



# Philippine Protected Areas At A Glance



SEPTEMBER 2021

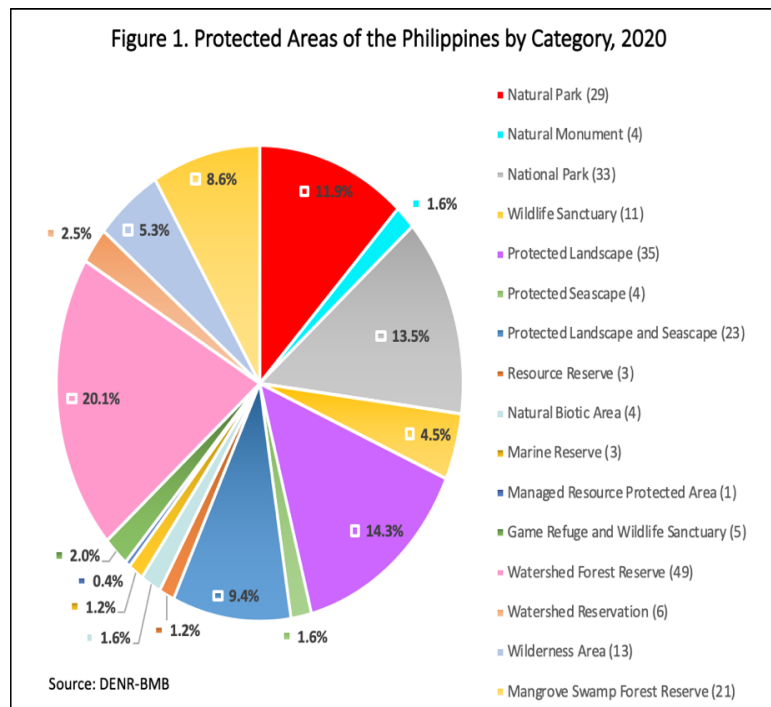
AG-21-02

Protected areas play a crucial role in mitigating climate change and building resilience to catastrophic events. Apart from ensuring biodiversity and conservation of ecosystems which have traditionally been a source of livelihood for many, safeguarding protected areas is also vital in preventing the future emergence of zoonotic infectious diseases such as Ebola and Coronavirus Disease 2019 (COVID-19). Issues in the operation and management of protected areas must hence be urgently addressed.

**What is a Protected Area?** Protected area (PA) refers to identified portions of land and/or water set aside for their unique physical and biological diversity and protected from destructive human exploitation. PAs are categorized as: (a) Natural Park; (b) Natural Monument; (c) National Park; (d) Wildlife Sanctuary; (e) Protected Landscape/Seascape; (f) Resource Reserve; (g) Natural Biotic Area; (h) Marine Reserve; (i) Managed Resource Protected Area; (j) Game Refuge and Bird/Fish Sanctuary; (k) Watershed Forest Reserve; (l) Watershed Reservation; (m) Wilderness Area; (n) Mangrove Swamp Forest Reserve; and (o) Other Categories established by law, conventions or international agreements which the Philippine Government is a signatory (see Box 1).

**Laws on Protected Areas.** In 1992, the Philippines enacted Republic Act No. 7586 otherwise known as the National Integrated Protected Areas System (NIPAS) Act. The law was passed pursuant to the Constitutional mandate to protect and advance the right of the people to a balanced and healthful ecology. The NIPAS Act provides for the establishment and management of a comprehensive system of integrated protected areas to maintain essential ecological processes and life-support systems that will preserve genetic diversity, ensure sustainable use of resources therein, and maintain their natural conditions to the greatest extent possible for present and future generations. In 2018, the law was amended by RA No. 11038 or the Expanded NIPAS (ENIPAS) Act which expanded the coverage and strengthened the administration and management of the system.

