CONCEPT NOTE
ON
ACCESS AND BENEFIT SHARING (ABS)

GEF 6 Strategic Objective 3: Sustainably use Biodiversity
Programme: Implement the Nagoya Protocol
GEF Expected Outcome and Indicators:
Outcome 8.1: Legal and regulatory frameworks, and administrative procedures established that enable access to genetic resources and benefit sharing in accordance with the provisions of the Nagoya Protocol
Indicator 8.1: National ABS Framework operational

Project Title: Strengthening National Capacities for the Ratification and Implementation of the Nagoya Protocol on Access and Benefit Sharing in the Philippines

Proponent: DENR-BMB
Partners: NCIP, Intellectual Property Office, Phil. National Museum, Phil. Institute for Traditional Alternative Care, National Plan Genetics Laboratory of IPB, National Commission on Culture and the Arts

I. RATIONALE

The Philippines has high biodiversity, being among the mega-diverse countries of the world. It has prolific and highly diverse marine and coastal resources which makes it the third highest in marine biodiversity in the world. For example, it hosts a total of 464 reef-building coral species or nearly half of all known coral species. The country also has 1700 reef species and 9% of the total known global coral reef area at 25,060 sq. km. Philippine marine fisheries produced a total fisheries volume of 5 million metric tons in 2009 valued at PhP 215.58 billion. The Bureau of Fisheries and Aquatic Resources (BFAR) estimates the fishing industry's contribution to the country's GDP at 2.2% (PhP 170.3 billion) and 4.4% (PhP63.2 billion) at current and constant prices, respectively. Marine mollusks have high medicinal value and the Philippines teems with them. It must be noted that marine organisms are the source of 60% of new anti-cancer agents currently on trial. Aside from this, they also hold potential for possible central nervous system, anti-microbial drugs and enzymes for cellulosic biofuels production. Philippine waters are estimated to harbor an estimated 10,000 species or approximately one fifth of all known species. The country's marine waters are also widely regarded by marine biologists as the epicenter of marine biodiversity.

The Philippines is home to an estimated 53,500+ species of plants and animals. Recent reviews have recognized 105 species of amphibians (79% endemic) and 264 reptiles (68% endemic), while recent summaries of birds have recognized 593 species (32% endemic). Mammal diversity is currently estimated at 175 native terrestrial mammals (65% endemic). Total country estimates include as many as 15,000+ plants (and their relatives) and 38,000+ animals (vertebrates and invertebrates). These numbers are considered conservative considering that recent studies have shown that terrestrial biodiversity of the Philippines is substantially under estimated. The Philippines has one of the highest rates of species discovery in the world (sixteen new species of

mammals have been discovered in the last ten years alone). New species are being discovered at a remarkable rate and this pattern shows no sign of slowing. Current taxonomic estimates show that the Philippines has the highest level of endemism in the Indo-Malayan Realm on a per unit-area basis and the highest concentration of biodiversity on earth .

However, "leakage" in revenue generation from the environment sector through bio-piracy of the country's genetic pool. As stated above, the Philippines' marine waters alone hold untold economic potential for drugs and fuels. Marine sponges, mollusks and sea squirts, for instance, have been the subject of many biomedical studies as potential sources for anti-microbial and anti-cancer drugs. The recent study done by the UP Marine Science Institute in partnership with the Oregon Health and Science University, University of Utah, the Academy of Natural Sciences, Philadelphia and Ocean Genome Legacy showed that marine mollusks found in the Philippines have unusual bacteria strains that have utility as drugs for central nervous system disorders, anti-cancer agents and anti-microbial treatments .

However, despite discoveries made by local scientists or the fact that some of these genetic materials, plants and biological resources have long been identified, developed and used by communities and indigenous peoples, many large corporations make huge profits from patenting these knowledge and biological materials without properly recognizing and rewarding the sources.

