



## Tebtebba

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***NGO in Special Consultative Status with the Economic and Social Council of the UN***

### **Examples of Indigenous Peoples' Knowledge, Traditional knowledge and Local Knowledge in Asia, Africa and Latin America**

**Submitted by:**

**Tebtebba - Indigenous Peoples International Centre for Policy Research and Education  
to the FWG-LCIPP, UNFCCC  
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**Note: On the Researches/Documentation/Publications as listed below, please refer to Tebtebba website: [www.tebtebba.org](http://www.tebtebba.org)**

**How do our indigenous brothers and sisters from Asia address climate change? Examples from Asia, from Asia, Africa and Latin America, as indicated below:**

- 1. Case Studies of Indigenous peoples and contributions to nature-based solutions (NBS) and Climate Change Response through Indigenous peoples customary governance and knowledge systems**

Note: Research studies were coordinated by Tebtebba with researchers/consultants of Elatia partners from May to December 2021. (Note: E-publications by Tebtebba on March, 2022) with support from the Climate and Land Use Alliance (CLUA)

**1.1 Collective Nature-based Solutions of the Dayak Indigenous Peoples in Sanggau and Ketapang Districts of West Kalimantan, Indonesia**  
**by Krissusandi Gunui, Executive Director, Institute Dayakology (ID)**

The Dayak people from the communities in West Kalimantan, namely, the Tiong Kandang and Tampun Juah and the Jalai and Kendawangan located in Sanggau and Ketapang Districts, of West Kalimantan demonstrate that indigenous and local knowledge (ILKs) are models for sustainable use and management of their lands and natural resources including their forest ecosystems. Their indigenous local knowledge (ILK) are considered as nature-based solutions, which has been developed over generations to provide guidance to live in harmony with nature and maintain balanced relationship between people and nature. These are also relevant in addressing the environmental crisis brought about by climate change. The emergence of COVID 19 raised a new awareness of how local wisdom or ILKs can be utilized in resolving the current issues on climate change and the health crisis.

The knowledge of indigenous communities existed and developed as they use everything available in their environment. This knowledge originated from the values and beliefs transmitted from their ancestors such as the observance and practice of the principles of the Seven Fortunes. The principles of the Seven Fortunes relate to their natural resource management and self-determined development. These principles are diversity and sustainability, cooperation and togetherness, organic and naturalness, rituals and spirituality, process and effectiveness, domestic and subsistence, and customary law and locality. All these principles have been manifested by the communities in their interaction with nature and their management of natural resources, such as their forest ecosystem.

The Dayak communities located in various kampongs observe sustainable farming and agricultural activities meeting economic, social, cultural and spiritual needs. The performance of various rituals reinforces the spirituality of Dayak people and this is important in forest management as they revered forests as “places of worship.” The traditional ritual of *Tolak Bala*, to get rid of bad luck and expel evil influences, diseases, pestilence and the virus from the villages is an example of a living tradition that appeases nature to help stop a pandemic or great suffering in the community.

Indigenous women play a very important role in overseeing the health and wellness of their family. They also perform rituals in the community like the customary ritual, *tolak bala*. Aside from being known as traditional healers, indigenous women in the community are the educators in the family. They are also knowledge holders of culture and tradition and gentle “teachers” to their children.

*Harmonious interaction between IPs and nature together with the creator generates wisdom, virtue values that serve as the guidelines and principles in managing as well as safeguarding nature (with the 7 wisdoms of life among the Dayaks).*

## **1.2 Indigenous Leadership and Customary Institutions among Ngisyanwas and Tsum Nubri in Nepal**

**By Dr. Pasang Dolma Sherpa, Executive Director, Center for Indigenous Peoples Research and Development (CIPRED)**

The Ngisyang valley of upper Manang has been an abode for two indigenous communities, the Gurung and Ghale. The protected and managed ecosystems by the indigenous communities in Nepal have been critical in meeting local sustenance such as food, water, furniture, fuel, wood, and medicine. The rich forests thriving in the territories of indigenous communities provide them environmental services such as clean air and protection from floods, erosion or related hazards, and helped in the mitigation of climate change.