**Philippine Protected Areas.** Prior to the passage of the amendatory law, only 13 PAs were proclaimed through legislation. With the ENIPAS Act, the Philippines, as of 2020, already have 107 legislated PAs<sup>1</sup>, 13 proclaimed PAs<sup>2</sup>; and 124 initial components<sup>3</sup>. Of the 244 PAs in the country, 176 are terrestrial and 68 are marine which cover 4.68 million hectares (ha) and 3.08 million ha, respectively. By category, watershed forest reserves are the most common (20.1%) followed by protected landscapes (14.3%) and national parks (13.5%). The regions with the most number of PAs are Region 5 (26 PAs), Region 3 (24 PAs) and Region 4B (23 PAs). In terms of land area, Region 4B has the biggest PA (2.34 million ha) followed by Region 2 (999,320 ha) and Region 7 (637,892 ha). The Philippine Rise Marine Resource Reserve is notable for being the sole transboundary protected area, spanning across four regions (Regions 2, 3, 4B and 5).



<sup>1</sup> Protected areas that have been legislated by Congress pursuant to the mandate under Article XII of the 1987 Philippine Constitution.  
<sup>2</sup> Protected areas that have been designated through the issuance of Proclamation by the President upon the recommendation of the DENR following the requirements of the NIPAS Act, as amended by the ENIPAS Act.  
<sup>3</sup> Under Section 5a of RA No. 7586, as amended by RA No. 11038, initial components consist of all areas or islands in the Philippines proclaimed, designated or set aside, pursuant to a law, presidential decree, presidential proclamation or executive order as national park, game refuge, bird and wildlife sanctuary, wilderness area, strict nature reserve, watershed, mangrove reserve, fish sanctuary, natural and historical landmark, protected and managed landscape/seascape as well as old growth forests identified before the effectivity of RA No. 7586 or still to be identified.

### Box 1. Protected Area Categories

**Natural Park** – a relatively large area not materially altered by human activity where extractive resource uses are not allowed and is maintained to protect outstanding natural and scenic areas of national or international significance for scientific, educational and recreational use. *Examples: Mount Isarog Natural Park (Camarines Sur) and Apo Reef Natural Park (Occidental Mindoro)*

**Natural Monument/Landmark** – a relatively small area focused on the protection of small features to protect or preserve nationally significant natural features on account of their special interest or unique characteristics. *Examples: Bessang Pass Natural Monument/Landmark (Ilocos Sur) and Chocolate Hills Natural Monument (Bohol)*

**National Park** – land of the public domain classified as such in the Constitution which include all areas under the NIPAS, primarily designated for the conservation of native plants and animals, their associated habitats and cultural diversity. *Examples: Paoay Lake National Park (Ilocos Norte) and Hundred Islands National Park (Pangasinan)*

**Wildlife Sanctuary** – an area which assures the natural conditions necessary to protect nationally significant species, group of species, biotic communities or physical features of the environment which may require specific human manipulations for their perpetuation. *Examples: Agusan Marsh Wildlife Sanctuary (Agusan del Sur) and Turtle Islands Wildlife Sanctuary (Tawi-Tawi)*

**Protected Landscape and/or Seascape** – area of national significance which is characterized by the harmonious interaction of man and land and water while providing opportunities for public enjoyment through recreation, tourism and other economic activities. *Examples: Taal Volcano Protected Landscape (Batangas), Sarangani Bay Protected Seascape (Sarangani) and Batanes Protected Landscape and Seascape (Batanes)*

**Resource Reserve** – an extensive, relatively isolated, and uninhabited area which is difficult to access and is designated to protect the natural resources of the area for future use and prevent or contain development activities that could affect the resources, pending the establishment of sustainable resource utilization goals which are based upon appropriate information and planning. *Examples: Upper Agno River Basin Resource Reserve (Benguet, Ifugao and Nueva Vizcaya) and Siocon Resource Reserve (Zamboanga Del Norte)*

**Natural Biotic Area** – an area set aside to allow the way of life of societies living in harmony with the environment to adapt to modern technology at their pace. *Examples: Buug Natural Biotic Area (Zamboanga Sibugay) and Basilan Natural Biotic Area (Basilan)*

**Marine Reserve** – a type of marine protected area in which removing or destroying natural or cultural resources is prohibited. *Examples: Palau Island Marine Reserve (Cagayan) and Sagay Marine Reserve (Negros Occidental)*

**Managed Resource Protected Area** – an area containing predominantly unmodified natural systems managed mainly for the sustainable use of natural ecosystems and to ensure long-term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs. *Example: El Nido-Taytay Managed Resource Protected Area (Palawan)*

