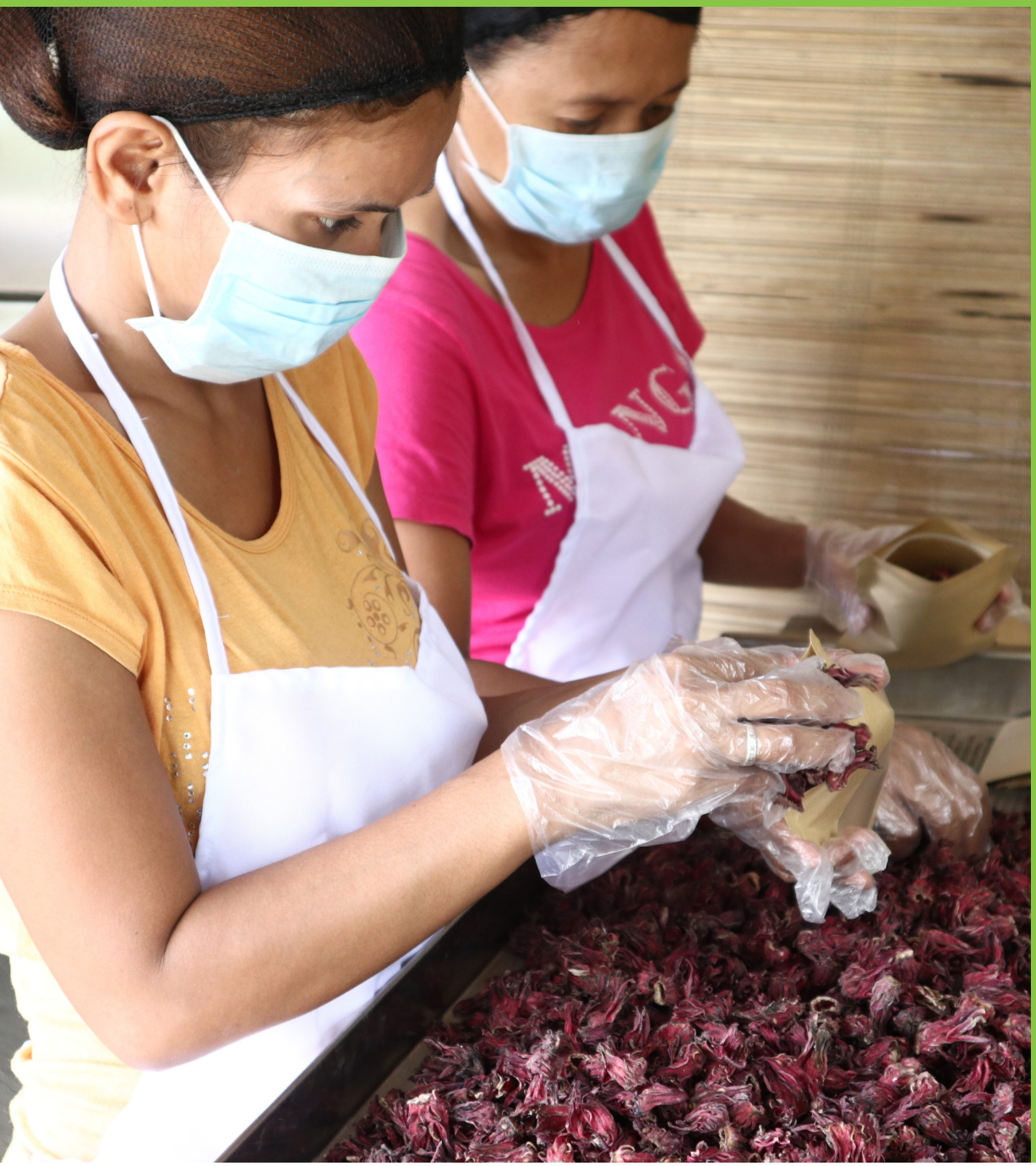
ASSESSMENT OF POLICIES ON NON-TIMBER FOREST PRODUCTS



Country Study: Philippines

NTFP-EP
non-timber forest products - exchange programme

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ASSESSMENT OF POLICIES ON NON-TIMBER FOREST PRODUCTS

Edna Maguigad

Country Study: Philippines

NON-TIMBER FOREST PRODUCTS EXCHANGE PROGRAMME – ASIA
2020

Cover Photo:
Processing of Roselle tea in Cuyambay, Tanay, Rizal
Erwin Mascarinas/NTFP–EP Philippines

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EXECUTIVE SUMMARY

Tropical jungle rainforest in Central Palawan
Photo: Vyacheslav Argenberg

This paper assessed the policies and the regulatory environment of non-timber forest products (NTFPs) in the Philippines. The growing economic importance of NTFPs in the Philippines can be seen in the increasing collection of forest charges derived from them. There has been an increasing value of forest charges collection attributed to NTFPs over the past decades. In community-managed forest areas, NTFPs remained to be a viable source of livelihood in the country. To date, there are several policies and legislations issued that involves NTFPs, which have their own strengths and weaknesses. Certain policies provide for rules and regulations governing the disposition, harvesting, development, and utilization of forest products, including NTFPs. These policies allow for more opportunities in the sector.

There are several challenges, however. Most of these policies are either outdated or have limited coverage. Most of the policies are primarily for permitting and collection of forest charges and management is limited to requirements of harvesting volume, size, and some with inventory. All the policies have prohibited the gathering and harvesting of these NTFPs inside protected areas. At the country level, there is absence of an official classification of NTFPs. A comprehensive policy or a framework for NTFP development is also not in place and has been identified as one of the gaps to the development and sustainability of the sector; there is insufficient baseline data, and advances in research and development is not at par with existing policies.

The Department of Environment and Natural Resources (DENR) is the primary government agency responsible for the conservation, management, development and proper use of the country's environment and natural resources. Aside from DENR, several government agencies, special bodies (e.g. Palawan council for sustainable development), state colleges and universities, the private sector, civil society organizations and peoples' organizations are among the key stakeholders that play an important role in NTFP development and management. An inter-agency technical working group was constituted by the DENR to facilitate the development of a comprehensive NTFP policy framework focusing on standards of production, collection, harvesting and transport of NTFPs. The TWG agreed upon and proposed 5 major classification of NTFPs in the country: (1) Food, beverages and spices; (2) pharmaceutical, cosmetic and medicinal; (3) Industrial, chemicals and biochemicals; (4) Fibers & structural materials; and (5) animal-derived products.

Assessment of NTFP policies and regulations were conducted. In terms of community access to NTFPs for harvest, utilization, production and management, communities' access to NTFPs in forestlands is linked with existing tenure system and associated rights. DENR issues various tenure agreements in forestlands. These holders are required to submit to the DENR, management plans and work plans, which includes a socio-economic profile that illustrates the importance or use of NTFPs. In communities under the Community Based Forest Management Agreement (CBFMA), they have full access rights to forests and forest resources for 25 years renewable for another 25 years, and can designate areas for various uses, including NTFP plantation or processing. In protected areas, organized communities living in multiple use and buffer zones are given 25-year tenure security (PACBRMA) and can harvest NTFPs in non-restricted zones. Access rights to NTFPs is broader in scope for indigenous peoples due to the constitution of the

Indigenous Peoples Rights Act (IPRA), recognized right of ownership by virtue of native title over ancestral domains. While policies are generally positive for communities' access to NTFPs in forestlands, the policies are short on issues of overlap of tenure. Policies and practice are limited to subsistence and traditional or customary use in terms of harvesting and gathering of NTFPs.

Capacities and resources of the community to develop and update their management plan is quite a challenge. Management of NTFPs at the community level in social forestry and ancestral domain areas are in policy and should be in accordance with their management plans.

In terms of NTFP transport and trade, communities are required to apply to DENR for permits to harvest and transport of NTFPs from forestlands. Regulations on transport and commercialization of forest products and NTFPs are in place. The process is long, costly, and tedious and involves multiple government agencies other than the DENR, for instance the LGUs can also impose taxes and fees. The bureaucratic delay in issuing permit takes 10 times longer than intended in the policy.

On the recognition and protection of indigenous knowledge, systems, and practices on NTFP use and management, Indigenous Knowledge Systems and Practices (IKSPs) are threatened by lack of interest or other priorities of the indigenous peoples youth and the issue of ancestral domains issued with resource use instruments by the DENR that limits the primacy of IP rights.

For value addition and processing of NTFPs, various government institutions, NGOs and academe are involved in research to improve the income stream from NTFPs in the country. However, there is no comprehensive inventory or assessment of NTFPs to support research on value addition. NTFP research and development is limited and considered of low importance. The Department of Trade and Industry (DTI) has offices that help on value addition that is accessible to community enterprises.

Meanwhile, forest communities were not able to access the various trust funds to support their forest enterprises and NTFP development due to various technical issues in the national treasury. Some financing for NTFPs is also allotted by the law, for example, the Philippine Tropical Fiber Law.

Investment and partnership for NTFPs are government-driven or mandated, but this has not been effective in terms of bringing in needed support for NTFP enterprise development. The growing interests on NTFPs lacked the level of investment and partnership needed for scaling up.

Several cases and examples on the ground where policies provided bottlenecks and facilitated community forestry enterprises, trade and marketing and value addition for NTFPs have been presented. Some of the bottlenecks were experienced by the Samahan ng mga Palaw'ano sa Amas Brooke's Point (SPABP) in Palawan and Pigteponen livelihood center in Quezon province experienced lengthy and costly permitting. For the Macatumbalen CBFM & Coastal Association MABAFCOMA, a Community-Based Forest Management Agreement (CBFMA) holder in Palawan, is hindered by the lack of support to update their resource management plan and the lack of human resources for the DENR field office to support them.

Based on the analysis of the policies, the paper provided the following key recommendations to operate, enhance or develop NTFPs: (1) Comprehensive and inclusive resource inventory/assessment of NTFPs across the country with the participation of all community stakeholders; (2) Simplification and harmonization of existing rules and regulations governing the development, processing, management, utilization, transport and marketing of NTFPs; (3) Education and information and capacity building within DENR and key agencies on NTFPs and its economic and socio-cultural importance; (4) continuing the issuance of favorable policies and expanding social forestry/community areas; and (5) creation of a NTFP roadmap covering policy formulation, governance, field practices, capacity building, research and development and marketing of NTFPs.

