# ENVIRONMENTAL MANAGEMENT PRACTICES OF T'BOLI INDIGENOUS COMMUNITIES IN ALLAH VALLEY WATERSHED FOREST RESERVE, MINDANAO, PHILIPPINES

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#### ABSTRACT

Traditionally, T'boli people live in scattered settlements on the highlands of South Cotabato in the Southern Mindanao region. This study was conducted to determine the environmental management practices of the T'boli indigenous communities in Allah Valley Watershed Forest Reserve and sought to develop critical understanding of the complex ways where the T'boli people are articulated with and accommodate contemporary activities with regards to environmental management. The study examined the contribution of the T'boli people in nature conservation using a qualitative research design to discover their implementing policies in preserving their ancestral territory. The data acquired in this study was derived from an interview and focus group discussion conducted with the selected members of the T'boli indigenous communities which tackled strategies to strengthen environmental policies outlined from their culture and tradition and various legislations. As a minority group relying on natural resources, it is in their moral obligation to promote environmental protection of their ancestral domain, thus, the study highlighted their participation in ecosystem and biodiversity management, protection, law enforcement, and policy development. As such, the management practices of the T'boli Indigenous Community played a vital role in the conservation and protection of Allah Valley Watershed Forest Reserve. Also, the initiatives of the T'boli Indigenous Community provided more responsive and empowered management practices in Allah Valley Watershed Forest Reserve.

**Keywords:** Environmental Management Practices, T'boli Indigenous Communities, Watershed Forest Reserve, Allah Valley, Mindanao.

#### **INTRODUCTION**

Indigenous peoples hold and manage a quarter of our planet's land area, many of which are Earth's most biodiverse regions (IUCN, 2020). The co-occurrence of high biological diversity and unique linguistic diversity in areas with high conservation value reinforces this proposition (Gorenflo et al. 2012). Several reports already attest to this high overlap of indigenous territories with biodiversity-rich areas (Toledo, 2001; Sobrevilla, 2008; Garnett et al. 2018). And the conservation of which would provide an important contribution to addressing climate and extinction crises (Dinerstein et al. 2020; O'Bryan et al. 2021). This overlap highlights the crucial roles of indigenous peoples in the conservation of biodiversity resources (IUCN, 2020).

The involvement of indigenous peoples in the conservation and management of natural resources was strongly recognized by the World Parks Resolution 1:53, a policy based on principles recognizing the rights of the indigenous peoples to land and territories and their rights to effective participation in the management of protected areas established on their ancestral lands (Sobrevilla, 2008). Since then, the indigenous peoples and local communities have taken active participation in shaping the Post-2020 Global Biodiversity Framework that will guide the world in fulfilling our shared vision of "living in harmony with nature" by 2050 (Cariño and Ferrari, 2021; CBD, 2021).

As a signatory to the United Nations Convention on Biological Diversity, the Philippines has taken steps to advance the rights of the indigenous peoples. Chapter 3, Section 7b of the IPRA Law provides that the IPs have the right to manage and conserve natural resources within their territories. Combined with RA 7586 (NIPAS Act of 1992), the principle of safeguarding Key Biodiversity Areas (KBAs) stipulated in House Bill 115 acknowledged their contributions to environmental conservation in their domain. The Indigenous Peoples within Protected Areas are given a tenurial instrument to promote the sustainable use of natural resources in the PA, which is the Protected Area Community Resource Management Agreement (PACBRMA).

One of the protected areas in Southern Mindanao is the Allah Valley Watershed Forest Reserve (AVWFR), which encompasses the ancestral territory of the Tboli indigenous ethnolinguistic group. The issuance of the Certificate of Ancestral Domain Claim (CADC) No. 003 and 004 forms the Lake Sebu Ancestral Domain Community Association (LASADCA) in recognition of their rights over their ancestral lands (LASADCA, 2021). As such, LASADCA was granted the PACBRMA and has been closely engaging in the management of the AVWFR as an important partner of the Protected Area Management Board in its mandate to address issues that are detrimental to AVWFR's rich biodiversity.

Herein we examined the environmental management practices of the T'boli Indigeous Community through the LASADCA, and their contribution in nature conservation of Allah Valley Watershed Forest Reserve.