As per their customary laws, people from the community are only allowed to collect forest products within a specific time and in a limited quantity. Pisang has the deepest and largest forest cover in the entire area.

Traditionally, Ngisyanwa are engaged in agriculture, animal husbandry, and trans-border trade. They grow various vegetables and food crops and raise animals like yak, nak (female yak), cow, horse, sheep and goat. Animal husbandry and direct-selling of animals have been a reliable source of family income. As animal husbandry is the major source of earnings and subsistence of the peoples in the valley, every village in the district has maintained its own pasture lands.

All the villages in the Upper Manang have their own forests from which the community collect firewood, timber, and medicinal herbs. As per their customary laws, people from the community are only allowed to collect forest products within a specific time and in a limited quantity. Pisang has the deepest and largest forest cover full of chir pines (Thangsing), cedars (Kelsing), and junipers (Sangsing) and Cordyceps (*Yarchagumba*) which has been a significant source of cash income for them.

More importantly, the natural environment also reinforces the identity of indigenous peoples where they can practice their traditional livelihoods and socio-cultural values like the performance of rituals, observance of customary laws, respect for community leaders, and role of indigenous women and youth, thus, ensuring unity in the community.

### **1.3 Indigenous Peoples and Nature-Based Solutions to Climate Change: Case Study of Indigenous Baka, Bagyéli/Bakola and Bedzang in Cameroon**

(Scoping Study Report prepared for Lelewai Foundation, ILEPA and Tebtebba, September 2021) by Dr Enchaw Gabriel Bachange (Consultant)

The art of nature-based solutions has been practised by indigenous peoples in their ancestral lands/territories from their very inception. Unfortunately, global and country level strive for climate change mitigation and adaptation undermines the central role to be played by indigenous peoples in providing nature-based solutions to this environmental hazard of contemporary times. From geospatial and anthropological perspectives it has been demonstrated that Forest Indigenous Peoples such as Baka, Bagyeli/Bakola and Bedzang occupy areas of highest biodiversity in the tropics, particularly carbon sinks and by virtue of their harmonious interactions with nature, they are at a vantage position to protect, restore and sustainably manage ecosystems in consonance with the philosophy of nature-based solutions to climate change. It is not a fallacy that indigenous peoples effectively used indigenous knowledge and practices to preserve forest and forest resources before the advent of the neoliberal conservation paradigm, which is yet to check, let alone reverse continued loss of biodiversity and the degradation of even the national parks and reserves which governments have brought under their aegis. These parks and reserves coincide with the ancestral lands or territories of indigenous peoples and their eviction thereof was not sanctioned by free, prior and informed consent or any form of compensation.

The Baka, Bagyeli/Bakola and Bedzang are the hunter/gatherers who continue to live as people of nature. Nature is therefore their main source of food, fodder, medicine, symbolic and ritual functions, and construction. They occupy areas of highest biodiversity wherein their ancestral lands/territories are the tropical forests in Africa. They have experienced frequent evictions from their territories without free, prior and informed consent or compensation. Their culture/religion and nature conservation are intertwined with their traditionally practices such as landscape re-seeding and hunting and gathering which is regulated through customary law and sanctions e.g. forest fires, tree cutting, entry to sacred forests and grooves reserved for the other spirits as customary protected forests.