INTRODUCTION

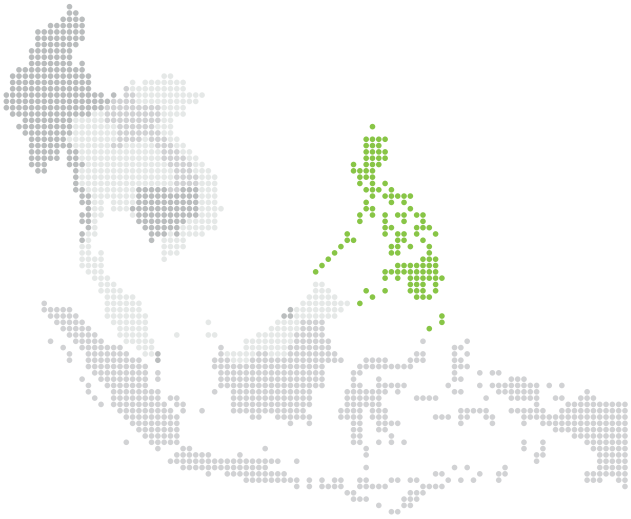
The Philippines is an archipelago composed of over 7,000 islands, of which approximately 2,000 are inhabited. It is divided into 18 regions, the three main island groupings are Luzon (including Manila) in the north, the Visayas in the center and Mindanao in the south. The Philippines is considered one of the fastest growing economies in the fastest growing region in the world, it has sustained an average annual growth of 6.3% from 2010 to 2016. It has not experienced a single year of negative GDP since 1998.[1] It ranked third after Malaysia and Poland as the world best country to invest or do business for 2019.[2] The forestry sector used to drive the economy decades before but now its services and industry, with the Gross Domestic Product from Agriculture and Forestry at 1.1% in 2018.[3] In terms of the Gross Value Added of forestry to the economy, the Philippines is targeting an increase from of 3% annually together with the increase in the volume of production of logs, almaciga resin and bamboo and increase in area of the production forest tree plantations and non-timber forest products (Philippine Development Plan, 2017-2022).

With a population of about 106 million people in 2018,[4] the Philippines is the seventh-most populated country in Asia and the 13th most populated country in the world. With about 2 million Filipinos added to the population every year over the past years, the population of the Philippines is projected to increase to 142 million by 2045 (NEDA, 2017). In 2004, 22% of the total country's rural population resided in areas officially classified as forestlands. This includes an estimated 14 to 17 million Indigenous Peoples (IPs) belonging to 110 ethno-linguistic groups.[5] They live in areas referred to as ancestral domains, majority of which are legally classified as forestlands.

Filipinos are constantly besieged by climate change and natural calamities (earthquakes, volcanic eruption) further exacerbating economic conditions for agriculture and forestry. Every year the country receives an average of 21 typhoons with increasing intensity, wind speed, and rainfall volume. Furthermore, extreme rainfall events and droughts are experienced in various parts of the country. It is one of the highly vulnerable countries in the world relative to climate change and disaster, ranked 1st in 2015[6] and in 2006; 5th in 2011; and the 4th most vulnerable over the past 20 years.[7] Typhoons, droughts and floods have already caused average annual damages of PHP 46.7 billion (about over USD 0.9 billion).[8]

In the latest 2006 land classification, 52.7% of the country's land area (15.8 million has) is officially classified as "forestland", with Palawan having the highest province with forestland at 1,035.926 has, followed by Agusan del Sur at around 674,922 has. The region of MIMAROPA, where Palawan is part of, has the highest forestland area in the country. The country's total forest cover in 2015 was estimated at 7.014 million has, where 28.9% (2,028 M has) is closed forest and 66.8% (4,683 M has) is open forest and 4.3% (303,388 has) as mangrove forest.[9] Palawan is ranked first in terms of forest cover.

The Philippines Biodiversity Strategy and Action Plan (PBSAP) reported that between 1934 and 1990, the country lost 10.9 million ha of forest cover or an average annual loss of 194,000 ha. Of this area, 10.37 million ha or 95% was converted to other land uses while 0.52 million ha were damaged by logging. While the bulk of deforestation was caused by logging at 40%, the other drivers are: forest conversion for agriculture, 20%; charcoal making and fuelwood gathering 12%; mining 8%.[10]



1 https://www.investasian.com/2018/12/22/best-countries-invest-asia-2019/
2 https://ceoworld.biz/worlds-best-countries-to-do-business-in-2018/
3 https://psa.gov.ph/regional-accounts/grdp/highlights
4 http://www.worldometers.info/world-population/population-by-country/
5 UNDP Fast Facts. can be retrieved from http://www.ph.undp.org/content/philippines/en/home/library/democratic_governance/FastFactsIPs.html
6 Accessed at https://germanwatch.org/en/download/10333.pdf
7 Philippine Movement for Climate Justice, 2015
8 Philippines Statistical Yearbook. https://www.psa.gov.ph/tags/philippine-statistical-yearbook
9 Philippine Forestry at a glance, 2018. DENR-FMB
10 REDD+ policy study on Analysis of the drivers of deforestation

Philippine forests provide timber and non-timber products totaling $100 million in net benefits yearly.[11] Critical watersheds support various hydro and geothermal power facilities that supply at least 35% of the country's energy requirements. However, the forestry sector contribution to the economy declined, from a gross value added of 36.7% in 2013 to 4.9% in 2014 and further slipped to negative 26.7% in 2015.[12] This is attributed to the issuance of Executive Order No. 23, s. 2011,[13] a moratorium on the cutting and harvesting of timber in natural and residual forests. The government sees this measure as an investment to protect the remaining forest, sustain the various ecological services they provide, allow natural regeneration of residual forests and development of plantation forests.

In 2017, the Philippines imported USD 2.04 billion of forest-based products broken down as 59.8% paper and articles of paper and paper board; 11.1% other wood-based manufactured articles; 10.3% plywood and plywood veneered panels; 6.7% forest based furniture and 4.3% pulp and waste paper.[14] The imported forest-based products represent 2.21% of the total country imports. In terms of exports of forest-based products, it is lower at 1.74 Billion USD with the bulk of the exports (70.1%) is other wood-based manufactured article.

In 2014, Philippine exported forest-based product to ASEAN countries was a mere 1% of while Japan got 83%, this is composed of builder's joinery and carpentry of wood including cellular wood panels, assembles flooring panels, shingles and shakes.[15]

The poverty incidence or falling below the minimum level of income deemed necessary to meet basic needs for living in the Philippines, is recorded at 21% to 34%, and is consistently recorded high among farmers, fishermen and children, self-employed and unpaid family workers and women.[16] The Philippine Masterplan for Climate Resilient Forestry Development (2016) targets to reduce 50% poverty incidence in the uplands within 15 years, and one of the strategic priority programs identified for this is community based forest management strategy. In community-managed forest areas, a viable source of livelihood is the potential of non-timber forest products (NTFPs), also referred to as ordinary minor products (OMP) under the Forestry Code and DENR policies. Being still considered as minor forest products, data collection is also limited. In 2018 DENR shows that almaciga resin, production of 204,476 kilograms, while other NTFPs traded includes anahaw leaves and poles, bamboo poles, nipa shingles and unsplit rattan.[17] Of the recorded almaciga production, 100% originates from MIMAROPA region. No other data of NTFP is officially recorded by the field offices of the Department of Environment and Natural Resources (DENR) except for these five. The data is generated due to the payment of forest charges.

The growing economic importance of NTFPs in the Philippines can be seen in the increasing collection of forest charges derived from them. Forest charges are a fixed amount of taxes collected for each category of timber and non-timber products on the basis of the FOB market price. In the early 1990s, NTFPs (or also referred to NWFPs) accounted only for less than Php3M or roughly 2% of forest charges collected from forest-derived products, and in Year 2000, it rose up to 6.34% but declined in 2006 to 3.22% (Razal & Palijon). In 2016, collected forest charges from the four NTFPs (almaciga resin, bamboo poles, split and unsplit rattan) amounted to 3,384,971 million pesos, which is one million pesos higher than in 2015. (PFS, 2016) Notably for the first time in history, forest charges from NTFPs are higher than round wood in 2012 to 2014.

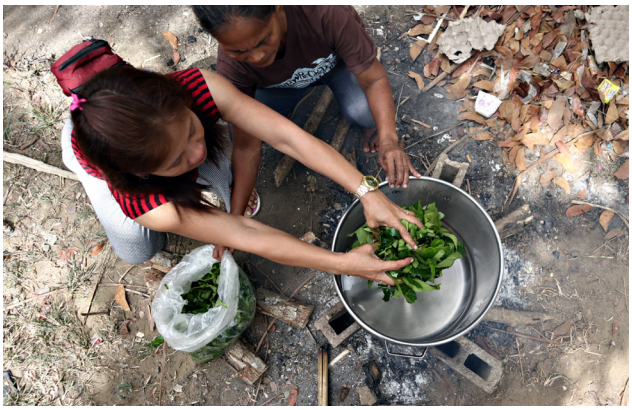
View of the Sierra Madre mountain range
Photo: Brown et al, distributed under a CC BY 3.0 license

12 Philippine Development Plan (PDP) 2017-2022 can be retrieved from http://pdp.neda.gov.ph/wp-content/uploads/2017/01/PDP-2017-2022-07-20-2017.pdf, p 110
13 Executive Order No. 23, Series of 2011, Declaring A Moratorium On The Cutting And Harvesting Of Timber In The Natural And Residual Forests And Creating The Anti-Illegal Logging Task Force, accessed from http://www.officialgazette.gov.ph/2011/02/01/executive-order-no-23-s-2011/
14 Philippine Forests at A Glance, 2018, DENR- Forest Management Bureau
15 http://www.fao.org/fileadmin/user_upload/rap/Asia-Pacific_Forestry_Week/doc/Stream_1/ST1_23Feb_Sibucao_Trends_in_world_trade.pdf
16 http://psa.gov.ph/poverty-press-releases
17 Philippine Forests at a glance. 2018 edition. DENR -FMB

ASSESSMENT OF POLICY & REGULATORY ENVIRONMENT ON NON-TIMBER FOREST PRODUCTS (NTFPs)

The first comprehensive legislation on forest resources was the **Act 1148** or the **Forest Act (May 7, 1904)** passed by the United States Congress in the time that the Philippines was under the United States. The Act was instituted primarily to manage the cutting, collection and removal of forest resources (timber, firewood, gums and resins and other forest products) on a commercial scale by the American government. This was replaced by the **Revised Forestry Code or Presidential Decree 705 in 1975**. In both legislation, the term NTFPs and non-wood forest product are not used, however provisions of PD 705 distinguish timber from forest products and defined for the first time what is a forest product. PD 705 states that forest products mean timber, pulpwood, firewood, bark, tree top, resin, gum, wood, oil, honey, beeswax, nipa, rattan, or other forest growth such as grass, shrub, and flowering plant, the associated water, fish, game, scenic, historical, recreational and geologic resources in forest lands (Section 3q, PD 705). PD 705 still largely maintains the framework of extraction of forest resources by industry but on its preambular statements emphasized on protection, rehabilitation and development of forest lands for the continuity of their productive condition. The overarching framework of the Forestry Code is state ownership of natural resources including state control and supervision over its exploitation, development and use. Utilization of forest resources is allowed as a privilege by the state through permits, licenses and concessions.

