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這片土地是「我們的」: 台灣原住民族和政府共同管理的研究
This Land is "Our" Land: A Study of Indigenous-State Co-Management in Taiwan

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Advisor: Professor Da-Wei Kuan

中華民國 2017 年 6 月

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List of Abbreviations

CIP: Council of Indigenous Peoples

DPP: Democratic Peoples' Party

FB: Forestry Bureau

FPIC: Free and Prior Informed Consent

ILO: International Labor Organization

KMT: Guo Min Dang (Kuo Min Tang)

MOI: Ministry of the Interior

NCCU: National Chengchi University

NPB: National Park Bureau

NTD: National Taiwan Dollars

UN: United Nations

VOC: Dutch East India Company

The people who are crazy enough to think
they can change the world
are the ones that do.
~Steve Jobs

For Lisa, Dale, Megan, Jeremy, and Amit,
with love, always.

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摘要

過去幾十年來，當地社區，科學家和政府官員不得不面對日益惡化的環境惡化以及對可持續發展和資源利用日益增長的需求。 近年來,為了解決日益增長的問題，土地和資源共同管理的概念越來越受歡迎。 共同管理通常被定義為"兩個以上的社會行為者之間談判，界定和保證公平分享給定領土，地區或一套自然資源的管理職能，權利和責任的情況" (Borrini et al. 2000) 。 更具體地說，森林共同管理是指分享責任的領域和資源與森林有關的請況。 在理論上，森林共同管理的好處不僅應該是環境，而且應該是社會經濟。

在本論文中，我將對台灣的共同管理案例研究，十多年前成立的太魯閣國家公園合作管理委員會，以及另一個最近新出現的魯凱族和 台灣林業局。 為了提供台灣共同管理協議的示範框架，我還將討論加入加拿大國家公園管理的共同管理。 我將在台灣和加拿大的相關殖民時期追溯土著國家關係的歷史和演變，以更好地了解當前原住民族和國家共同管理工作的基礎。

本論文還將討論國際原住民族權利制度的出現在台灣制定本國原住民族政策方面發揮的作用。 我將了解原住民如何適應台灣國家公園和森林管理工作的政策和決策框架。 在評估原住民族與中央政府在這方面的權力關係的性質時，我的目的是回答以下問題：台灣當地原住民族如何與台灣政府達成共同管理協議？ 在分析歷史和國際背景，政策框架和每個案例的具體細節時，我將就台灣當局與原住民部落未來的共同管理工作提出建議。

關鍵字: 共同管理, 原住民族, 台灣, 太魯閣, 魯凱, 國家公園, 林木局, 加拿大

Abstract

Over the past several decades, local communities, scientists, and government officials have had to contend with increasing environmental degradation and the growing need for sustainable development and resource use. In more recent years, in order to address these rising concerns, the concept of co-management of land and resources has become increasingly popular. Co-management is commonly defined as "a situation in which two or more social actors negotiate, define, and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources" (Borrini et al. 2000). More specifically, forest co-management refers to situations in which the area and resources for which responsibility is being shared are forest-related. In theory, the benefits of forest co-management should not only be environmental, but socioeconomic as well.

In this thesis, I will conduct two case studies of co-management in Taiwan, the Taroko National Park co-management committee, which was established over a decade ago, and another more recently emerging case of co-management between Rukai indigenous peoples and the Taiwan Forestry Bureau. In order to provide a model framework for Taiwanese co-management agreements, I will also discuss co-management as it has been incorporated into Canadian national park management. I will trace the history and evolution of indigenous-state relations across the pertinent periods of colonization in both Taiwan and Canada to better understand the foundations upon which current indigenous-state co-management efforts have been constructed.

This thesis will also touch upon the role that the emergence of an international indigenous rights regime has played in shaping domestic indigenous policies in Taiwan. I will identify how indigenous peoples fit into the policy and decision-making frameworks of Taiwan's national park and forest management efforts. In assessing the nature of power relations between indigenous peoples and the central government in this context, I aim to answer the following question: how do local Taiwanese indigenous peoples engage in co-management agreements with the state government of Taiwan? Upon analyzing the historical and international contexts, the policy frameworks, and the specific details of each case, I will posit suggestions for future co-management efforts between the Taiwanese state government and indigenous communities.

