Traditional Forest Conservation Knowledge/Technologies: The Case of the *Ifugaos*, Philippines

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Abstract

This paper looked into the traditional forest conservation knowledge/technologies in the Philippines as practiced by the *Ifugaos* in the Northern Luzon which contributes to sustainability of production systems. It described the various knowledge systems for natural resources management showcasing the different beliefs, culture and traditions of the indigenous peoples. The unique system of the *Ifugaos* in tending forests known as the "*muyong system*" could be viewed as a forest conservation strategy, a watershed rehabilitation technique, a farming system or an assisted natural regeneration (ANR) strategy. The knowledge system has been transmitted from generation to generation, making the lives and aspirations of the indigenous peoples in harmony with their physical and social surroundings. Based on the present indications, the system plays a significant role in promoting the sustainability of the forest and the cultural and important values of the *Ifugao* people.

Key Words: indigenous knowledge/technologies, *muyong system*, natural resources management, Ifugaos

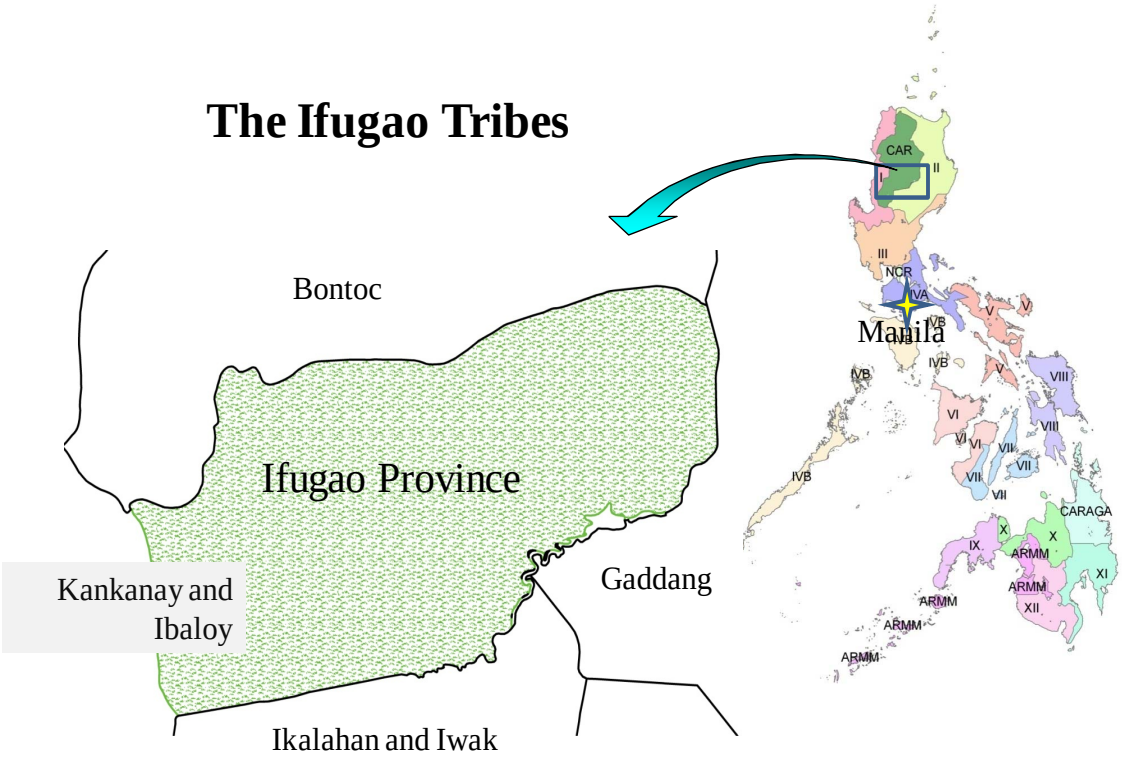
1. Introduction

The Philippines is an archipelago endowed with abundant natural resources, a rich history, diverse cultures and many ethno linguistic groups. The National Commission on Indigenous Peoples (NCIP) estimated about 95 tribal groups in the country. Of the more than 87 million Filipinos, about 12 to 15 million are indigenous peoples, or about 17 to 22 percent of the total population (Molintas, 2004).