Talisay leaves used as natural dye for t-shirt designs
Photo: Erwin Mascarinas/ NTFP–EP Philippines



Under the same policy and legal framework, the first policy that involves NTFP was issued, **Forestry Administrative Order No.11 (1970)**, the policy laid down rules and regulations governing the disposition, harvesting, development, and utilization of forest products, identifying the minor forest products that require permits and impose forest charges for their harvest. The policy allows poor residents without communal forests to extract forest products for their personal use.

In the 1980s, a program called **Integrated Social Forestry Program (ISFP) under Presidential Letter of Instruction (LOI) 1260**,[18] started recognizing occupants and landless farmers in the forest land community programs. Promoting timber has in effect made known other forest products aside from timber which are important for community livelihoods. This community forestry started until it became a small program within the forest bureau to legalize the increasing occupation of people in the forest areas.

With the **1987 Constitution**, the provisions on state ownership of natural resources including state control and supervision over its exploitation, development and use has to be interpreted together with new provisions such as such as application of the principle of agrarian reform or stewardship in the "disposition or utilization of other natural resources" and the state recognition of the rights of the indigenous people to their ancestral lands and their ancestral domains.[19] These ancestral lands and domains

18 Presidential Letter of Instruction 1260, http://www.officialgazette.gov.ph/downloads/1982/07jul/19820728-LOI-1260-FM.pdf

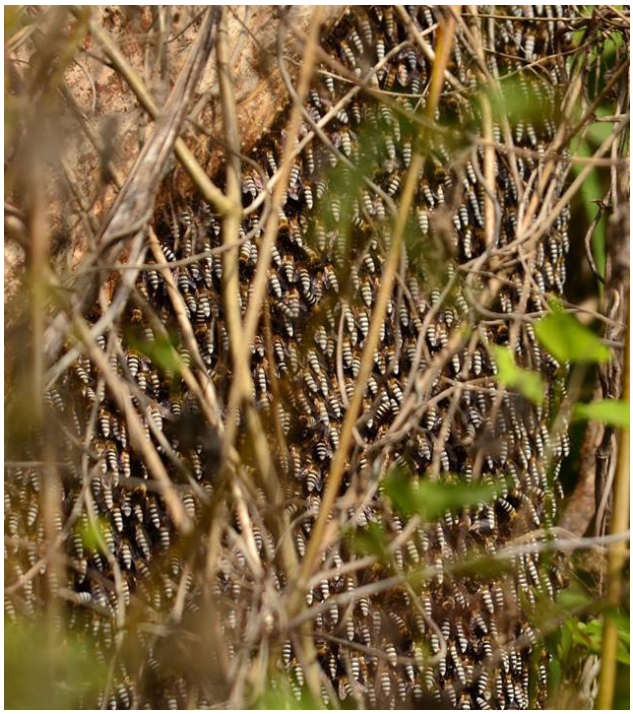
19 Section 5, Article XII, 1987 Constitution "The State, subject to the provisions of this Constitution and national development policies and programs, shall protect the rights of indigenous cultural communities to their ancestral lands to ensure their economic, social, and cultural well-being. The Congress may provide for the applicability of customary laws governing property rights or relations in determining the ownership and extent of ancestral domain."

are mostly classified as forest lands; and NTFPs abound in these areas and are economically important for indigenous peoples.

Pursuant to the mandates under the Constitution, an **Indigenous Peoples' Rights Act (IPRA)** was passed which recognized native title[20] and the indigenous concept of ownership[21] of Indigenous Cultural Communities and Indigenous Peoples (ICCs/IPs). The law states that ancestral domains are ICCs'/IPs' private but communal property, which belongs to all generations and shall not be sold, disposed nor destroyed. The ancestral domain includes with it resources, which necessarily includes forest products such as NTFPs, which under the IPRA is owned by the community. On the other hand, natural resources are regulated by the DENR but there is no explicit policy issued on harmonizing IPRA and the Forestry Code and relevant administrative order, in effect the applicable rule for harvesting NTFPs through permitting system still applies to indigenous peoples in ancestral domains.

In July 19, 1995 President Fidel Ramos issued **Executive Order (EO) No. 263, Adopting Community-Based Forest Management as the National Strategy to Ensure the Sustainable Development of the Country's Forestlands Resources.** In the protected areas, EO 263 together with the National Integrated Protected Areas Law (NIPAS) serves as the overarching legal framework for CBFM implementation. Under the CBFM program, the People organizations are issued tenure for 25 years renewable for another 25 years, with the requirement to come up with a management plan called Community Resource Management Framework (CRMF). The procedures is laid down under **DENR Administrative Order (DAO) No. 1996-29, Rules and Regulations for the Implementation of Executive Order 263 and DENR Memorandum Circular (DMC) 1997-12**, or the **Guidelines for the formulation of the CRMF**[22] and Annual Workplan for Community-Based Forest Management Area. The CRMF can serve as management plan for NTFPs, an initial business plan as well as interim harvesting permits for NTFPs. However, FMB stated that in 2016, less than 50% of the CBFMA holders have completed their plans, hence a simplified guidelines was issued **FMB Technical Bulletin 20, 2016**. Livelihood or enterprises and market information systems are two of the components within a CRMF and harvesting and utilization of NTFPs are included as livelihood/enterprises. Community forestry as strategy for forest protection and regeneration, but there is a wider perspective beyond protection, and this encompasses building sustainable community enterprises around forests, particularly using NTFPs.

Apis dorsata
Photo: Erwin Diloy/
NTFP–EP Philippines



As observed by Razal and Palijon (NWFP, 2009), NTFPs have been evolving in the last century, from being considered minor forest products to the use of the term NTFPs from as seen from 2005 to date in the Philippine Forestry Statistics. The official forestry related data sets coming from the Forest Management Bureau of the DENR. The PFS defines NTFP as all biological materials and derivatives other than timber

20 Section 11, IPRA, Section 11."Recognition of Ancestral Domain Rights. - The rights of ICCs/IPs to their ancestral domains by virtue of Native Title shall be recognized and respected. Formal recognition, when solicited by ICCs/IPs concerned, shall be embodied in a Certificate of Ancestral Domain Title (CADT), which shall recognize the title of the concerned ICCs/IPs over the territories identified and delineated"

21 Section 5, IPRA Section 5. Indigenous Concept of Ownership. - Indigenous concept of ownership sustains the view that ancestral domains and all resources found therein shall serve as the material bases of their cultural integrity. The indigenous concept of ownership generally holds that ancestral domains are the ICCs/IPs private but community property which belongs to all generations and therefore cannot be sold, disposed or destroyed. It likewise covers sustainable traditional resource rights

22 https://policy.denr.gov.ph/pol-1996/dao29.pdf

which are extracted from forests for human use. This is used synonymous to non-wood forest product.

In 1984, Bureau of Forest, BFD Circular **"Guidelines Governing the Issuance of Non-timber Forest Products License to Collect/Gather Honey and Beeswax"** was issued which allowed honey gathering in any forestland except experimental forest, national parks, wilderness areas, with a minimum area of 2,000 hectares. There is a required appraisal by the CENRO and a management plan approved by the regional director as a requirement for the license to gather/collect. The duration is five (5) years, but this policy is not used nor even known to CENRO employees.

In between the issuance of FAO 11 in 1991, referred as the NTFP mother policy, up to now, key NTFP policies have been issued but dealt with specific species (rattan, anahaw, oleoresin and honey) and with the primary purpose for regulation of the resource mainly through licensing and imposition of forest charges.

On rattan, **DENR Administrative Order No. 04, Series of 1989 or Revised Regulations Governing Rattan Resources and Memorandum Circular No. 2001-08 on the Renewal of Expired Rattan Cutting Contracts** laid down the permitting process and management of the resource in terms of harvesting volume and sizes. The importation of rattan poles is encouraged while its exportation is prohibited. The rattan cutting contract has a duration of 10 years and is renewable for the same duration. For anahaw, a palm species, the policy is **DENR Administrative Order No. 2000-64** or **Regulation in the Cutting/Gathering and/or Utilization of Anahaw**. Anahaw (*Livistona rotundifolia*) is mainly used for flower arrangements and fan-making and the mature anahaw for roofing purposes together with rattan and bamboo. (Razal & Palijon, 2009). The permit is for a period of one year and is applied from the DENR Regional Executive Director.

There is also **DENR Administrative Order No. 18 dated May 25, 1994**, prohibiting the unauthorized cutting of edible fruit bearing trees within forest areas. It has identified 16 fruit trees and a general prohibition for all other trees that bear fruits which can be used for human and wildlife.

The **Wildlife Act (Republic Act 9147)** provides for guidelines and procedures on the protection, management and use of wildlife resources, and also covers bioprospecting. Some NTFP resources such as almaciga is listed here as vulnerable species.

With these specific policies on NTFPs, it can be observed that these are primarily for the permitting and collection of forest charges and management is limited to requirements of harvesting volume, size, and some with inventory. The duration of utilization permit varies such as 10 years for rattan, five years for honey, three years for oleoresin and one year permit for anahaw. All are renewable for the same duration of the original permit as long as certain conditions are met. All of the policies have prohibited the gathering and harvesting of these NTFPs inside protected areas covered areas while harvesting in inside titled private lands shall no longer require a cutting permit. Most of these policies were issued before IPRA in 1997.

In areas under social forestry such as those of Community-Based Forest Management Agreements, **DAO 96-26 Revised guidelines governing the harvest and transport of planted trees and NTFPs within social forestry areas** and **DENR Administrative Order No. 2000-29 dated March 14, 2000**, were issued. The latter provides requirements for CBFM holder to utilized forest products in the area, including NTFPs, for commercial: (1) an affirmed Community Resource Management Framework, (2) Approved Annual Work Plan, (3) an Environmental Clearance Certificate and (4) Resource Use Permit. The Natural Resources Development Corporation (NRDC), an office with DENR was tasked to assist the CBFM holders in the processing, marketing and disposition of forest products. Years after, very few CBFM holders would actually harvest their forest products due to the difficulty and high transactions costs of these requirements. In the case of timber, the harvesting never happened due to a series of moratoriums.

The varying policies in NTFP emanate from its wide definition as well as absence of official classification. There are already various classification systems for NTFPs developed by Brown and Fischer (1920) and FAO (1991). For FAO, NTFPs may be classified into eight (8) categories namely, food; forage; pharmaceuticals; toxins; aromatics; industrial chemicals and biochemical; fiber; and ornamentals. There is classification system proposed by Razal and Palijon (2009) includes two major categories: **Non-wood** and **non-timber** forest products.