Keywords: *co-management, indigenous, Taiwan, Taroko, Rukai, National Park, Forestry Bureau, Canada*

Chapter 1

I. Introduction

Over time, there has been an increasing focus on the ways in which "social and ecological systems are, or may be, linked in order to promote sustainability" (Carlsson and Berkes 2005). Many scholars argue that co-management strategies are the most effective ways by which to engage the government and local communities in promoting ecologically sustainable initiatives. While there are many definitions of co-management, one that is commonly accepted is "a situation in which two or more social actors negotiate, define, and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources" (Borrini et al. 2000). Also important to note is that co-management has many different aspects and can be understood as power-sharing, institution-building, trust and social capital, process, problem-solving, and governance (Berkes 2008). Unfortunately, actively incorporating local communities, particularly indigenous communities, in ecological initiatives has proven to be a particularly contentious issue in settler states. Some difficulties derive from the fact that "local knowledge often arises from a different worldview than Western science and has different starting points, assumptions and rules" (Berkes 2008). Additionally, effective co-management strategies "require multi-level governance arrangements that link social actors (vertically and horizontally) in the pursuit of shared learning" (Armitage et al. 2008). This type of linkage is particularly difficult in states where the actors are not on equal planes or do not share proportionate power in the decision-making process, as is typically the case in settler states.

Taiwan and Canada are two such settler states. Though both are strikingly different in terms of their geographic locations, landscapes, and climates, they do share similar colonial histories and relative indigenous populations (being approximately two percent of the total population of each state). Understanding the long colonial histories of each Taiwan and Canada is paramount in comprehending the foundations upon which current indigenous-state relations have been established. In Taiwan and Canada alike, successive centuries of colonization by outside forces have contributed to the stripping of indigenous rights, especially through assimilationist policies like the residential schools in Canada and the census and reserve land

systems in Taiwan. Over the past several decades, however, both Taiwan and Canada have undergone processes of democratization, and are now considered to be democratic states. Through these processes, Taiwan and Canada have both seen the revision of national park legislation and increased efforts to protect lands deemed to be naturally and culturally valuable (Finkelstein and McNamee 2012). While initially excluded from the planning and management of national parks and forested areas, over the years, both the Taiwanese and Canadian governments have claimed to take steps toward incorporating indigenous peoples into these processes (Parks Canada Indigenous Affairs Branch 2016). The question remains, however, to what extent these state governments have successfully devolved decision-making power to local indigenous communities in the planning and management of forests within designated national park areas. This question is especially pertinent when such areas overlap with traditional indigenous territories.[1]

In the international sphere, states, supranational institutions, and civil society have interacted over the years to give rise to an indigenous rights regime. At the same time, the emergence of this regime and the "multi-faceted process that ultimately led to the establishment of a universal and comprehensive regime of indigenous rights" serve to exemplify the critical role that "regional systems can play in the construction and consolidation of global human rights regimes" (Barelli 2010). Since the 1930s, international recognition of indigenous rights has been marked by the adoption of numerous indigenous peoples' human rights instruments. Some of these include ILO Conventions concerning the protection of indigenous and tribal populations (ILO Convention No. 169, 1989), the International Covenant on Civil and Political Rights (1966), the International Covenant on Economic, Social, and Cultural Rights (1966), the Universal Declaration of Human Rights (1948), and the UN Draft Declaration on the Rights of Indigenous Peoples, ratified and adopted by the General Assembly in 2007 (Mona 2007). All of these international conventions, covenants, and declarations have served as assets in indigenous peoples' pursuit of recognition and equality. In addition to highlighting some of these landmark instruments, I will elaborate on the extent to which the emergence of an international indigenous rights regime has influenced the recognition of indigenous rights in Taiwan.

[1] According to ILO Convention 169 Article 13 about land, indigenous territories are generally understood to be "the total environment of the areas which the peoples concerned occupy or otherwise use" (International Labor Organization 169, 1989). All references to indigenous territories contained within this thesis shall henceforth be understood as such.

Throughout this thesis, I aim to answer this primary research question: how do local Taiwanese indigenous peoples engage in co-management agreements with the state government of Taiwan? Before doing so, I will explain the motivation behind my research and provide a brief historical overview of the colonization and democratization of Taiwan and Canada, as well as the emergence of the national parks systems and forest management mechanisms in each state. Additionally, I will highlight some critical milestones in the emergence of an international indigenous rights regime that have helped to shape the recognition of indigenous rights in Taiwan. I will examine other cases of indigenous-state co-management and adapt Ortiga's six criteria for recognition of indigenous land rights to be applied to the systems of forest co-management in both Taiwanese case studies (Ortiga 2004). In identifying the degrees to which each co-management agreement meets the criteria within this framework, I will discuss the effective and ineffective components of each agreement. Finally, I will discuss Canadian indigenous-state co-management as a potential model for Taiwan. This analysis will thus allow me to make informed suggestions for future forest and national park co-management agreements in Taiwan.