**Game Refuge and Bird/Fish Sanctuary** – a forest land designated for the protection of game animals, birds and fish, and closed to hunting and fishing in order that the excess population may flow and restock surrounding areas. *Examples: Lake Malimanga Bird and Fish Sanctuary (Zambales) and Lake Buluan Game Refuge and Bird Sanctuary (North Cotabato)*

**Watershed Forest Reserve** – a forest land reservation established to protect, maintain or improve water yield and provide restraining mechanisms for inappropriate forest exploitation and disruptive land use. *Examples: Angat Watershed Forest Reserve (Bulacan) and Infanta Watershed Forest Reserve (Quezon)*

**Watershed Reservation** – a forest land reservation established to protect, maintain or improve water yield and provide restraining mechanisms for inappropriate forest exploitation and disruptive land use. *Examples: Naguilian Watershed Reservation (La Union) and Lake Lanao Watershed Reservation (Lanao del Sur)*

**Wilderness Area** – area managed mainly for wilderness protection. Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition. *Examples: Dampalit Island Wilderness Area (Masbate) and Bantayan Island Wilderness Area (Cebu)*

**Mangrove Swamp Forest Reserve** – mangrove area of the public domain which is declared and determined to be needed for conservation and protection purposes. *Examples: Sibuyan Island Mangrove Swamp Forest Reserve (Romblon) and Entire Province of Palawan as Mangrove Swamp Forest Reserve (Palawan)*

**Other Categories** – other classifications established by law, conventions or international agreements which the Philippine Government is signatory.

**Table 1. Number of Protected Areas in the Philippines, by Region, 2020**

| Region  | Initial Component |                     | Proclaimed |                     | Legislated |                     | Total      |                     |
|---|-------------------|---------------------|------------|---------------------|------------|---------------------|------------|---------------------|
|   | No.               | Area (Ha)           | No.        | Area (Ha)           | No.        | Area (Ha)           | No.        | Area (Ha)           |
| Cordillera Administrative Region (CAR)                  | 6                 | 89,236.66           | 1          | 78,005.32           |            |                     | 7          | 167,241.98          |
| National Capital Region (NCR)                           | 2                 | 480.71              |            |                     | 2          | 205.46              | 4          | 686.17              |
| Region 1 (Ilocos)                                       | 7                 | 10,203.18           |            |                     | 8          | 18,626.40           | 15         | 28,829.58           |
| Region 2 (Cagayan Valley)                               | 5                 | 19,009.62           | 2          | 187,215.91          | 8          | 793,094.64          | 15         | 999,320.17          |
| Region 3 (Central Luzon)                                | 17                | 239,067.15          |            |                     | 7          | 44,193.26           | 24         | 283,260.41          |
| Region 4A (CALABARZON)                                  | 13                | 124,754.09          |            |                     | 9          | 105,827.06          | 22         | 230,581.15          |
| Region 4B (MIMAROPA)                                    | 12                | 1,283,824.73        | 5          | 438,763.27          | 6          | 617,502.80          | 23         | 2,340,090.80        |
| Region 5 (Bicol)  | 13                | 13,755.79           | 2          | 117.85              | 11         | 496,343.22          | 26         | 510,216.85          |
| Region 6 (Western Visayas)                              | 9                 | 65,091.73           |            |                     | 5          | 145,688.70          | 14         | 210,780.43          |
| Region 7 (Central Visayas)                              | 8                 | 28,271.96           |            |                     | 11         | 609,620.84          | 19         | 637,892.79          |
| Region 8 (Eastern Visayas)                              | 4                 | 8,752.27            |            |                     | 7          | 453,175.29          | 11         | 461,927.56          |
| Region 9 (Zamboanga Peninsula)                          | 2                 | 11,650.37           |            |                     | 12         | 294,630.33          | 14         | 306,280.69          |
| Region 10 (Northern Mindanao)                           | 3                 | 881.61              |            |                     | 9          | 138,103.61          | 12         | 138,985.21          |
| Region 11 (Davao Region)                                | 2                 | 2,084.37            | 1          | 114.87              | 7          | 111,983.08          | 10         | 114,182.32          |
| Region 12 (SOCCSKSARGEN)                                | 3                 | 159,721.57          |            |                     | 2          | 224,834.69          | 5          | 384,556.27          |
| Region 13 (CARAGA)                                      | 8                 | 42,077.84           | 1          | 43,345.66           | 3          | 329,237.47          | 12         | 414,660.98          |
| Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) | 10                | 176,062.12          |            |                     |            |                     | 10         | 176,062.12          |
| Inter-Regional (2/3/4A/5)                               |                   |                     | 1          | 357,903.10          |            |                     | 1          | 357,903.10          |
| <b>Total</b>  | <b>124</b>        | <b>2,274,925.75</b> | <b>13</b>  | <b>1,105,465.98</b> | <b>107</b> | <b>4,383,066.86</b> | <b>244</b> | <b>7,763,458.60</b> |