NON-WOOD PRODUCTS	NON-TIMBER PRODUCTS
• Plants producing medicinal and cosmetic products • Plants that yield extractive or chemical products • Plant sources of edible fruits and nuts	• Resin producing plants • Dye and tannin-producing plants • Gum and latex producing plants • Sources of essential oils • Sources of seed oils

Aside from the absence of an official classification, a comprehensive policy or a framework for NTFP development is also not in place and has been identified as one of the gap to the development and sustainability of the sector. The Forest Management Bureau has acknowledged that regulations on NTFPs are not harmonized leading to inconsistent interpreta-

tion and implementation of policies on the ground. In terms of information, there is insufficient baseline data. The approach is commodity-based and conducted by different agencies/institutions. Finally, it was also observed that advances in research and development is not at par with the existing policies. In 2016, DENR constituted interagency technical working group to facilitate the institutionalization of standards on the production, collection, harvesting and transport of NTFPs and come up with a comprehensive framework policy for the conservation and sustainable use of NTFPs. One of the key discussions of the TWG is defining the NTFP commodity classification based on Philippine setting. The five classification as suggested by Dr. Razal to the TWG was agreed upon: source of fiber or structural materials; pharmaceutical, cosmetics, medicinal products; chemical products; food/edible products; and animal derived products.

Proposed NTFP classification by the NTFP-TWG, November 2016

FOOD, BEVERAGES AND SPICES	PHARMACEUTICAL COSMETIC & MEDICINAL	INDUSTRIAL CHEMICALS & BIOCHEMICALS	FIBERS & STRUCTURAL MATERIALS	LIVE PLANTS & ORNAMENTALS	ANIMALS, ANIMAL PRODUCTS/ BYPRODUCTS
• Wild, domesticated semi-domesticated plants • Usable weeds • Mushrooms • Edible roots, tubers, bulbs, stems, leaves, shoots, flowers, fruits, sap, pith, seeds, etc. • Cereals • Vegetables • Edible fats and oils • Spices and flavorings • Salt substitutes • Sweeteners • Meat tenderizers • Beverages • Honey • Vinegar • Sugar • Thirst quenchers • Wines	• Drugs, anesthetics, ointments, lotions and purgatives for both human and veterinary use • Essential oils for cosmetic and perfume industries • Unguents • Incense	• Non-edible fats and oils • Naval stores • Waxes, gums and latex • Dyes • Resins • Tannins • Biochemicals for plastics and coatings, paints and varnish industries • Toxins • Preservatives	• Cloth • Matting • Cordage • Basketry • Brooms • Stuffing for pillows • Cork • Pulp • Paper • Engineered bamboo • Bamboo poles • Rattan • Leaf products (nipa, anahaw, buri shingles) • Furniture made of non-timber based raw materials • Handicraft materials • Vines	• Aesthetically pleasing plants for horticultural and amenity planting • Cut and dried-flower trades	• Food products • Preserved animals • Leathers • Feathers • Birds nest, eggs, • Collectible materials (birds, butterflies, gecko, insects, reptiles, etc.)

More recently, there are new policies enacted for Micro, Small and Medium Enterprises (MSMEs) that could provide support to entrepreneurial programs particularly for NTFPs. The **Philippine Innovation Act (RA 11293 which was passed last April 17,2019)** and the **Innovative Startup Act (RA no. 1137 April 26,2019)**.

Republic Act 11293 or **"An Act Adopting Innovation as Vital Component of the Country's Development Policies to Drive Inclusive Development, Promote the Growth and National Competitiveness of Micro, Small and Medium Enterprises"** was passed. The law aims to generate and scale up action in all levels and areas of education, training, research and development towards promoting innovation and internationalization activities of MSMEs as driver of sustainable and inclusive growth. A National Innovation Agenda and Strategy Document will be developed under this act which will include strategies for improving inclusive innovation programs that are targeting the improvement of welfare of the lower income and marginalized communities including women. The policy will also work on removing barriers to innovation such as elimination of regulatory barriers and cut red tape to boost innovation.

The Act Providing Benefits and Programs to Strengthen, Promote and Develop the Philippine Startup Ecosystem or the Innovative Startup Act is a policy will promote programs, benefits and incentives for startups and startup enablers through the national government agencies as well as the initiatives extended by non-government organizations (NGOs) in partnership with any national government agency. Startup Grant Funds (SGF) will be created under each of the three agencies namely: **(1) Department of Science and Technology, (2) Department of Information and Communications Technology and (3) Department of Trade and Industry.**

INSTITUTIONAL ACTORS AND STAKEHOLDERS AND THEIR ROLE AND CONTRIBUTION IN NTFP UTILIZATION, PRODUCTION, PROCESSING, MANAGEMENT AND TRADE

The DENR is the primary government agency responsible for the conservation, management, development and proper use of the country's environment and natural resources, including forest, grazing lands and of the lands of public domain. (Executive Order 192, 1987). Within the DENR, three bureaus at the national level are primarily involved with NTFPs: **(1) DENR-Forest Management Bureau, (2) Biodiversity Management Bureau (BMB) and (3) Ecosystem Research Development Bureau (ERDB)**.

At the national level, DENR – Forest Management Bureau (FMB) is the primary office within the DENR in charge of forestry protection, development, occupancy, management and conservation of forest lands and watersheds. FMB is also in charge of crafting of policies pertaining to NTFPs, capacity building of DENR personnel on NTFPs, development of modules on sustainable livelihood options involving NTFPs and publishing of the Philippine Forestry Statistics which contain information on production trade, price, and revenue from NTFPs. The ERDB is in charge of the inventory of various NTFP resources and conduct researches on the propagation and production of NTFPs. They also maintain the Bambusetum and the museums for rattan and bamboo. Both FMB and BMB facilitates the issuance of community forestry agreements of forest dependent peoples organizations where community livelihood on NTFPs thrives in forestlands and protected areas, respectively.

At the local level, the regional field offices of the **DENR (Regional Office)** coordinates and oversees the implementation policies, regulations, programs and projects on environment and natural resources, while the offices under, **the provincial office (PENRO) and community level (CENRO)** implements all the DENR programs including those related to community livelihoods related to NTFPs. In most NTFP policies, the Regional Office issues the harvesting and transport permit based on the appraisal, evaluation or recommendations from the CENRO and PENRO.

Aside from the DENR, the following offices and stakeholders are involved in NTFP development and management:

AGENCY/STAKEHOLDER	ROLE IN NTFP DEVELOPMENT AND MANAGEMENT
Department of Science & Technology (DOST) – Forest Product Research & Development Institute (FPRDI)	• Maintains a depository of technical information and research results on the properties, end-uses, process and protection of forest product and disseminate such information for the benefit of the industry and the general public • Issues publications on these studies (Technical notes, journals, field guides, etc.) • Development of standards for NTFP product and provide technical assistance to NTFP-based enterprises • Development of environmentally-friendly extraction processes from different plant sources • Conducts researches on identification, properties, processing and utilization of NTFPs • Design of equipment for processing various NTFPs

AGENCY/STAKEHOLDER	ROLE IN NTFP DEVELOPMENT AND MANAGEMENT
DOST – Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD)	• Implements a harmonized research and development agenda on Agriculture, Aquatic and Natural Resources Sector 2017-2022, which includes plans for listed NTFPs such as bamboo, rattan, sago, tiger grass, vines and other NTFPs • Support for the NGP includes: Production protocols for the propagation of quality timber and non-timber forest planting material and development of sustainable harvesting and post-harvest techniques/technologies and marketing strategies for timber and non-timber forest species/products.
Department of Agriculture – Philippine Fiber Industry Development Authority (PhilFIDA)	• PhilFIDA is mandated to promote the growth and development of the natural fiber industry (abaca, salago etc.) through research and development; production support; fiber processing and utilization; and standards implementation (fiber classification, grading, baling, tagging and marking) and trade regulation (licenses for traders, exporters, manufacturers and classifiers). • They also provide skills development trainings and workshops to improve the technical and entrepreneurial capabilities of stakeholders.
Department of Trade and Industry (DTI) (Board of Investments, Design Center of the Philippines, Bamboo Industry Development Council)	DTI is the executive arm of the government enabling business and empowering consumers. It handles business registration and provide incentives for SMEs involved in NTFPs and undertake industry road mapping. Key relevant offices under DTI are: **A. Small Business Corporation Group** which supports the development of small enterprises by promoting various modes of financing and credit delivery systems **B. Cottage Technology Center** providing technical expertise on NTFP management, development, processing, value chain analysis and marketability; and support for establishment of hubs **C. Design Center of the Philippines** which promotes industrial designs as a tool for improving the quality and competitiveness of Philippine products. It services the design needs and requirements of small and medium enterprises by providing services on product/package design, product technology demonstration, design & technical information, and library information on design-related topics. **D. The Philippine Bamboo Industry Development Council (PBIDC)** provides the policy and program directions for the stakeholders of the fast developing bamboo industry under Executive Order 879, 2010
National Commission on Indigenous Peoples (NCIP)	• Agency under the Office of the President with frontline services for the indigenous peoples, issues policies for their protection and link IPs with other government agencies on issues on use of natural resources in their ancestral domains, livelihood and enterprises concerns. • In NTFP permitting and even in informal access by third persons to ancestral domains, the requirement of securing Free and Prior Informed Consent (FPIC) should be present, and the NCIP's role is to certify if FPIC was indeed secured according to the IPRA.

AGENCY/STAKEHOLDER	ROLE IN NTFP DEVELOPMENT AND MANAGEMENT
Local Government Units (LGUs)	LGUs have the power to support NTFPs by providing enabling policies for NTFP development and support services for NTFP enterprises (business permitting, financial support services etc.). Under NTFP permitting system, they are required to provide clearance and endorsement of the applicant for DENR to processing the permit.
Palawan Council for Sustainable Development (PCSD)	• Multi-sectoral body in charge of the governance, implementation and policy direction of the Strategic Environmental Plan (SEP) for Palawan. It has issued resolutions on NTFP harvesting and management (such as on almaciga). • Processes the SEP clearance which is a requirement for NTFP permits
Philippine Institute for Traditional and Alternative Health Care (PHITAC)	• In charge of the promotion of quality, safe, effective, beneficial, accessible, and acceptable traditional and complementary medicine products, technologies, and modalities, as well as for the protection of the Philippine traditional medicine • It maintains the national electronic data base Philippine Traditional Knowledge Digital Library (https://www.tkdlph.com).
State College Universities (SUCs)	• SUCs such as the University of the Philippines Los Banos – College of Forestry and Natural Resources provides research and course promotion on NTFPs as well training and extension services. • There is also the Forestry Development Center which provides policy research and publication of books, brochures, and journal articles on NTFPs, amongst others.
Private sector	• There are individuals such as traders who acts as brokers or middlemen between community or individual NTFP enterprises and business. • There are also big associations engaged in NTFP products such as business like the Chamber of Furniture Industries of the Philippines and the Philippine Chamber of Handicraft Industry (PCHI).
Civil society organizations	• Non-government organizations which provide knowledge sharing and capacity building on NTFPs and support the development of community NTFP enterprises • Some are also involved in policy advocacy. The Non-Timber Forest Products Exchange Program – Philippines is an example and has the widest reach in terms of areas, number of beneficiaries and programs.
Peoples' organizations (Cooperatives and associations)	Forest dependent communities, usually tenure holders or indigenous peoples organizations who organized themselves to be community forestry enterprises. There are also regional and national federations of POs such as the Philippine Forest Honey Network and CBFM National PO Federation, the eco- textiles and almaciga associations.