### **1.4 National Scoping Study on Nature Based Solutions: A Maasai Pastoralist Perspective, Kenya, June, 2021 by Research Consultant: Kimaren Ole Riamit, Director, Indigenous Livelihoods Enhancement Partners (ILEPA)**

The Maasai Pastoralists who are Indigenous Peoples in Kenya have their own indigenous knowledge and application of forage with wide range of plant's seasonality, nutritional value, toxicity, and medicinal properties for both human and the different

livestock/animals they keep. They have deep knowledge and practice of indigenous knowledge systems of livestock and pasture/natural resource management as they respond to climate change impacts. They have common property regimes where access to pastures and water is negotiated and dependent on flexible and reciprocal arrangements such as herd accumulation, keep multispecies herds, tree fodder during the dry season, olokeri/olopololi and Intra community mechanisms to minimize the spread of risks brought about by climate change. In the process, they make necessary adjustments and innovative measures to be able to mitigate, adapt and cope up with drastic changes brought about by the impacts of climate change to nature, environment, and all the biodiversity, ecosystems and natural resources thereat.

Another traditional knowledge and practice to their traditional livelihood as pastoralists, the Maasai have their animal disease control and management, with necessary adjustments as they face risks and impacts brought about by climate change. They have systems in place on their ecological approach to disease prevention and control such as olchutai (fluke), olkimpai (Tsetse flies); ilinkati (Malignant Catarrhal Fever, MCF). They have ethno-veterinary knowledge and its application through the knowledge and use of specific species of trees and shrubs collectively as olchani (plural ilkeek).

They also learned and developed their food and nutrition provisioning of wild plant food, primarily fruit and roots, honey, as well as medicinal plants. They have their own indigenous herbal medicine for human as well as for animal/livestock use. They also have domestic energy sources which are mostly firewood from specific species of trees and plants. In relation to water catchment and sources, they also developed their sustainable utilization to cope up with increasing population needs but needed to also introduce some innovations with limited sources of water.

Cultural identity, heritage, and spirituality is very crucial in the protection, conservation and sustainable use and management of natural resources and environment. Nature provides cultural and ceremonial expressions such as the important plants in every rite of passage of men and women. They respect and recognize the very important role of the oloiboni or seer, as a respected traditional elder, wiseman and guardians of forests, who provides advice, prophecy and guidance for decisions for the territory of the Maasai.

They also respect and recognize the important roles of women in nature management and solutions, wherein the the practice of NBS among IPs is gendered which include the traditional medicine healers (Enkaiyukoni), the rites of passage like naming of children ceremonies (Illatimi) and the women fertility ceremonies (Emayian oo nkituaak) which sustain the intergenerational transfer of knowledge systems and practices.

More importantly, the intergenerational transfer of these traditional knowledge systems and practices, and gender roles as mentioned have in turn sustained the culture interlinked with nature, in their self-determined, sustainable development, including their defined response measures to climate change mitigation and adaptation, with the utilization of traditional and local knowledge systems as Maasai indigenous peoples.

### **1.5 The Experience with Community Eco-Tourism Regulations in the San Miguel del Bala community in Madidi National Park, Bolivia**

**By the Center for Indigenous Peoples' Autonomy and Development (CADPI), May 2021 Researcher: Felipe Teran Gezn**

The case study in Bolivia was carried out in the San Miguel del Bala Indigenous Community, which is located in the Tacana Nation's Territory, which is to the north of the La Paz department, in the buffer zone of the Madidi National Park and Natural Area of Integrated Management. It is a member of the Council of the Tacana Indigenous People (CIPTA), which is made up of the 20 communities within its territory, which has 18 productive associations that carry out natural resource management projects in 16 communities of TCO Tacana I and 4 communities of TCO Tacana II, with 624 partners.

San Miguel del Bala is directly linked to 20 different basins, which are part of the Beni river basin, which protects an extensive continuous and intact forest that collects the water that descends from the mountain ranges and on which the downstream supply depends and is the one that deposits the largest amount of water and sediment with nutrients in the Madera River, the largest basin in the Amazon.

The natural parks were named protected areas since 1995, which left many families that made living through traditional livelihoods such as hunting, fishing, and forestry. San Miguel was able to adapt and find alternative pathways to economic development to improve its quality of life. This is where the San Miguel del Bala Community Ecotourism Association was born; it is a community ecotourism venture which works within and without Madidi National Park. It has two shelters which exhibit Tacana culture and the surrounding biodiversity, it exhibits three components related to ancestral knowledge and knowledge about i) water; ii) natural medicine and iii) the ancestral constructions of Tacana houses were highlighted.