Source: DENR-BMB

**Economic Significance.** There are currently no studies which provide an estimate on the economic value of protected areas in the Philippines. However, total ecosystem services in the Philippines had been estimated at PHP2.3 trillion (US\$ 46 billion) ranging from timber and fuelwood production, water provision, ecotourism, carbon sequestration, flood prevention, and fishery production, among others (Biodiversity Finance, 2020). While this estimate cannot be fully attributed to protected areas, the country's PAs arguably contributed much to the estimate. In 2014, the Philippine Wealth Accounting and the Valuation of Ecosystem Services (Phil-WAVES) conducted a study on Experimental Ecosystem Accounts on two pilot sites: Laguna Lake and Southern Palawan. The pilot studies looked at the land, carbon, ecosystem condition, ecosystem services supply, and ecosystem asset accounts. Should budget be available, similar studies can be conducted in PAs to help the Philippines measure and value the country's natural resources and evaluate how they can be used equitably and sustainably.

**Protected Area Management.** The Biodiversity Management Bureau (BMB) of the Department of Environment and Natural Resources (DENR) provides the overall supervision of all the PAs in the country. The BMB provides technical advice to the DENR Secretary on the management of PAs and their biodiversity in line with the provisions of the law as well as the international agreements to which the Philippines is a signatory, foremost of which is the Convention on Biological Diversity<sup>4</sup>. By law, each PA should have a Protected Area Management Board (PAMB) headed by the DENR's regional, provincial, city or municipal officers, with governors, city and municipal local chief executives, other officials or representatives of national government agencies (NGAs) as well as from nongovernmental organizations (NGOs). In coordination with the local government units (LGUs), the PAMB takes the supervision of PAs at the local level and decides on budget allocations, approval of funding proposals, and planning on matters concerning the ecology, particularly the PAs. As of December 2020, 115 PAs or 64 percent of the total PAs have organized/appointed PAMBs.

**Protected Area Management Appropriations.** The General Appropriations Act (GAA) allocates an annual budget for PAs which are downloaded to the DENR regional and/or provincial offices where the PAs are located. Bulk of the budget is usually allocated for personal services (PS) while maintenance and other operating expenses (MOOE) and capital outlay (CO) get a relatively lower share. The usual practice is to earmark a portion of the PA's MOOE to the expenses of the DENR field offices that supervise or direct the operation of the particular PA. From PHP795 million in 2014, the total budget for protected area management and development has risen to PHP1.4 billion in 2021 (Table 2). A notable increase was observed in 2020 with the one-time insertion of PHP500 million for protected area management and development, including ecotourism. Despite the increase though, the funding for protected area management remains insufficient to manage all the PAs in the country.

<sup>4</sup> The Convention on Biological Diversity is a legally binding instrument/treaty of the United Nations signed by the Philippine Government in 1994 which addresses the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

For instance, the BMB proposed a total amount of Php8.9 billion in 2019 for the implementation of the ENIPAS Act over the next 3 years (2020-2023) but only Php1.4 billion was provided in 2020. Hence, it operated on a budget deficit of Php1.7 billion. For 2021, only Php1.4 billion has been allocated for PA Management and Development, Php2.2 billion lower than the proposed budget of Php3.6 billion. Due to unavailability of funds, the establishment of Protected Area Management Offices (PAMOs) as one of the priority provisions of the ENIPAS Act has been put on hold. Since