Under the Philippine legal and policy framework, the participation of all sectors in national planning and developed is enjoined at all levels, community, local and national. Moreover, multi-sectoral process of collaboration is being practiced starting off from public posting and hearings of key policies and taxation measures related to NTFP policies.

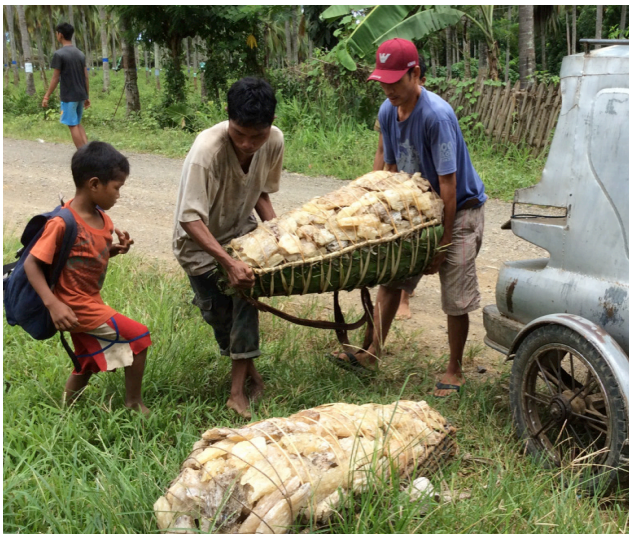
ASSESSMENT OF POLICIES AND REGULATIONS

An initial scan of the Strategic Action Plan (SAP) for Small and Medium Enterprises (SMEs) in ASEAN by NTFP–EP showed that the current policy environment in ASEAN for community forestry enterprises often hampers their growth rather than promote or support them (NTFP SME Study, 2017). The Philippines' policy environment could be a different story as it has a long history of social forestry programs, public participatory processes and respect for indigenous peoples' rights.

From the policy scoping in the previous section, we can conclude that there are a number of policies and regulation on NTFPs, which have their own strengths and weaknesses. They allow for more opportunities in the sector, even without a comprehensive framework for the utilization, management and development of NTFPs. In this section, these scattered policies are analyzed based on how they provide an enabling policy environment for community forestry enterprises or the opposite — endangering their local livelihood, traditions and sustainable resource management practices.

Assessment of the policies and regulations, its strengths, weaknesses, opportunities and gaps focused around these criteria:

I. Community access to NTFPs for harvest, utilization, production and management
II. NTFP transport and trade
III. Recognition and protection of indigenous knowledge, systems and practices on NTFP use and management
IV. NTFP value addition/processing
V. NTFP financing
VI. Investments and partnerships for NTFP development and micro, small and medium enterprises (MSMEs)



Almaciga hauling
Photo: SPABP

I. Community access to NTFPs for harvest, utilization, production and management

The communities' access to NTFPs in forest lands is linked with existing tenure system and associated rights. Tenure in the Philippines is defined as the "guaranteed peaceful possession and use of specific forest land area and the resource found therein covered by an agreement, contract or grant which cannot be altered or abrogated without due process" (Forest Management Bureau). Forest land, in this context is defined as land of the public domain classified as needed for forest purposes including both production and protection, and includes forest reserves, and forest reservation of the public domain. This term is alternately use with timber land (PD 705). Forest or timber land is one of the legal classification of lands under the Philippine Constitution. As a legal classification, forest lands neither reflects the use of the land nor its actual state. There are forest lands which are not anymore forested or forestland which has housing and other settlements.

State ownership of forest land and resources is the overarching framework however the Constitution recognizes principles of agrarian reform

and stewardship, and the rights of the indigenous people to their ancestral lands and domains. Indigenous people rights include their sustainable traditional resource rights, community intellectual property rights and indigenous knowledge systems and practices. In forestlands, the DENR issues the following tenure agreements: for corporations such as Integrated Forest Management Agreement (IFMA) or to organized communities or peoples organizations (PO) such as the Community-Based Forest Management Agreement (CBFMA) or the Protected Area Community Resource Management Agreement (PACBRMA) in protected areas. Socialized Integrated Forest Management Agreements (SIFMA) or to individuals such as the Forest Land Grazing Agreement (FLGMA) and the Certificate of Stewardship Contracts (CSC)s. These holders are required to submit to the DENR, management plans and work plans, which includes socio-economic profile which illustrates the importance or use of NTFPs

As discussed above, the Philippines has a long history of community forestry or social forestry as people were already residing in the forests, the program started with legitimizing forest land occupation then build up as a strategy for forest protection and regeneration, then programs for building sustainable community enterprises around forests. In communities belonging part of the CBFMA holders have full access rights to forests and forest resources as guaranteed under the agreement. As stated in the regulation, the CBFMA holder is granted exclusive occupation and use of the forestland covered by the CBFMA and the forest products therein. They can also designate areas for many uses such as NTFP plantations or processing and the organization can allocate and regulate resource use rights of the community members. Being the tenure holder for 25 years renewable for another 25 years, they can also contract with private and government entities or individuals for the development of portions or the entire CBFMA area, as long as these are consistent with the Community Resource Management Framework (CRMF). In exchange, the government makes the CBFM PO obligated to protect the entire forestland within the CBFMA area against illegal logging and other unauthorized extraction of forest products, slash-and-burn agriculture, forest and grassland fires, and other forms of forest destruction. Individual families who has stewardship certificates have the same access and utilization rights.

In protected areas, organized communities living in multiple use and buffer zones are given 25-year tenure security provided this will not pose a threat to the environmental integrity of the protected areas. These are the PACBRMA. They may also be allowed to harvest non-timber forest products like rattan, bamboo, vines, etc., in non-restricted zones of these areas.

On the other hand for indigenous communities, their access rights to NTFP is broader in scope and is in perpetuity as compared to other community groups of CBFMA or PCBRMA holders. The Constitution and the Indigenous Peoples Rights Act (IPRA) recognized right of ownership by virtue of native title over ancestral domains. Ownership rights includes the right to develop lands and "the right to benefit and share the profits from allocation and utilization of the natural resources found therein" but vested property rights within the ancestral domains already existing and/or vested.

The policies are generally positive for community access to NTFPs in forest land. However, policy is short when there are issues of overlap of tenure, such as when CBFMAs are issued in ancestral domains or when extractive and destructive resource rights such as mining rights are issued over an ancestral domain. In cases of the latter, community access rights are restricted, the miners to extract the mineral carries with it surface rights to cut down trees, where the entire NTFP resource base disappears. There are main safeguards against mining rights by the DENR, and that it is subject to the Environmental Clearance Certificate and FPIC. However in practice, it is mostly open pit, stripping off entire forest lands with trees and NTFPs, and exonerating traditional livelihoods based on forest resources.

The community access to be able to harvest and gather NTFPs, in policies and as well as in practice, is limited to subsistence and traditional or customary use. It also extends to some extent to traditional occupations. The rules differ once the community thinks bigger such as setting up NTFP enterprises. Hence, harvesting now falls under commercial extraction and when the forest resource leaves the community, the rules on permitting kicks in. The permit requires an approved management plan as well as the capacity and resources of the community to develop/update their management plan, which is quite challenging.

Management of NTFPs at the community level in social forestry and ancestral domain areas are in policy should be in accordance with their management plan, this is to ensure sustainability in terms of production. Efficiency and sustainability of the collection process and harvesting process are also considered. PO members are also expected to be aware and understand the many DENR regulations issued, but communities found this a constant challenge, NTFP management trainings are very limited. Management of NTFPs are challenging due to its many species and management can also species-specific. The ERDB proposes an open and closed season for NTFPs, to ensure sustainability, but would be practically hard to implement and monitor. This proposal will also affect many communities dependent on NTFPs all year long.

II. NTFP transport and trade

Emanating from the state ownership of forestland and forest resources, communities are required to apply to DENR for a permit to harvest then a permit to transport NTFPs from forestlands. In areas covered by **EO 224 series of 1987** and **EO 258 series of 1995 "vesting on the National Power Corporation (NPC) the complete jurisdiction, control and regulation over watershed areas and reservations surrounding its power generating plants and properties of said corporation"**, there is a separate guidelines on the terms and conditions of forest product gathering. In such areas, it is the Manager of the NPC Watershed Management Department that has the authority to issue permit and no longer DENR.

In the NTFP transport stage, the key considerations are the legality of source and the payment of forest charges. Private lands covered by existing land titles and by approved land applications are exempted from the payment of forest charges. Regulations on transport and commercialization (import and export) of forest products and NTFPs are in place the Philippines. Transporting NTFPs under DAO 07-1994 requires NTFP producers to obtain a Certificate of Non-Timber Forest Product Origin (CNFPO) or Certificate of Minor Forest Products Origin (CMFPO) or a Certificate of Verification (CoV) if harvested in harvested in public lands and private lands, respectively. This applies to all, even to the indigenous peoples transporting NTFPs from their ancestral domain, a land declared as private under IPRA.

These permits to transport is traced back to the permit to harvest, cut and gather the NTFP. The first step in the long list of requirements is the local government unit (LGU) endorsements, both from the barangay and municipal councils. In case the area is within a Certified ancestral land/domain claim, endorsement or waiver from the concerned indigenous communities/tribal people and lately certificate precondition from the National Commission of Indigenous People (NCIP). If an area overlaps with a protected area, an endorsement form the Protected Area Management Board (PAMB) is also needed. If the community applicant is from Palawan, An endorsement from the PCSD in the form of a SEP clearance is required to support the DENR application.

A Certificate of Minor Forest Products Origin (CMFPO) from DENR-CENRO issued per transport and it serves as monitoring strategy. Example of a CMFPO application process for almaciga is as follows:

> The community enterprise conducts a stock inspection and these stock inspection data is recorded and submitted to CENRO together with a request for inspection. After inspection, an auxiliary invoice is issued that shows the amount/ how many kilos of resin will be transported and forest charges is paid. The application is then Endorsement by CENRO to PENRO and then the PENRO issues the Certificate of Origin (CO). Then the paper is referred back to the CENR O for processing the CO and issuance of issue certificate of transportation agreement. This is the time the date of transport is decided. The agreement is notarized.