The objective was to take advantage of the territory's natural touristic attractions, to attract tourists and improve the quality of life of its inhabitants, as an alternative form of economic activity, demonstrating that it is possible to make sustainable use of forest resources through developed tourism, which is organized, trained and provided services required by the community enterprise. Ecotourism is based on the conservation of the Tacana territory with the traditional knowledge and practice on the care of water basins,

the preservation of the people's own identity (without losing their customs and traditions), and the sustainable use of the present biodiversity, for the benefit of population, "human sustainability" and climate change mitigation and adaptation.

### **1.6 Strengthening Community Governance for Sustainable Territorial Government in Karatá Territory in Bilwi, Puerto Cabezas, RACCN, Nicaragua**

**By the Center for the Autonomy and Development of Indigenous Peoples (CADPI) with Researchers: MSc. Juan Rosman Hernández and MSc. Jadder Mendoza Lewis**

The case experience in Nicaragua is conducted in the Karatá Miskito Indigenous and Afro-descendant territory, in the Northern Caribbean Coast Autonomous Region. It is made up of five communities: Karatá, Lamlaya, Dakban, Wiwas and the city of Bilwi. It has 37,471 square hectares, recognized as territorial property. It is located in the Cayos Miskitu Biological Reserve, which has an area of approximately 8,500 km<sup>2</sup>. The vegetation cover of the biological reserve includes 15 ecosystems in 384,496 hectares, with a diversity of coastal - marine environments and one of the largest extensions of seagrass in the Caribbean and coral reefs. The hydrological system also features a large number of shallow lagoons (4 to 5 m deep), which are connected to the mainland through a multitude of channels and are important habitats to the conservation of biodiversity and the maintenance of local economies. The land use rules practiced by the community contribute to reducing environmental degradation, consolidating their food security and sovereignty, strengthening their livelihoods, and becoming more resilient to the impacts of climate change. The experience is characterized by:

- a) Coexistence relations between all living beings. For which they have defined norms for community artisanal fishing, the protection of sensitive ecosystems to preserve the quality of fishing production and, to regulate fishing gear and methods.
- b) Conservation of traditional knowledge and practices, such as that regarding traditional medicine, and the construction of houses, hunting, fishing, backyard agriculture with fruit trees that serve as a protective barrier and promotion of community ecotourism.
- c) Strengthening of territorial and community governance. The community authority is responsible for the administration of justice, spiritual life, and for economic, social and cultural reproduction. The highest governing body is the Communal Assembly. The community authorities elect the territorial authority, which has a Statute that regulates territorial management and the mechanisms for consultation and participation.

### **1.7 Video production by Tebtebba and Elatia Partners: Nature-Based Solution and Indigenous Peoples which can be found in this link:**

<https://www.youtube.com/watch?v=nePDKoXqWMs>.

**Note:** This information material was produced by Tebtebba and Elatia with support from the Climate and Land Use Alliance (CLUA)

Briefly, Indigenous peoples are one of the most, if not the most, vulnerable to the impacts of the COVID-19 pandemic, given their continuing marginalization. This doubles, if not triples, the burden that indigenous peoples are already experiencing due to climate change impacts. In this current crisis, there is a huge potential for Nature-Based Solutions (NBS) to contribute to addressing many of the impacts of the pandemic and address climate change impacts. This will include not only supporting communities' abilities to address immediate impacts of the pandemic but more importantly, in helping create a more sustainable and resilient post-COVID world. This video material was produced to increase awareness and understanding of indigenous peoples and their contributions to Nature-Based Solutions. It also proposed indigenous peoples' perspectives on critical elements that NBS should take into account including, but not limited to, human and indigenous peoples' rights, their rights to their lands, forests and territories; their traditional knowledge, practices and innovations; and their overall contributions to sustaining and maintaining the environment, including to climate adaptation and mitigation.

