficiency and effectiveness. In the Philippines context, this also refers to full use of resources allocated for a particular purpose and suggests challenges in fund absorption. In such cases, government should look at partnerships with civil society or with international donors such as UNDP, i.e., through the Government Co-Sharing Scheme already being piloted with the Department of Education (procurement) and with the Department of Social Welfare through the Bottom up Budgeting. This report also recommends for a further analysis of NBSAP actions especially those labeled as enabling actions in order to remove possible duplication within and across agencies. Delivering better is hinged on an M and E system to track progress and effectiveness of expenditures.

In both cases, and when then country is more prepared, the **application of the BIOFIN method is recommended** towards finding solutions that “**avoid future expenditures**” and “**deliver better**”. BIOFIN has already laid the groundwork for replication and adaption of the method such that the entire continuum, from the PIR to PPBER to FNA, can be **more focused on specific policy issues addressing specific finance solutions**. As demonstrated by the BIOFIN method, the PIR process would lay the groundwork for an in-depth policy analysis, investigate and value resource uses and impacts, and scrutinize existing financing solutions. The PPBER and the Financial Needs Analysis can then focus on sources and uses of funds for the particular policy issue, paving the way for a streamlined case build up towards the Financing Solution(s).

B. Improve awareness

BIOFIN’s workplan for the remainder of the project embeds activities on communications and improving general awareness. This is a component that is crucial and unavoidable given the challenges in “selling” the biodiversity message as observed throughout the implementation of the BIOFIN methodology but mostly, through primary data gathered from the personnel surveys implemented under the PPBER.

On the one hand are strategies to improve awareness on biodiversity, in general, but on the other hand are strategies directed towards decision makers, i.e., those instrumental in making investment decisions. Enhancing awareness and “making the business case” will be constant features associated with financing biodiversity. The communications plan developed by BIOFIN would have to be evaluated two/three years henceforth to determine new baselines and adjust messages accordingly.

C. Build the capacity of Secretariat and M&E support

Within the project lifetime, BIOFIN will work with the NBSAP Secretariat to ensure that the BIOFIN method is institutionalized among the agencies tasked to implement the NBSAP. Key questions to enable the NBSAP secretariat beyond BIOFIN would include : (i) designation of staff and training for sustainability of BIOFIN method. ; (ii) integration of BIOFIN with complementary methods such as the UN System of Environmental Economics Accounting; (iii) integration of BIOFIN indicators and metrics to other indicators such as SDGs and National Plans ; (iv) development of annual reports or knowledge materials to sustain momentum in the BIOFIN Method; and (v) determination of system requirements towards tracking biodiversity expenditures / revenues and attainment of NBSAP targets.

References

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Apo Reef Natural Park Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Bataan National Park Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Bulusan Volcano Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Central Cebu Protected Landscape Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Mt. Isarog National Park Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Mt. Kalatungan Range National Park Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Mt. Kanlaon National Park Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Mt. Kitanglad Range National Park Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Mt. Malindang Range National Park Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-

BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Manleluag Protected Landscape Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Mt. Apo National Park Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Mt. Mantalingahan Protected Landscape Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Mt. Banahaw-San Cristobal Protected Landscape Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Ninoy Aquino Parks and Wildlife Center Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Naujan Lake National Park Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Northern Negros National Park Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Mt. Palay-Palay/Mataas na Gulod Protected Landscape Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Resources, Environment, and Economics Center for Studies (REECS). 2014. Sagay Marine Reserve Business Plan. Quezon City, Philippines: Sustainable Financing of Protected Areas Project.

<http://business.inquirer.net/194635/ph-tax-regime-not-friendly-to-environment-bir-chief#ixzz3xtPbMdid>

<http://www.gmanetwork.com/news/story/527038/money/bfar-exec-on-fishing-policy-same-rules-stricter-implementation>

Manasan, R. 2012. Analysis of the President's Budget for 2013. Philippine Institute for Development Studies. Discussion Paper Series No. 2013-31. Philippine Institute for Development Studies, Makati City, Philippines

Padilla, J., R. Rosales, et. al. January 2000. Manual for the Implementation of Fee System Guidelines in Protected Areas. ENRAP IV Technical Paper. USAID DENR REECS, Quezon City, Philippines.