# LITERATURE REVIEW

Indigenous Peoples (IPs) are distinct social and cultural groups that share collective ancestral ties to the lands and natural resources where they live, occupy or from which they have been displaced (U. Basaninyenzi, 2021). IPs include Native Americans, Aboriginal and Torres Strait Islander Peoples in Australia, the Maori Peoples of New Zealand, the Sami of Northern Europe, Indigenous minorities in Africa and various tribal peoples throughout Asia (Dyson & Underwood, 2006). They are inheritors and practitioners of unique cultures and ways of relating to people and the environment (UN, 2021). About 370 million Indigenous people around the world spread across more than 90 countries and the vast majority of them -70% - live in Asia (Z. Tryon, 2021). In the Philippines, the number of indigenous peoples is unknown but it is estimated that between 10% and 20% of the country's population (IWGIA, 2021).

Indigenous peoples are key actors for environmental management because they hold valuable indigenous and local knowledge (ILK) for the sustainable stewardship of nature (Ayala, et. al. 2020). ILK is a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the

relationship of living beings (including humans) with one another and with their environment' (Berkes, et. al. 2000).

Indigenous people's contributions are necessary in creating solutions for the ecosystem. Traditional knowledge and heritage can contribute to environmental assessments and sustainable ecosystem management (E. Schneider, UNEP, 2020). Their involvement in environmental issues could help not only to prevent conflicts, but also tomanage complex environmental issues such as biodiversity conservation and environmental impact monitoring, which require a good knowledge of the surrounding ecosystems (O. Boiral, et. al, 2020). Hence, environmental protection is essential for most indigenous communities (Lertzman and Vredenburg, 2005; Noble and Birk, 2011).

The role and importance of indigenous communities in the environmental management of natural resource-based organizations are virtually ignored in the literature on environmental management(Clark, 2002; Hill et al., 2012; O'Faircheallaigh and Corbett, 2005). On that note, the study of Ayala et. al., (2020)proved that indigenous communities have a close human–nature connectedness. They hold traditional, environmental, and local knowledge which is increasingly recognized as a valuable contribution to sustainable environmental management.

# METHODOLOGY

**Research Design.** A qualitative research design through interview using a semi-structured questionnaire followed by a focus group discussion was applied in the study. This design has the capacity to discover in detail the environmental management practices of the T'boli indigenous communities in Allah Valley Watershed Forest Reserve.

**Source of Data.** The study made use of primary data based on the interview and focus group discussion conducted with the selected members of the T'boli indigenous communities in Allah Valley Watershed Forest Reserve through purposive sampling.

**Scope and Limitation**. This study covered the management strategies and intervention programs of the T'boli indigenous communities in Allah Valley Watershed Forest Reserve purposely to address environmental issues such as deforestation and habitat depletion. This study also described the management activities in the Municipality of Lake Sebu, the home of the T'boli people.

Moreover, this study only focused on the overall environmental management practices of the T'boli indigenous communities in Lake Sebu, South Cotabato, one of the municipalities covered by Allah Valley Watershed Forest Reserve. Specifically, it sought to determine the environmental management practices of T'boli indigenous communities in implementing environmental protection in Allah Valley Watershed Forest Reserve and identify the T'boli indigenous communities' contribution in environmental conservation in the community-based programs.

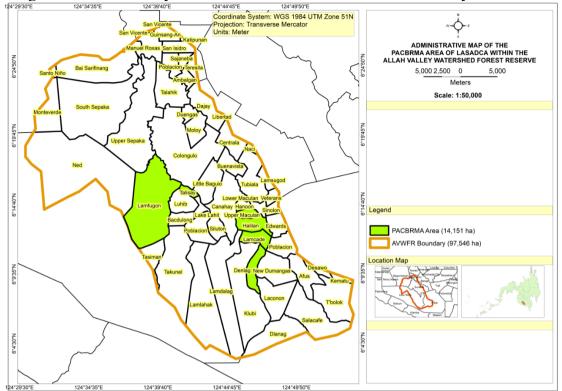


Fig. 1. Areas covered by the Lake Sebu Ancestral Domain Community Association

### **RESULTS AND DISCUSSION LASADCA's Participation in Environmental Management**

Lack of attention to community organizing has been identified as a factor hindering effective environmental management. In Southeast Asia, such community-based organizing has been recognized; the Panchayats of India, Nepal's cooperation with international funding agency led to sound forest protection; Malaysia's Longhouse Associations and Chipko and Appiko Movement in India strengthened local control over local resources; and the Afrak Mountains Nature Reserve in West Papua (World Bank 1990). In the Philippines community-based resource management is also not new. For instance, the Calanguyans, through the Wishful Ancestral Domain Association of Kalanguya (WADAKA), was successful in implementing policies to protect their ancestral domain and monitoring the use and development of natural resources in Caraballo Mountain (Gabriel, Mangahas 2017).