Ifugao is home to a thriving ancient culture and host to the famous rice terraces which had been inscribed in UNESCO's World Heritage List in 1995 as "a continuing cultural landscape" and likewise considered by the U.S. Association of Civil Engineers as an engineering marvel built by unschooled and free men not of slave labor (Cagoco, 2006).

The *Ifugaos*, which is derived from the term *ipugo* which refers to the rice grain given to them by their God, "*matungulan*", inhabit the most rugged and mountainous part of the country in the Central Cordillera in Northern Luzon, with peaks rising from 1,000 1,500 meters, and drained by the waters of the Magat River, a tributary of Cagayan River. The area covers about 1942.5 sq km of the territory. The ancient Ifugao rice terraces is the country's only remaining highland

mountain ecosystem featuring the ingenuity of the *Ifugaos* and a remarkable agricultural farming system which has retained the viability as well as the efficacy of the 2000 year old organic paddy farming. The continued existence and viability of the rice terraces is a manifestation of strong culture nature connections, marvellous engineering systems, innovativeness and determined spirit of the *Ifugaos* to maximize use of the mountainous lands for food production.



The Ifugao *Muyong* System/Rice Terraces-Forest Ecosystem

2. Discussion

The rice terraces are supported by indigenous knowledge management of *muyong*, a private forest that cap each terrace cluster (Baguilat, 2007). The *muyongs* are an essential part of the agroforestry system in the steep mountainous region protecting lower farmlands from run off and erosion (FAO, 2005). They are being managed through a collective effort and under the traditional tribal practices. The communally managed forestry area on top of the terraces contains about 264 indigenous plant species which are mostly endemic to the region. The terraces form unique clusters of micro watersheds and are part of the whole mountain ecology. They serve as a rainwater and filtration system and are saturated with irrigation water all year round. A biorhythm technology, in which cultural activities are harmonized with the rhythm of climate and hydrology management, has enabled farmers to grow rice for food at over 1000 meters.

There are three (3) types of *muyong system* as reported by FAO (2005) classified according to their establishment namely: a). those that were planted and handed down through generations; b). those recently established on fallow swidden (or *uma*) land; and c). those established within the natural forest through a long usage claim.

With the implementation of people oriented/social forestry programs in the country which started in 1976, Certificates of Ancestral Domain Claim (CADC) were awarded to the *Ifugaos*, providing them security of tenure for 50 years. However despite the CADC, many *Ifugaos* believed that their ownership over the land is not time bound (FAO, 2005). The passage of the Indigenous People's Rights Act in 1997 provides an absolute Ancestral Domain Title to the *Ifugaos*, thus, legitimizes ownership of their lands and promotes the practice of their traditions and beliefs in managing their land.
Despite however the good indications that the system promotes sustainability of the forest, there are issues and concerns besetting the knowledge systems being practiced by the *Ifugaos*. In 2001, the famous rice terraces was included in the list of endangered World Heritage Sites. Over the last 50 years, the size of the cultivated terraces had significantly shrunk, from 15,000 hectares to just about 5,000 hectares during the present time, and the reasons are alarming.

3. Conclusion

Indigenous forest management systems like the Ifugao *muyong* system play important roles in supporting the sustainability of the productive systems and the cultural and important values of the Filipino tribal/ethnic people. The *muyong* system has helped the *Ifugaos* in fulfilling their aspirations in developing and managing their land in harmony with their physical and social surroundings. Perhaps it is time for the government to listen to the local people like the *Ifugaos* whose experiences in their *muyong* system generates a number of lessons and who obviously possess time tested solutions to some problems. An effective traditional ecological knowledge is essential to ensure that the factors to facilitate forest sustainability are in place.