**Other suggested researches and publications include the following list below, which may also be used as deemed necessary. These are also found in the Tebtebba website: [www.tebtebba.org](http://www.tebtebba.org)**

**2. Indigenous Peoples, Forests & REDD Plus: Sustaining & Enhancing Forests Through Traditional Resource Management Volume 1, Copyright © 2010, Tebtebba Foundation**

Case studies written by indigenous researchers that showcase the living examples of how indigenous peoples knowledge and practices and customary laws on forest observation and natural resource management are crucial for sustaining these remaining forests. It shows multiple benefits of forests to indigenous peoples including socio-economic, cultural and spiritual benefits

- Frans Lakon, Paulus Unjing, Vitalis Andi, Elias Ngiuk & Sujarni Alloy, The Dayak Jalai Peoples and their Concep of Dahas in Ketapang District, West Kalimantan, Indonesia: A case Study by Institute Dayakologi (ID) and Aliansi Masyarakat Adat, Nusantara (AMAN), pages 119-178

**3. Indigenous Peoples Forests and REDD Plus -Sustaining and Enhancing Forests Through traditional Resource management Volume 2, Tebtebba Foundation 2013.**

Case studies on how indigenous peoples protect, manage and conserve their forest lands to show the states need to rethink and re-orient their framework of forest management

- Pasang Dolma Sherpa; Gelu Sherpa; Khim Ghale; Kunshang Lama; Pasang Sherpa, PhD; Revitalizing Customary Governance and Strengthening Traditional Knowledge on Resource Management in Nepal pages 195 – 266
- Alangui, Wilfredo and Caguioa, Christin Myra. Protecting the Forest Learning from the Agawa Women of Besao, Mtn Province
- Vu Thi Hien, Nguyen Thi Tuyet, Nguyen Xuan Gap, Nguyen Hong Xa and Pham Thanh Cuong: Reclaiming Traditiona Forest Mangement Practices: The Binh Son Village Experience

### **3. Knowledge Innovation and Resilience: *Indigenous Peoples' Climate Change and Adaptation and Mitigation Measures*, Published by Tebtebba 2012**

“Indigenous peoples are vital to, and active in, the many ecosystems that inhabit their lands and territories and may therefore help enhance the resilience of these ecosystems... [T]hey interpret and react to the impacts of climate change in creative ways, drawing on traditional knowledge and other technologies to find solutions which may help society at large to cope with impending changes.”

### **4. Indigenous Women, Climate Change & Forests, Tebtebba 2011**

Case studies on how indigenous women who are dependent and who live in forests continue to play significant roles in protecting the biodiversity and other ecosystem services which our forests provide. Our reciprocal relationship and our rights to these forests and resources should be the defining elements to consider in any initiative around forests and climate change.

### **5. Indigenous Peoples Low Carbon and Climate Friendly Sustainable Livelihoods : Innovating on Traditional Occupation, Tetebba 2017**

5.1 Vietnam: Pilot model of Community-led sustainable livelihood initiatives through legal entity and networking by Ta Quoc Tuong, Center for Research and Development in the Highland Areas (CERDA)

5.2 Nepal: Sustainable Livelihood and Technology, Achievements and Lessons Learned by Gokul Prasad Dura, NEFIN/CIPRED

5.3 Indonesia: Managing Ancestral Domains as the Source of Local Knowledge-based Alternative Livelihoods, Krisussandi Gunui, Institut Dayakology

5.4 Indonesia: Economic Development of Indigenous Peoples in the Indonesia Archipelago by Rudy Redhani, AMAN

5.5 Philippines: Revitalizing and Innovating on Indigenous Knowledge for Sustainable Livelihoods by Adela Tayaban and Florence Daguitan, NNK Philippines:

5.6 Strengthening the Agency of Indigenous Peoples as Vital Actors and Decision Makers in Proper Implementation of REDD Plus by Manggob Masinaring, SILDAP

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