The study provides support to the high awareness of the T'boli indigenous communities on the need to protect the Allah Valley Watershed Forest Reserve. This was exemplified by the organization of T'boli tribal members into social and environmental groups with the legal and moral duties to protect the environment and sustainably use it. The Lake Sebu Ancestral Domain Community Association (LASADCA), the lone Protected Area Community-Based Resource Management Agreement (PACBRMA) holder of Allah Valley Watershed Forest Reserve, is an ideal example for such organizations involved in the management strategies and intervention programs for the protection and preservation of the Protected Area. Pursuant to RA 11038, the T'boli indigenous communities are represented in the Protected Area Management Board (PAMB), the governing body responsible for decision-making and implementation of policies and programs in the AVWFR, through a guaranteed representative of the Indigenous Cultural Communities in the body. LASADCA, being a PACBRMA holder, was granted rights to sustainably use forest, land, and water resources in accordance with their Community-Based Resource Management Plan (CRMP). The process involves the sustainable development of their ancestral land and the equitable allocation of resources among its beneficiaries. The CRMP is the plan that provides direction to its members, which is consistent with the principles on recognizing the rights of the indigenous peoples to land and territories and their rights to effective participation in the management of protected areas established on their ancestral lands (Sobrevilla, 2008). The promotion of biodiversity conservation programs should ensure that indigenous knowledge is incorporated in their design and implementation (M.B.K. Darkoh, n.d.). It is important that the indigenous peoples and local communities are given appropriate control over and access to land and other resources, as well as management responsibility for the natural areas upon which their continued prosperity depends (Lemons, Victor 2003). Herein, we discussed the extent of involvement of LASADCA, as an organized indigenous people's organization, in the management and conservation of the AVWFR.

# LASADCA's Environmental Management Practices

While different indigenous communities in our country have different cultures and practices, they tend to share a holistic and human-inclusive view of nature (Jones 2021). In this view, it formed the basis for indigenous environmental management that includes protecting lakes or forests, and even establishing regulations against exploitation of indigenous ancestral domains. The T'boli embodies this view of nature as exemplified by LASADCA's inclusion of both conservation and sustainable use in their CRMP. LASADCA envisions a community that is self-reliant and culture-sensitive, enjoying a sustainably-managed resources (LASADCA, 2021). The concept of biodiversity conservation is continuously inculcated among the members through the active engagement of the Department of Environment and Natural Resources (DENR) through the Protected Area Management Office (PAMO).

In achieving LASADCA's vision, they identified various management focuses to streamline program implementation. These include (1) ecosystem and biodiversity management, (2) protection, law enforcement, and policy development, (3) community economic development, (4) partnership and tourism management, and (5) strengthening of the organization. However, only three of these management focuses have strong implementation records: the first, second, and fifth.

LASADCA members have been closely involved in the biodiversity monitoring activities of the PAMO in their ancestral areas, which hosts a significant portion of biodiversity in the AVWFR (LASADCA, 2021). In fact, early this year, an extremely rare species of amphibian, which was thought to have gone extinct for 28 years, was rediscovered in BululTbotu, which is within LASADCA's area (DENR, 2020; Pitogo and Saavedra, 2021;). The active involvement of IPs significantly supports the DENR in biodiversity conservation activities, which is in line with their CRMP's first management focus. Also included in this management focus is the establishment of National Greening Program (NGP) plantations to reforest degraded areas. As of September 2021, the total forest plantations under the eNGP that are inside the PACBRMA area is 2,098.35 hectares (data from PAMO-AVWFR).

Although the traditional swidden farming and slash-and-burn agriculture have been practiced for generations, LASADCA members acknowledge that these practices do not support their vision. Thus, LASADCA intends to diversify agriculture to support both the local economy and biodiversity. Alongside this is the transition from monocrop fields in agricultural areas to poly cropping to maximize profit with less impact on local biodiversity (LASADCA, 2021).

However, a respondent pointed out that the implementation of this transition is difficult due to the lack of resources and the strong adherence to traditional practices by many local members. A traditional practice has formed part of the social values of indigenous peoples, and deliberate efforts to force value shifts for conservation are ineffective (Manfredo et al. 2017). But with careful engagement with the indigenous peoples and local communities to understand their existing value structures, LASADCA can formulate innovative strategies to overcome this hurdle. It should be highlighted that this active involvement in biodiversity conservation and protection is not only consistent with indigenous peoples view of nature, as discussed, but is also in accordance with the IPRA Law and ENIPAS Act of 2018.