There are instances where aside from forest charges, there are other charges. The LGUs have the power of fiscal autonomy and by virtue of that can levy taxes and fees. In Agusan del Norte, a provincial ordinance was enacted in 2006 that exacts taxes from forest products being transported, similar to a nature of road users' tax (Docta and Razal). On top of this, there are also informal fees the enterprise is forced to pay along the transport route. Note that the current draft DAO on NTFPs does away with the application fee for permits. This is not the first time since it happened under DAO 1998-43: **Exemption of Community Based Forest Management Projects from the Payment of Administrative Fees. Section 64 of PD 705**, otherwise known as the **Forestry Reform Code of the Philippines**, the DENR Secretary is empowered to set and prescribed the payment of administrative fees. CBFM projects are hereby exempted from the payment of following administrative fees: Application Fee; License/Permit Fee Service Fee ; Rental Fee Others (e.g. Oath Fee, appeal fee and authentication fee).

In terms of taxation, which is collection of forest charges, no exemption for community enterprises, but this has evolved to be not the main issue of the community enterprises but the bureaucratic delay in issuing permit which takes 10 times longer than intended in policy.

However, this can be improved with the new law, **Republic Act 11032, Ease of Doing Business and Efficient Government Service Delivery Act of 2018**, amending the Anti-Red Tape Act of 2007. Under the law, all government agencies must complete transactions within the following mandatory time frames:

Simple Transactions: Applications and requests that require only standard ministerial action shall be processed within **3 business days**.

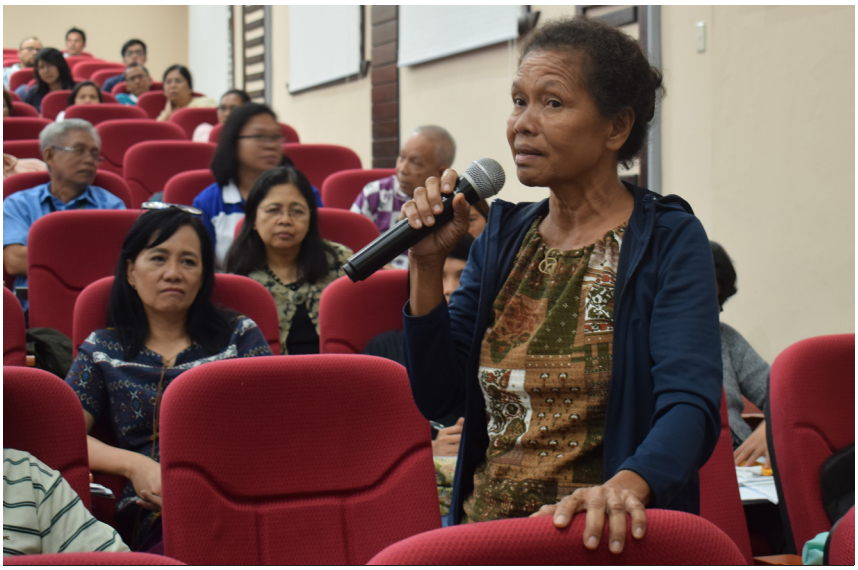
Complex Transactions: Applications and requests that require resolution of complicated issues shall be processed within **7 business days**.

Highly Technical Transactions: Applications and requests that require highly technical or specialized knowledge shall be processed within the period of **20 business days.**

Note that among 1,884 CBFMA holders and hundred peoples organizations and thousands of individuals engaged harvesting NTFPs, a mere fraction even reach the stage of applying for transport permit, as the application for harvesting permit takes a lot of time and requirements, to the extent that communities do away with doing the business legally and formally. To illustrate this case, the basic and simple requirement for CBFMA is a CRMF, this is their management plans formulated by the communities with their 25 year vision. However FMB states in 2016 (20 years and more since CBFMAs are issued), less than 50% of the CBFMA holders completed this requirement. In effect, more than half of the CBFMA holders are just exercising interim harvesting rights without those management plans.

The policies are in place, but policy issuance is just the first step, supportive measures to facilitate compliance must be also in place. For management plans, community needs data, human, technical and financial resources to guide their formulation, and there is very limited external support that PO can avail of. For harvesting and transport permits, communities need an efficient way for government to process the permits. For sustainability of the NTFPs, documentation and inspection of volumes of production and harvest should be accurate and efficient to ensure that all NTFPs are coming from legal sources, there is sustainable harvesting protocols and regeneration plans are in place.

III. Recognition and protection of indigenous knowledge, systems and practices on NTFP use and management



Conchita Calzado, IP leader in Quezon raising issues and concerns on their almaciga permit during the Policy Forum on NTFPs
Photo: NTFP–EP Philippines

As mentioned above, the Philippines has an estimated 14 million indigenous peoples (IP) belonging to 110 ethno-linguistic groups.[23] The highest concentration of indigenous peoples are in Mindanao (61%) and followed by the Cordilleras (33%).[24] The extent of ancestral domains are with approved Certificate of Ancestral Domain (CADT) as of 2019, are 245 covering 5,735,891 hectares. The indigenous peoples, particularly those in rural areas remain largely poor, their geographically isolated location makes government services and facilities such as health and education inaccessible, resulting to IPs' high illiteracy and high vulnerability to diseases. There is also serious lack of ethnography. The specific location, governance systems, indigenous knowledge, systems and practices are not completely documented and organized. Without specific data, policies and programs are not responsive and appropriate to the needs of the IPs, and has led their exclusion in national policies, plans and programs. The lack of data extends to IKSPs relating to forest resource and non-timber forest products. Indigenous peoples are among the disadvantaged sectors identified under Republic Act 8425 or Social Reform and Poverty Alleviation Act, because of their vulnerability to exploitation and discrimination. Extractive activities (i.e. mining and logging), "development work" (e.g. large dams, hydroelectric dams), in-migration, territorial control mechanisms (e.g. expropriation of land, imposition of territorial boundaries, and other policies), among others, lead to displacement and place great pressure on the preservation of their resources and way of life (Philippine Development Plan, 2017-2022).

IPRA explicitly laid down rights of IPs in terms of resource use, and Section 57, IPRA states that the "indigenous peoples shall have priority rights in the harvesting, extraction, development or exploitation of any natural resources within the ancestral domains, this includes forest resources" and NTFPs. Subsequent environment legislation such as the protected area

23 National Commission of Indigenous Peoples Strategic Directions (2016-2022).
Note: Ethnicity variable was added in the 2010 census by the PSA but the results of 8 million IP was contested by NCIP and other groups. No data gathering process of the enumerator was questioned; UNDP uses the estimate of 14 to 20 million IPs.
24 UNDP Fast Facts

law recognizes indigenous communities ownership rights to their forestland and resources, which necessarily includes sustainable traditional resource rights of IPs. Sustainable Traditional Resource Rights refers to the rights of ICCs/IPs to sustainably use, manage, protect and conserve: a) land, air, water, and minerals; b) plants, animals and other organisms; c) collecting, fishing and hunting grounds; d) sacred sites; and e) other areas of economic, ceremonial and aesthetic value in accordance with their indigenous knowledge, belief systems, and practices (IPRA IRR).

The IP rights to their ancestral domains is also recognized under the **2018 Expanded NIPAS** law where "ancestral domains and customary rights shall be accorded due recognition "(Section 13, E-NIPAS) and their "responsibility govern the area based on their IKSPS and customary law, with full and effective assistance with DENR, NCIP and other government agencies (Section 12, E-NIPAS, R.A 11038). This national policy ideally is a basic principle in harmonizing/interfacing management plans of the ancestral domains plans protected areas.

In protected areas, NTFP collection in strict protection zones shall be allowed only for research, it is explicit and if taken together with other provisions of the law, traditional use of NTFPs or the utilization of NTFPs by indigenous people, in accordance with written or unwritten rules, usage, customs and practices traditionally observed, accepted and recognized by them, should also be allowed. However, this is not the case on the ground, except in Palawan, where a PCSD Resolution no. 04-233 allows IP communities to gather almaciga resin in core zones, in recognition of traditional NTFP gathering as basic source of livelihood.

In the past, DENR and NCIP had jointly developed an approach to dealing with forestry practices and IKSPs. This is in the **Joint Administrative Order JAO 2008-01: Guidelines and Procedure for the Recognition, Documentation, Registration and Confirmation of all Sustainable Traditional and Indigenous Forest Resources Management Systems and Practices (STIFRMSP)** of Indigenous Cultural Communities/ Indigenous Peoples in Ancestral Domain/Land. However, only one or two IKSPs on forestry has been recognized, and this is the Muyong. Muyong is a practice that is already well established, documented and recognized, even without undergoing the STIFRMSP process.

Inventions, processes and products using traditional knowledge on NTFPs are afforded protection by the IPRA in terms of community intellectual property rights and other tools under the Intellectual Property Code. In effect these IKSPs can be treated as property rights where the holders have a say over access and use of TK by third parties. Enterprises using IKSPs in their NTFP products and processing can also apply for trademarks, individual or collective, patents, geographical indicators, to prevent unauthorized or inappropriate uses of their IKSPs.

If NTFPs are used in medicine, this will be under the ambit of **Republic 8423, or the "Traditional and Alternative Medicine Act (TAMA) of 1997**, where one of the its objective is to "formulate policies for the protection of indigenous and natural health resources and technology from unwarranted exploitation, for approval and adoption by the appropriate government agencies". It has also created a Philippine Institute of Traditional and Alternative Health Care under the Department of Health as the enabling body to promote the law through research and development, policy formulation and capacity building. They recognized IKSP used by traditional healers and attempts to deep dive process, starting off with sharing information through the online TK digital library.

The IKSPs are also threatened by the lack of interest or other priorities of the youth. There are IKSPs in preparing the abaca and weaving it to Hinabol and Tinalak by the Higaaonon and T'boli. In a similar manner the gathering of almaciga by the Palawan and the foraging for food by the Agtas are not just NTFP livelihood activities but are also passing on traditions. With the influence of mainstream or outside culture, including migration to the urban centers of the next generation threatens the survival of these IKSPs.

A more pressing issue on this is when the ancestral domains are also areas issued with resource use instruments by the DENR under more powerful actors. While there is a strong recognition of the primacy of IP rights and their IKSP in the management and utilization of the forest resources in the area, the same policies requires IPs to recognize these rights until they expire, with the right to renew as long as there FPIC secured.

IV. NTFP Value addition/processing

Major NTFPs such as bamboo, rattan, almaciga, elemi gum are mostly traded raw by community enterprises. Value adding and processing of NTFPs requires research and ideally my government agencies mandated to do so, such as PCARRD, FPRDI or PTRI. In some cases there are NGOs and academe also involved in research that targets improving income streams from NTFPs. There is no comprehensive inventory/assessment of NTFPs that could better assist research of the qualities of NTFPs to be used for value addition and processing. A major stumbling block to NTFP research and development, which is key to value adding, is still the perceived low importance and economic value of NTFPs, except for some like Bamboo which has been consistently supported.