To address the issue on biopiracy, the Philippine Government, being the first party to the UN CBD, has issued Executive Order in 1995 as a national measure to regulate bio prospecting activities and to minimize the act of biopiracy and give Filipino scientists some measure of relief in the way they conduct field researches in the area of biological diversity. This was replaced by the Philippine Widlife Act of 2001 (RA 91467) which laid out the rules for non-commercial or scientific researches. The law also provided that th

However, even with the policy in place, there are no system to track and monitor the utilization of these genetic resources across time. Similarly, the current regulation deals only with the development stage of research but not on the innovation, pre-commercialization and commercialization stages[1]. Similarly, protection of researches and discoveries continue to be a weakness in the country. This is indicated by the status of patent applications and issuance of patents. The Intellectual Property Office reported that patent applications over a 3 year period decreased from 3,391 in 2010 to 2,784 in 2012. Moreover, of the total applicants, 94.6% are non-resident (foreign). Of the total patents granted, only 0.45% were granted for resident applications.

Unfortunately, the country has not significantly invested in studying these resources and their benefits. Investment in research and development on the wealth creation potential of these resources as a basis for asserting benefit claims has been consistently low in the Government's priorities. In fact, the percentage of the country's research and development expenditure to GDP decreased by 3% from 14% in 2002 to 11% in 2008 . Similarly, the Philippines ranked last among the ASEAN countries (excluding Lao People's Democratic Republic and Myanmar) in government procurement of advanced technology products; second from the last in university-

[1] National ABS Policy Assessment Report done by ACB in ____

industry collaboration in R&D and third from the last in the availability of scientists and engineers . Moreover, competencies and capacities of the concerned institutions and sectors (e.g. the academe) have likewise not kept up with the rapid developments in this area.

Another issue on intellectual property is the protection of traditional knowledge (TK). Indigenous peoples have invested in knowledge management, for centuries, on the cultivation and conservation of valuable species of plant and organism(s) upon which they remain dependent for food security and health. However, this KM process and its keepers, the IPs, are constantly at risk and this effective form of stewardship, which could result in greater gain for the country, is in danger of losing out. Traditional knowledge of local communities that is associated with genetic resources is disappearing rapidly since there are no clear protection mechanisms related to this. Hence, custodians of TK and biological resources should receive protection and corresponding benefits if traditional knowledge is expected to lead to commercial gain

II. PROJECT COMPONENTS

The proposed project aims to build/strengthen national capacities and systems to implement a national Access and Benefit Sharing (ABS) framework and protocols to ensure protection and sustainable use of the country's genetic pool/resources which the Philippine Government can benefit from.

Component 1: Strengthening the National Policy, Legal, and Institutional Framework on ABS

Expected Outputs:

- An enabling national ABS regulatory framework and protocols in place in compliance with the Nagoya Protocol and mainstreamed in development planning processes
- System for the protection of Traditional Knowledge (TK)
- An administrative and monitoring system established and operational at a national and local level in compliance with the ABS framework and the Nagoya Protocol

Component 2: Increasing awareness and capacity building of all relevant stakeholders on the National ABS Framework

Expected Outputs:

- Capacity of agencies relevant for ABS implementation improved by at least 30% as measured by UNDP's ABS Capacity Development Scorecard
- Coordinative/collaborative mechanism established to facilitate smooth implementation of ABS system
- Network or constituency established for a nationally-favorable ABS system;
- Inter-agency information system on researches on genetic resources developed;

Component 3: Demonstrating Private-Public-Community Partnerships on Access and Benefit Sharing

Expected Outputs:

- Effective working of a national ABS regime demonstrated by at least one ABS Agreement compliant with the country's legislation and the Nagoya Protocol in place

- Financing mechanism to support private and local entrepreneurs in translating biodiversity genetics research results into viable commodities and enterprises;

III. BUDGET PROPOSAL

Project Components	Estimated Budget (in USD)
Component 1	1,845,000.00
Component 2	3,800,000.00
Component 3	3,000,000.00
Project Management	455,000.00
TOTAL	9,100,000.00