**Table 2. Protected Area Management Budget Appropriation, 2014-2021 ('000 Php)**

| Year | Protected Area Management & Development | Protection & Conservation of Wildlife | Management of Coastal & Marine Resources | Total     |
|------|---|---------------------------------------|--|-----------|
| 2014 | 795,309                                 | 76,511                                | 175,069                                  | 1,046,889 |
| 2015 | 857,323                                 | 70,140                                | 210,033                                  | 1,137,496 |
| 2016 | 749,515                                 | 72,220                                | 699,833                                  | 1,521,568 |
| 2017 | 1,295,183                               | 72,220                                | 632,607                                  | 2,000,010 |
| 2018 | 1,415,619                               | 161,572                               | 320,313                                  | 1,897,504 |
| 2019 | 1,469,278                               | 77,782                                | 388,520                                  | 1,935,580 |
| 2020 | 2,031,820                               | 77,782                                | 243,834                                  | 2,353,436 |
| 2021 | 1,485,280                               | 77,782                                | 248,275                                  | 1,811,337 |

Source: DENR-BMB

2020, the BMB has accordingly been in discussions with the Department of Budget and Management (DBM) on the establishment of PAMOs, but until now the proposal is yet to be approved, perhaps partly because of the on-going COVID-19 pandemic. The lack of budgetary resources has hindered the implementation of many important activities in PA management such as habitat protection and monitoring, wildlife protection, resources assessment, ecotourism development, and rehabilitation of degraded areas. It also affected law enforcement activities with the limited hiring of park superintendents and park rangers who act as guards and overseers of PAs.

As to the budget of BMB, which provides the overall supervision of all the PAs in the country, it increased from Php185 million in 2014 to Php442 million in 2019. However, in 2021, it was slashed to Php243 million, along with the other agencies in the DENR, to support the government's COVID-19 pandemic response.

**Moving Forward.** Inadequate management, financial constraints and law enforcement problems are interconnected issues that have to be addressed to fully achieve the purpose of PAs. Sufficient human and financial resources and broad social support should be in place particularly where these ecosystems have traditionally been a source of livelihood for local communities. Investing in natural resource protection and conservation can actually be a part of the COVID-19 policy response as it can help minimize the chances of another zoonotic pandemic while providing immediate jobs and economic stimulus. Maintaining healthy ecosystems and protecting diverse natural habitats will help prevent infectious diseases to enter or interact with human communities.

With the country's limited financial resources, the PAMBs and LGUs can forge partnerships and collaborative arrangements with other institutions to maximize the use of resources and avoid duplication of efforts. Aside from the need to secure subsidies from the national government, the PAMBs and LGUs should also be empowered to explore innovative financing mechanisms and be encouraged and capacitated to access grant facilities offered by development partners and tie up with private sectors to generate funds for their programs and activities.

For effective enforcement, the government must continue to strengthen its efforts on the following approaches: a) development of support within stakeholder community; b) implementation of "*bantay kalikasan*" or "*bantay dagat*" groups for law enforcement activities; c) enforcement through peer group pressure and local incentives and disincentives; d) use of regular government police and enforcement channels depending on their availability and ability to assist; e) use of effective but appropriate penalties with law enforcement; g) conduct of education programs to inform stakeholders of illegal activities; h) formation of support networks to reinforce good practices at the local level; i) provision of incentives to local enforcers in form of insurance, stipend, and appropriate equipment; and j) collection of fines that are shared with the law enforcers (PDP 2017-2022).

In the Senate of the 18<sup>th</sup> Congress, twelve bills (Senate Bill Nos. 955, 1328, 1711, 1712, 1713, 2257, 2276, 2277, 2278, 2279, 2280 and 2362) have been filed seeking to legislate additional PAs, namely: 1) Pag-asa Island Ecotourism Cluster and Protected Area; 2) Northern Antique Protected Seascape and Landscape; 3) Tugbo Natural Biotic Area; 4) Hinakpan Mystical Hills Natural Monument; 5) Mt. Arayat Protected Landscape; 6) Paoay Lake Protected Landscape; 7) Naga-Kabasalan Protected Landscape; 8) Sicogon Island Wildlife Sanctuary; 9) Mt. Pulag Protection Landscape; 10) Tirad Pass Protected Landscape; 11) Banao Protected Landscape; and 12) Mt. Busa-Makima Protected Landscape. The enactment of these legislative proposals would help provide extensive protection and effective preservation of the aforementioned PAs by giving more access to funding for protection programs as well as the prosecution of prohibited acts enumerated in the said bills.