There instances where government through legislation mandates use and value adding of specific resources and some of them are NTFPs, examples are the **Republic Act No. 9242 or the Philippine Tropical Fabrics Law of 2004 and the Executive Order 879, the Philippine Bamboo Industry Act**. The Tropical Fabrics Law prescribing the use of natural fibers produced, spun, woven or knitted and finished in the country for official uniforms of government officials and employee. Under the law, the tropical fabrics are defined as those containing natural fibers produced, spun, woven or knitted and finished in the Philippines.

The Department of Trade Industry has offices that helps on value adding that is accessible to community enterprises. The DTI Regional Operations Group provides such support such provision of Shared Service Facilities (SSF), Marketing linkage and promotion, Raw materials manipulation. DTI also provides support on product development and design through the Design Center of the Philippines (DCP).

V. NTFP Financing

In policy, the first financing scheme envisioned to support forest enterprises and NTFP development in the form of **Rattan Special Deposit**, it is collected from holders of rattan cutting permits since 1995. It is treated as a trust fund under general accounting rules of the National Treasury. However, this fund has not been accessed due to the technical issues with the National Treasury rules. In a similar manner, a trust fund under the CBFM program suffered the same fate. As the CBFMA is a production sharing agreement with the government with a mandated benefit sharing ratio of 75% and 25%, in favor of the CBFMA holder. Half of the government share or 12.5 percent is deposited in a **CBFM Special Account**. The CBFM SA shall support the CBFM Strategy, provide financial and professional incentives to deserving communities. Under **DAO No. 1998-44 or the Guidelines on the Establishment and Management of the CBFM Special Account**, it can be used for POs to support the formulation of their CRMF, its implementation and for enterprise development. No fund has flowed from the CBFM SA to the people organization because of technical rules of accounting.

There also envisioned community trust funds under IPRA that may directly support NTFPs, and this is the **Fund from the Protection of Manifestations of Indigenous Culture**. Under the law, IPs shall also have the right to equitably share in the benefits of such presentation or performance. All funds collected from these activities shall be managed directly by the community concerned through the registered IPO, otherwise, the same shall be held in trust by the NCIP for the benefit of the concerned IP community.[25] Note that these 3 funds, laid down by the regulations have been operational at all, but they have been set up and money from the targeted sources (Rattan and CBFM) has filled it up, but this is in the national treasury and cannot be accessed by forest communities.

Financing for NTFPs is also allotted by the law, examples are the initial implementation of the **Republic Act No. 9242 or the Philippine Tropical Fiber Law** where P60 Million is provided from the Agricultural and Fisheries Modernization Act Fund to be allotted to Fiber Industry Development Authority (FIDA) of the Department of Agriculture (DA) for the promotion of the commercial production of plant fibers and for the conduct of continuing research on the improvement of the process of extracting plant fibers (Section 6, RA. 9242).

The Development Bank of the Philippines (DBP), a government banking corporation has a grant facility called Forest Program, started in 2005 to support upland and coastal communities. Peoples' Organizations (PO) are identified as beneficiaries. There are 66 eligible plant species for the program, and three of the six eligible plant species are NTFPs: bamboo, ilang-ilang and other essence producing trees and bignay, a tannin-producing species.

VI. Investments and partnerships for NTFP development and MSMEs

As observed from the forest policies, investment and partnership for NTFPs are government driven or mandated, but this has not been effective in terms of bringing in needed support for NTFP enterprise development. The growing interests on NTFPs driven by entrepreneurs and public alike lacked the level of investment and partnership it needs to scale up. Some of these policies which has not been maximized are as follows:

Tenure holders in forestlands have two options for securing investment and partnership for forest resources development including for NTFPs, provided that it is consistent with their CRMF:

a. The policies allowed involvement of third parties, DENR Memorandum Circular No. 98-08 — Guidelines on Contracting Inside Community-Based Forest Management (CBFM) Area provides two major kinds of contracting inside CBFM areas: **(1) By Service Contract.** This takes the form of extraction of forest resources and associated activities such as road construction, major and minor transport, processing, and marketing of forest products. **(2) By Development Contract.** This involves the development of portions of CBFM areas into plantations for timber, latex, fruits and other forest products, agroforestry, livestock production, eco- tourism and other developmental activities as contained in the affirmed

25 Section 16, IRR IPRA

Community Management Resources Framework (CRMF) of the POs. (Sec. 2, DAO 98-02). This can be between POs or third parties which may be an individual, a partnership, a corporation, another PO/cooperative, or a government entity.

b. There is also the Natural Resources Development Corporation (NRDC), a government corporation and corporate arm of the DENR is mandated to assist the PO in the processing, marketing and disposition of forest products through a mutually agreeable arrangement with the concerned POs. (Sec 7, DAO 2000-29). NRDC has not performed this functions.

In partnership with third parties, the benefit sharing scheme is based on mutually agreed terms, which is brought about by negotiations. The PO capacity to negotiate and information available to them to negotiate intelligently are usually absent. For forest community enterprises, there no policy requiring them for accounting of benefits. It is internal process which can be dangerous for POs who are not accustomed to large sums of money or which their members have no capacity for accounting and monitoring. There are no also policies for fund management as this is an internal matter for the POs, aggrieved members may opt use existing civil and criminal laws to file cases.

In terms of benefit sharing, it's the PO responsibility to develop and implement equitable benefit-sharing arrangements among its members (Section 7, DAO 2004-29). This includes negotiating for benefits sharing terms with contractors, which is on a case to case basis. Government does not have a share in the harvested non-timber products, the benefit sharing provision is applicable on timber harvesting.

Aside from DENR, the DTI also provides an enabling environment for NTFP development. The community enterprise can avail of the benefits under **R.A No. 9178, Barangay Micro Business Enterprises (BMBE) Act of 2002**. The law provides localized incentives, provision of technical assistance and guidance to enable them to access credit and financing as well as easier access to tax credits and other tax and duty incentives provided by the Omnibus Investment Code and other laws. All eligible enterprises shall register with the DTI Negosyo Center in the municipality or city and apply for a Certificate of Authority BMBEs to avail of the benefits provided by the law such as income tax exemption, exemption from the coverage of the Minimum wage law, however, BMBE employees will still receive the same social security and health care benefits as other employees. A special credit window is also in place for financing of BMBE, technology transfer, production and management training and marketing assistance programs for BMBE beneficiaries.

At present, FMB is developing framework and guidelines for **Sustainable ENR-Based Enterprise Development Assistance Program (SEEDAP)**. SEEDAP is a mechanism on upgrading of existing livelihood operations into enterprise. It will be provided for CBFM holders who are already engaged in the processing and marketing activities using raw materials from CBFMA area and other legal sources. They will be giving support in terms of equipment and tools with a maximum support of 1.5 million pesos. Meanwhile, the **Sustainable ENR-Based Livelihood Development Assistance Program (SELDAP)** is a mechanism for livelihood development through investing in sustainable ENR-based livelihood asset endowments. Qualified beneficiaries are those who are about to start up livelihood operations using the existing forest resources within the CBFMA area. Eligible support to be provided shall be in form of any or combination of farm tools, inputs, implements and aquaculture. Support is around PHP. 350,000 per beneficiary.

In the Philippines, MSMEs comprise 99.6% of all enterprises and employ 63.7% of the workforce but has relatively low value added to the economy (Senate of the Philippines, 2012). In terms of MSME development, the BMBE law clearly applies for many community NTFP enterprise, BMBE is defined under the law or "any business enterprise engaged in production, processing, or manufacturing of products, including agro-processing, as well as trading and services, with total assets of not more than P3 million". The NTFP enterprises can register as BMBE and enjoy the incentives such as support from the Negosyo Centers, Exemption from income tax and minimum wage requirement of workers, reduction in local taxes and access to advisory, consulting, Entrepreneurship, capacity building services of the DTI and Negosyo Centers. A loan portfolio for is also allotted for BMBEs.

Processing of Roselle tea in Cuyambay, Tanay, Rizal
Photo: Erwin Mascarinas/NTFP–EP Philippines

There are partnerships set up by NGOs such as the NTFP–EP Philippines along NTFP commodities that has proven to be effective in support development of NTFP enterprises, these are the Philippine Forest Honey Network, the Southern Palawan Almaciga Group and the Network of Sustainable Eco-Textile Handweavers.

EXAMPLES OR ACTUAL CASES WHERE POLICIES AND REGULATIONS ARE DEMONSTRATING EITHER A BOTTLENECK OR AS FACILITATING FACTOR FOR COMMUNITY FORESTRY ENTERPRISES ON NTFPs AND TRADE AND MARKETING OF NTFP VALUE-ADDED PRODUCTS

Almaciga resin enterprise's constant woes is the costly and tedious permitting process

Almaciga (*Agathis philippinensis*), is a forest tree species protected under Philippine law because of its vulnerable status under the International Union for Conservation of Nature Red List of Threatened Species. The resin obtained from tapping Almaciga trees, popularly known as manila copal, is one of the most important non-timber forest products (NTFP) of the Philippines. It is used in varnish, paints, incense and in many other applications For decades now, there is a total ban on cutting of almaciga trees and collection of by-products in the remaining forests in the Philippines under DENR Administrative Order no. 74 of 1987. However, in the province of Palawan, indigenous communities are allowed to tap the almaciga trees for its resin.

Palawan is one of the provinces with the most almaciga trees. The combined production from Palawan and Samar in 2016 has made the country the second largest producer of almaciga resin in the world. A significant number of indigenous communities especially in the municipality of Brooke's Point rely on harvesting of resin from almaciga as their main livelihood. Tappers use indigenous knowledge or traditional method of tapping in collecting almaciga resin which they have learned from their ancestors. This practice has been recognized by Palawan Council for Sustainable Development (PCSD) and in support had issued Resolutions Numbers 94-51, 94-63 and 04-233 stating that "...concessions to such almaciga areas in the tribal ancestral lands be granted to the indigenous peoples in the province of Palawan".

Almaciga tree
Brooke's Point, Palawan
Photo: SPABP

The **Samahan ng mga Palaw'ano sa Amas Brooke's Point (SPABP)** is a cooperative that focuses on the production of almaciga. It is a functional organization with a bookkeeper, treasurer, purchaser, classifier, secretary and manager, all employed by the community enterprise. The cooperative has a collection center where the collected almaciga resin are brought and classified. Most almaciga trees are planted in the mountainous areas.