Annex 1. Results of Pre -Feasibility Analysis for BIOFIN financing solutions

Annex 1. Potential financial solutions for the Philippines and ratings based on BIOFIN Pre-Feasibility Criteria

Pre – Feasibility Parameters	Earmarked Funds Related to Environment / Climate Change	Earmarked Funds Unrelated to Environment	User Fees	Fines and Penalties	Bioprospecting	Mining Royalties	Commemorative License Plates	CSR	Lottery Winnings	ODA
Will the solution generate, leverage, save, or realign a large volume of resources?	H	H	H	M	H	H	H	M	L	H
Will the financing sources be stable and predictable?	H	H	H	L	H	L	L	L	L	M
Do the persons or entities paying have a willingness and ability to pay?	H	H	H	L	L	L	M	M	M	H
Are there significant financial risks? E.g. exchange rate, lack of investors, etc.	H	H	H	M	L	L	H	M	H	M
Are start up costs onerous?	H	H	H	M	H	M	L	M	L	M
Will successful implementation or expansion of the solution contribute to GDP, Jobs, Poverty Reduction?	M	M	H	L	H	H	L	L	L	M
Does the solution address market failures?	M	M	H	M	L	M	L	L	L	M
Will the financing allocations remain targeted towards biodiversity over time?	H	L	H	M	L	L	L	L	L	H
Are there risks to biodiversity created by the solution? If yes, how challenging would it be to create adequate safeguards?	H	H	H	L	L	L	L	L	L	H

Financing Plan for the NBSAP
The Biodiversity Finance Initiative

Will there be a positive social impact?	H	M	H	M	L	H	L	H	L	H
Is there significant risk of unintended negative social consequences?	H	H	M	L	L	M	H	H	H	H
Will the solution be viewed as equitable and will there be fair access to the solution?	H	H	M	M	L	H	L	H	L	M
Are there any major political risks to consider?	M	M	M	M	H	L	H	H	H	H
Is there strong buy-in from key actors and stakeholders?	M	M	M	M	L	L	L	H	L	H
Do the managing actors have sufficient capacity to lead the process? Or can they rapidly acquire it?	H	H	M	M	L	L	H	H	H	H
Is the solution legally feasible? How challenging will the legal requirements be?	H	H	H	H	H	H	H	H	H	M
Is the solution coherent with existing mechanisms and institutional architecture, can synergies be achieved?	H	H	H	H	H	M	L	M	L	H
Total "High" Scores	13	11	12	2	7	4	6	7	5	10

Financing Plan for the NBSAP
The Biodiversity Finance Initiative

Pre-Feasibility Parameters	Debt for Nature Swaps	Ecological Fiscal Transfers	Crowdfunding	Green tax	Bonds	Incentives for public budget execution	Conservation Incentives	Certification	Sovereign Wealth Funds
Will the solution generate, leverage, save, or realign a large volume of resources?	H	M	L	H	H	H	H	M	H
Will the financing sources be stable and predictable?	M	M	L	H	H	H	M	M	H
Do the persons or entities paying have a willingness and ability to pay?	H	M	L	H	H	H	M	H	H
Are there significant financial risks? E.g. exchange rate, lack of investors, etc.	M	M	L	H	L	H	H	M	L
Are start up costs onerous?	M	L	M	L	L	M	L	M	L
Will successful implementation or expansion of the solution contribute to GDP, Jobs, Poverty Reduction?	M	M	L	M	L	M	M	H	L
Does the solution address market failures?	M	M	L	M	L	L	M	H	L
Will the financing allocations remain targeted towards biodiversity over time?	H	H	M	H	M	M	M	M	M
Are there risks to biodiversity created by the solution? If yes, how challenging would it be to create adequate safeguards?	H	H	L	H	M	H	H	H	M
Will there be a positive social impact?	H	H	L	M	L	H	H	H	L
Is there significant risk of unintended negative social consequences?	H	H	H	H	H	H	H	H	H
Will the solution be viewed as equitable and will there be fair access to the solution?	M	L	M	M	M	H	H	H	M

Financing Plan for the NBSAP
The Biodiversity Finance Initiative

Are there any major political risks to consider?	H	L	H	M	H	M	M	H	H
Is there strong buy-in from key actors and stakeholders?	H	L	H	L	L	L	M	M	L
Do the managing actors have sufficient capacity to lead the process? Or can they rapidly acquire it?	H	L	H	M	L	H	H	M	L
Is the solution legally feasible? How challenging will the legal requirements be?	M	L	M	L	H	H	H	H	H
Is the solution coherent with existing mechanisms and institutional architecture, can synergies be achieved?	H	L	L	M	H	M	M	M	H
Total "High" Scores	10	4	4	7	7	10	8	9	7