Since 2005, when LASADCA was granted a PACBRMA, members have actively joined the PAMO's capacity building training on law enforcement and policy development, which is under their CRMP's second management focus. A response reported that these trainings helped improve the capacity of LASADCA members, adding that protection and law enforcement activities in their area were operational from 2016 to 2020. In the updating of their CRMP, LASADCA members targeted an area of 6,245 hectares patrolled yearly from 2022-2026, highlighting their intent to improve surveillance within their area. But the implementation of this target will require close coordination with the DENR. While a focus on enforcement is a welcomed development, improving the policy performance of LASADCA should also be a priority. This strengthens the sense of responsibility of LASADCA for the management and conservation of resources.

Recognizing the need to improve the capacity of LASADCA as an organization and as the only PACBRMA holder in the AVWFR, the PAMB through the PAMO conducted an organizational strengthening in 2021, which is the fifth management focus in their CRMP. This included the updating of the CRMP and strengthening the monitoring and evaluation aspect of the plan. This was timely because a major renewable energy project will be established within their ancestral land, and more programs are expected to be given to LASADCA to support the plan's implementation. Experiences in the field would tell that there have been people who raised criticisms on the leadership of LASADCA. This concern is valid and has been a challenge among the current leaders to improve LASADCA's organizational capacity and leadership capabilities of the members, not to mention that there is a need to have significant progress in the implementation of the CRMP.

The environmental management practices of LASADCA do not only focus on direct conservation and management of biodiversity but also involve strengthening the capacity of the organization and its members. LASADCA leaders acknowledge that the former will not be as effective and successful if capacity is less among the implementers. LASADCA exemplifies that to live in harmony with nature would entail a balance between the use of traditional ecological knowledge and scientific knowledge in the management of protected areas. And this will only happen if the indigenous peoples themselves are capacitated and the Indigenous Knowledge, Systems, and Practices (IKSPs) are well documented.

Although we provided herein an overview of some environmental management practices of LASADCA, as an organized indigenous community, there are still other traditional environmental management practices that are yet to be documented. These are embedded in Indigenous Knowledge, Systems, and Practices (IKSPs) the of the Tboli indigenous ethnolinguistic group, which require careful design of methodology and proper coordination with concerned agencies (e.g., NCIP for the process of Free, Prior, and Informed Consent). The AVWFR Protected Area Management Plan 2022-2023 highlights the need of a formal research process to generate this IKSPs data for its promotion and mainstreaming in the policies and initiatives of the PAMB. But some of which have already been recorded in the literature (Logong, 2000; Hyndman et al. 2004; Duhaylungsod, 2011).

#### **Indigenous Peoples Contribution to AVWFR**

Indigenous peoples have always relied on natural resources within their ancestral territory (Jones, 2021). Thus, they have stakes in the decisions created for its management and conservation. Several instrumentalities in the country were already put forward that enable the participation of indigenous peoples in this process. But these instrumentalities mean nothing if the indigenous peoples are not engaged, capacitated, and well-informed. The involvement of LASADCA in the AVWFR provides a good example on how indigenous peoples can take part in the conservation and management of protected areas, with their own management plan and autonomy for its implementation. This is beneficial not only to sustain their way of life but also to allow biodiversity in their ancestral land to thrive for the future generations-which is the very concept of sustainable development. The environmental management practices of LASADCA discussed herein are not only unique to the organization, but are also practiced wholly by the Tboli and Ubu-Manobo indigenous communities in the AVWFR. Coupled with long-held beliefs and traditions embedded in their cultural heritage, these practices and engagement of the indigenous peoples magnify conservation policies and initiatives of other stakeholders, which also have high stakes in the conservation and preservation of the biodiversity-rich ancestral lands

#### CONCLUSION

The study suggested that the initiatives of the T'boli Indigenous Community provided more responsive and empowered management practices in Allah Valley Watershed Forest Reserve. This was embodied with the formulation of Lake Sebu Ancestral Domain Community Association, wherein, 5 management focuses has been identified. Out of the identified management focuses, 3 were successfully implemented namely ecosystem and biodiversity management; protection, law enforcement, and policy development; and strengthening of the organization. The recognition of the rights of the indigenous people to their ancestral land was also magnified in various legislations. These legal actions allowed the LASADCA to regulate forest activities within their ancestral territories, therefore, enriching the biodiversity it hosts. Finally, this study concluded that the participation of the T'boli Indigenous Community through the LASADCA has been effectively utilized towards preservation and conservation of Allah Valley Watershed Forest Reserve.

#### ACKNOWLEDGEMENTS

Heartfelt gratitude and appreciation are attributed to the Department of Environment and Natural Resources Region XII, the leaders and members of the LASADCA, the Protected Area Management Office-Allah Valley Watershed Forest Reserve, Mr. Kier Mitchel E. Pitogo, the professional school of the University of Mindanao, and all other stakeholders involved in this study.

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