As a licensee/permittee, SPABP pays a substantial amount of forest charges whenever the resins are for transporting or processing. The government imposes forest charges based on the prevailing market value of the resource. As stated in DAO no. 2000-63, the forest charge for almaciga resin is Php 1.50 per kilo. SPABP annual permit allows them to harvest 30,000 tons of resin.

The Palaw'an residing in Amas village in the municipality of Brooke's Point, Palawan exemplify the inextricable link between culture and ecology and NTFP

management is built upon a strong traditional governance system. The indigenous youth is also engages, doing different almaciga tree conservation efforts like establishing almaciga nurseries, mapping and inventory of almaciga trees and documentation of cultural or indigenous methods of tapping. There is sustainable supply of almaciga but their problem is the lengthy and costly permitting. The processing of an annual permit mostly takes more than a year.

A similar case is also being experienced by PIGTEPONEN, the marketing arm of the community enterprise groups in General Nakar, province of Quezon. Since 2016, they have been processing their application for Almaciga resin permit. It took them almost one year before they were able to complete the inventory, DENR CENRO resource validation, mapping process and submit the application in 2017. Endorsement of DENR PENRO was issued a year after in 2018 after re-validation of Almaciga in the area conducted by DENR. The DENR Region 1V-A then required endorsement from the Protected Area Management Bureau (PAMB) of Presidential Proclamation 1636. A Dialogue with the PAMB was organized in November 2018. Mr. Marcelino Tena, one of the board members of PIGTEPONEN and also sits as IP representative to PAMB expressed its intention that their community will sustainably manage the almaciga resources. The members of PAMB who were present during the activity expressed support to granting endorsement.

Following the recommendations from the PAMB, sustainable management plan was developed including Almaciga propagation. Collection of wildlings, nursery establishment and outplanting has been conducted by the Samahan ng mga Katutubong Nag-aalmaciga (SAMAKANA) in 2019. These activities were reported to PAMB last January 30 which resulted to approval of the endorsement by the members who were present. PIGTEPONEN is hopeful that the almaciga resin permit will be issued by the DENR Regional Office soon.

Rattan furniture business by the CBFMA is hampered by the lack of updated CRMF

The Macatumbalen CBFM & Coastal Ass. (MABAFCOMA) is a CBFMA holder managing 1,850 hectares of forestland in San Vicente, Palawan. They are involved in Vermiculture, rattan crafts and seriously take forest law enforcement. For them rattan was the most viable economic enterprise, it sent their children to school. In 2003, they became champion in rattan production in Palawan and even was mentor other CBFMA holders. Unfortunately some years back, their bodega (small warehouse) which contains their finished products and their raw materials was gutted by fire, and they struggled to recover due to loss of investment. Now while they are capable to go back to rattan furniture making, and in facts has established a rattan plantation, their CRMF is not yet updated. This hinders them from applying for a rattan cutting permit.

They have asked support from CENRO offices but CENRO covers many CBFM areas and has few staff to assists them. The PO is even willing to shoulder the costs of their CRMF updating.

The special case of bamboo

Bamboo is one of the most economically-important NTFPs in the Philippines. Its fast growth and excellent properties makes it an ideal substitute to wood for furniture, handicrafts, construction material, and chemical products. Bamboo is included as one of the species that can be used in the reforestation and watershed rehabilitation program of DENR. Under the National Greening Program from 2011-2015, the Philippines was able to establish a total of 16,442 hectares of bamboo plantations in 15 regions . In addition, the Philippines has also committed to reforest at least 500,000 hectares with bamboo as part of the 1 million hectares of designated areas as its contribution to the ASEAN commitment of 20 million hectares of new forest by 2020.

On bamboo harvesting and collection in forest land is governed by existing DENR policies and regulations which requires the gatherer to secure a cutting permit at the CENRO specified in the Revised Forestry Administrative Order No. 11 dated September 14, 1970. Forest charges

is imposed except for planted bamboos in industrial tree plantations and private lands that are covered by existing titles or tax declarations. DENR monitors movement of bamboo by requiring a Certificate of Non-Timber Forest Products Origin (CNFPO). This is specified in DENR AO 59 issued on September 30, 1993. Again, exempted are those planted inside titled and tax declared alienable and disposable (A and D) lands, provided that they are certified by the Community Environment and Natural Resources Office (CENRO) as such. Findings from PCARRD study show that the imposition of the Certificate of Verification for harvested bamboo is disabling investment from the private sector. The PCARRD Bamboo study suggested comprehensive bamboo policy which includes community based data collection and monitoring system.[26]

Bamboo
Photo: James Lee

In 2010, Executive Order 879 was issued creating the Philippine Bamboo Industry Development Council (PBIDC) to provide policy and program directions for the stakeholders of the fast developing bamboo industry. Under the said Order, Bamboo is mandated to be use as the indigenous material for at least 25% of desk and other furniture requirements of public elementary and secondary schools, and to prioritize its use in furniture, fixtures and other construction requirements of government facilities. Subsequently, the Order paved the way for issuance of Memorandum Circular No. 30 s. 2012 which directed the full implementation of the Philippine Bamboo Industry Program. The Philippine Bamboo Industry Development Plan 2010 to 2020, set targets of 16,000 hectares of bamboo plantations by 2020, to increase to 42,000 hectares by 2030 and 80,000 hectares by 2040. The majority of the projected bamboo plantation area will be dedicated for culm, or mature stalk production while only 75 hectares of the total will be for shoot production.

26 http://www.pcaarrd.dost.gov.ph/home/momentum/bamboo/index.php?option=com_content&view=article&id=814:sectoral-policies-and-regulations-affecting-bamboo-sector&catid=122&Itemid=7

RECOMMENDATIONS TO OPERATIONALIZE, ENHANCE OR DEVELOP NTFPs AND THE VIABLE PARTICIPATION OF COMMUNITY FORESTRY ENTERPRISES IN MARKETS

1. **Comprehensive resource inventory/assessment of NTFPs across the country with the participation of all community stakeholders.**

   a. Management of NTFP resources need to start with an inventory of the resources. The inventory is ideally cost effective, already assessing characteristics of the NTFPs as well as threats such as climate change and decreasing supply. A comprehensive inventory ideally includes harvesting protocols and best practices in the utilization and management of the NTFPs, including IKSPs associated with it. Cost effective and inclusive management tools such as participatory resource monitoring (PRM) should also be used and recognized.

   b. In addition, given the wide range of NTFPs e.g., bamboo, rattan and other palms, resin and gums, wild food and medicinal plants, the participation of communities are key to make the inventory more robust and accurate. The inventory can be basis for the setting up a database on NTFP, preferably in digital form to be more accessible and simultaneous with this the identification and allocation of suitable areas for NTFP development.

2. **Simplification and harmonization of existing rules and regulations governing the development, processing, management, utilization and transport and marketing of NTFPs.**

   a. Given the extent of titled ancestral domains (5.735 Million hectares) and the abundance of NTFPs in these areas under management of indigenous peoples, the urgency of passing the draft Joint NCIP-DENR administrative order entitled "Rules and Regulations for the Extraction and Marketing of NTFPs in ancestral domains", which has been there for a decade already.

   b. To engaged the private sector, the deregulation of NTFPs in private lands or even in forest lands should be operationalized.

   c. Approval of permits for collection should be mainstreamed and streamlined at the CENRO level given that the existing monitoring and reporting as well as the establishment of a local to national database is developed and should be in-place.

   d. Reduce and streamline the requirements necessary and launch government program to assist IPs /communities to process and obtain and renew NTFP licenses/permits. Inventory requirements in the permitting process should be other alternative methods- community based inventories.

   e. Grant multiple year permits (for e.g. permits for 5-10 year periods. This is feasible as 10 year negotiated rattan permits have already been granted before. This is less cumbersome and allows the community to invest in resource management and enterprise development instead of being tied up in the permitting process.

   f. Institute measure/s that define the timeline for the steps of the work, preparation & submission of reports, and install provision for sanctions; standard costings for every steps in the permitting process (including FPIC process).

3. **Educational Information and Capacity building within DENR and key agencies on NTFPs and its economic and socio-cultural importance**

   a. Strengthen the network of agencies, organizations and people involved and promoting NTFPs supported by better data collection and management.

   b. Collaboration with the authorities to raise awareness is key for the development of a robust policy environment to support the management and regulatory framework of NTFPs.

   c. Increase engagement with research institutions and other stakeholders to support value chain studies and improved harvesting practices.

   d. Increase awareness and local capacities

on the proper collection and utilization of NTFPs to ensure sustainable supply. Promotion of the production and development of a well-managed NTFP plantation

4. **NTFPs are economic assets in community managed areas, and they thrive more on natural forests managed by forest dependent communities, hence, continued favorable policies and expanding areas under social forestry schemes will have gains for NTFPs and the communities.**

5. **Creation of a NTFP Roadmap**, which can be a basis of an NTFP Industry Road Map under the DTI and Bureau of Investment. This is a key recommendation from the NTFP Policy Forum, a multi-stakeholder forum in 2018 organized by the NTFP–EP Philippines, Forest Development Center and UP College of Forestry. The road map is envisioned to include policy, governance, capacity building, marketing and research and development, described below:

   a. **On Policy formulation.** To pursue policy formulation aggressively in promoting NTFPs, and formulate in a manner that carefully considers all possible impacts to avoid being counterproductive. Review bottlenecks and assessment of these as basis of policy revisions and simply access and permitting rules. Specifically ensures that only IPs will be allowed in ancestral domains.

   b. **On Governance.** The Creation of an office or at least, an expert working group on NTFPs that will provide coordination among institutions; this entity can conduct and support NTFP value chain analyses and implement interventions, and facilitate the process of responding to expressed NTFP capacity-building needs. Creating networks to facilitate cooperation on NTFPs and develop and establish a mechanism for multi-stakeholder participatory resource management, monitoring and evaluation of NTFPs.

   c. **On Field Practices.** The propagation and production of NTFP resources should be expanded, through inclusion in reforestation programs such as the National Greening Program; Seal of good and sustainable product: Participatory Guarantee System (PGS); Promotion and enhancement of indigenous knowledge systems and practices and Improved benefits of communities in the value chain.

   d. **On Capacity Building.** To provide capacity and resources to support the development and sustainability of Community-based NTFP Enterprises; Transfer of appropriate technologies on NTFP development and development or use of Tools: Mapping, inventory and Participatory Resource Monitoring (PRM).

   e. **On Research and Development.** To include NTFP data base and Comprehensive and development of tools for inventory/assessment of major NTFPs, Identification and allocation of suitable areas for NTFP development; Potentials of NTFPs: multiple uses, processing, nutrition value, etc.; Conduct economic studies to support policy formulation or revision.

   f. **On Marketing.** To link POs to incentives, support programs and actors for financing, value addition and marketing of NTFPs and Do an independent study on market price and forest charges to determine appropriate prices as basis for forest charge per product.

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