

## INCREASING INVESTMENTS IN BIODIVERSITY

### *Key recommendations*

- Realignment of national budgets to biodiversity conservation
- Private sector engagement particularly in protected area management
- Explore Access and Benefit Sharing scheme as an innovative financing mechanism
- Green/blue bonds as a stable and significant source of funding
- Earmarked funds as possible sources of realignment or new funding;

### *Context Analysis*

Biodiversity or the variety of life of Earth underpins the health, functionality and productivity of ecosystems. All species, even those we cannot see, have an essential role to play. Many are also critical for successful businesses and local livelihoods. Food, fiber and fuel production, as well as soil and nutrient cycle maintenance, all depend on and impact biodiversity. This means that industry sectors from agriculture, forestry and energy all rely on natural resources and ecosystem services for their operations and product offerings.

As a Party to the United Nations Convention on Biological Diversity (CBD), the Philippines, led by the Department of Environment and Natural Resources (DENR), formulated its National Biodiversity Strategy

### *Key statistics*

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). The baseline financing for biodiversity represents 0.08% of GDP and 0.31% of the national budget for this period of analysis. From 2008-2013, the budget of the DENR was observed to be increasing at the rate of 23% per year. The biodiversity budget has been increasing at a faster rate of 34% per year for the same period, although its contribution to total budget is less than 20% of the total. In the DENR alone, budget allocation for biodiversity can increase from 4% to 16% by mainstreaming with other bureaus such as the Forest Management Bureau and the Ecosystems Research and Development Bureau.

Local governments contribute PHP 0.5 billion pesos or USD 13 million based on protected area expenditures alone. Current funding levels for local governments comprise an average of 4% of the 20% development fund-representing share of national taxes.

and Action Plan (NBSAP) with a time frame of 2015-2028. This supports the Philippine Development Plan 2017-2022 and complements other national plans on climate change, REDD+ and desertification and land degradation, among others, and is compatible with the Environment and Natural Resources Framework of the DENR. The plan lists 113 actions that cover 9 thematic areas: forest, coastal and marine, inland wetlands, cave

and cave systems, protected areas, agrobiodiversity, urban biodiversity, invasive alien species and access and benefit-sharing. Biodiversity conservation is a complex subject matter and should be implemented by various stakeholders. This is reflected in the Plan, which lists more than 50 national and attached agencies as responsibility centers supported by other sectors in the society such as academe, local governments and civil society. The estimated cost of implementation within the given time frame is PhP24B/year.

A public and private expenditure review conducted by the Biodiversity Financing Initiative (Biofin)<sup>1</sup> revealed that current government (including local governments) spending on biodiversity is only PhP5B/year which leaves a financing gap of PhP19B/year to fully implement the NBSAP. Gross domestic product (GDP) measured at constant prices from 2008-13 averaged PhP5 trillion/year. Measured against this metric, estimated biodiversity spending of all agencies (including Official Development Assistance) is a measly 0.08% of GDP for this period. The country's national budget stood at PhP1.6 trillion for the same period and biodiversity spending represents only 0.31% of national budget. 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. This sector's contribution to GDP from 2008 to 2013 is 11.0% while the fishery sector alone contributes 2.5%. Thus, income derived from the fishery sector is roughly 31 times the current biodiversity spending.

### ***Detailed recommendations***

The implementation of the finance solutions are deemed critical because these represent the transformation that is envisioned to have 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.

The DENR is the country's main proponent of biodiversity, contributing more than 60.0% or about PhP2 billion yearly to biodiversity spending. The Biodiversity Management Bureau (BMB), the main

bureau 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 both the ERDB and FMB have inherent biodiversity functions. About PhP485 million may represent some budget realignment within the DENR alone.

Moreover, the private sector is a viable source of resources given the presence of a Public-Private Partnership (PPP) Program established by the government. Although most of the projects that have been implemented under this program focus on public infrastructure, it is open to facilitating partnerships on programs/projects on biodiversity conservation. A particular area of interest is the privatization of services in protected areas. Using ecotourism as a banner program in protected areas, private sector investments can be secured towards the business plans earlier developed for 18 protected areas. To enable this finance solution, a policy that establishes a functional PPP desk/center within the DENR is needed that will process solicited and unsolicited proposals.

The Access and Benefit Sharing scheme is also seen as an innovative financing mechanism that is sustainable and long-term. This is because 50% of the pharmaceutical products in the market now are derived from genetic resources or inspired by natural compounds (Zotchev et al., 2012). The global market for pharmaceutical holds an enormous potential for prospecting-based financing to support biodiversity conservation agenda (Pisupati, 2014) considering that the Philippines is a mega-diverse country.

Another innovative financing solution that can be explored by the country is the issuance of bonds for biodiversity. This bond may be a composite of corporations that are certified as sustainably managed or contributing to the NBSAP goals.

Increasing access to earmarked funds is another way of boosting support for biodiversity conservation. One is ER 1-94<sup>2</sup> fund which can be tapped by local government

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<sup>1</sup> Biofin develops and pilots a new approach and methodology for leveraging increased biodiversity investments. It is implemented by UNDP in 30 countries and supported by the

EU and the governments of Germany, Switzerland, Norway and Flanders.

<sup>2</sup> ER 1-94, as amended, requires the generation company and/or energy resource developer to set aside one centavo per

units for (i) environmental enhancement projects; (ii) reforestation and watershed management projects; and (iii) health related projects. Current funding available from ER 1-94 trust funds amount to more than PHP 1.2 billion. 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.

The People's Survival Fund (PSF) is a fund set up by government with a base account of PHP 1 billion. The fund has been set up to assist local governments in climate adaptation and mitigation. The take up has been close to zero to date the reason being the inability of local government units to submit proper proposals.

The Malampaya Fund<sup>3</sup> is another earmarked fund which needs to undergo a deeper feasibility analysis, especially with respect to the legal aspect. 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, an assessment of 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.

## References:

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World Business Council for Sustainable Development [WBCSD]. (n.d.). *Business & biodiversity: Enabling informed decision making*. Accessed June 23, 2016 from <http://www.wbcsd.org/business-biodiversity-enabling-informed-decision-making.aspx>

Pisupati, B. and Bavikatte, S. (2012). Access and Benefit Sharing as an Innovative Financing Mechanism. *Asian Biotechnology and Development Review*, 16(2): 53-70.

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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.

Zotchev S. B., Sekurova O. N., Katz L. (2012). Genome-based bioprospecting of microbes for new therapeutics *Current opinion in biotechnology* 23: 941-947.

## Acknowledgements:

Place acknowledgements here.

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<sup>3</sup> 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.