II. Research Motivation

When I began my studies at the National Chengchi University in the fall of 2015, I intended to improve my understanding of the complexities of Taiwan's history to apply to a study in cross-strait relations. During my first semester at NCCU, I enrolled in a course on the socialization and mobilization of Taiwanese indigenous peoples. I also took a course focused on the ethnic and cultural structure of Taiwan. Through these courses, I gained exposure to Taiwan's colorful and diverse indigenous population. I grew increasingly frustrated as I learned about the historic oppression that indigenous peoples had faced over centuries of colonization. In particular, the loss of land rights struck a chord with me on a moral level. I viewed the repeated seizure of indigenous land as theft on the part of the colonial governments, and thus believed it to be inherently wrong. As I befriended Taiwanese students of indigenous descent, I became progressively more aware of the past injustices committed against indigenous peoples. I also began to better understand the continued socioeconomic and political inequalities in

government representation and legislature, all of which began to take on a more personal meaning for me.

I am originally from the United States, which, like Taiwan, has a long colonial history throughout which Native Americans have also faced centuries of oppression, degradation, and displacement by colonial settlers. As a result, I recognize the striking similarities between the plight of indigenous peoples in Taiwan and North America, namely the United States and Canada. Considering the recent change in administration in the United States, indigenous rights issues appear to be as serious as ever, and the past several centuries have yet to yield a cohesive and equitable framework for indigenous-state negotiations. I understand that the legacies of colonization not only include political marginalization, but also diminished rights to traditional lands and territories. I see this as an urgent issue that needs to be discussed.

On a different note, I grew up as a woman in a patriarchal society, and while I have not faced the same degree of prejudice or marginalization as is faced by those of other minority groups, especially women in minority groups, I can still strongly empathize with the inequalities faced by peoples who are seen as being "less." Despite arguments that some may make to the contrary, to this day, women are still fighting for equal status and pay in America, which touts itself as being one of the most progressive democracies in the world. Similarly, I am frustrated that democratic governments like those in the United States, Taiwan, and even Canada fail to recognize the stark inequalities and prejudices that are faced by minority groups. I am incredibly frustrated that the original inhabitants of these states, namely indigenous peoples, do not have access and rights to their traditional lands and territories. Thus, I aim to contribute to the literature on indigenous-state co-management by analyzing two cases of such in Taiwan. In my discussion, I aim to incorporate Canada, a state which many scholars point to as having a more progressive co-management approach and framework, as a potential model for co-management. I intend to provide suggestions for increased involvement of indigenous peoples by the Taiwanese state government in the national park and forest co-management process, and ideally affect positive future change.

III. Literature Review

III.a. Historical Background

While Taiwan and Canada are strikingly different with regard to geography, climate, and location, the two states share a surprising number of similarities. The histories of both Taiwan and Canada have been characterized by over four centuries of colonization, which has largely contributed to the basis of indigenous-state relations in each today. While Canadian indigenous-state relations are largely based on treaty federalism, Taiwanese indigenous-state relations are more so conducted in a top-down manner resulting from centuries of oppression and denied recognition of rights. Additionally, while both Taiwan and Canada have different agencies governing the planning and management of national parks and forests, the emergence and evolution of these structures have taken relatively different paths. This is especially apparent in the differing ways in which Taiwanese and Canadian national parks and forestry bureaus incorporate indigenous peoples into the decision-making processes of each. Because of the seemingly similar, yet apparently quite different processes by which modern indigenous-state negotiations and land management structures have emerged, I believe it will be very interesting and informative to compare these two states in my analysis.

Taiwan

Taiwan's colonial history dates back nearly 400 years. Prior to the initial colonization of the island, "Taiwan was the location of Proto-Austronesian" and was primarily inhabited by Austronesian-speaking indigenous peoples (Bellwood 2009). Those indigenous peoples remaining in Taiwan today are referred to as 原住民族 (*yuan zhu min zu*), and prior to colonization, they enjoyed relative autonomy over the island for several thousand years.

Taiwanese indigenous autonomy on the island came to an end in 1624, however, with the arrival of the Dutch East India Company (VOC), which "established a base in southwestern Taiwan" to expand its trade with China and Japan (Brown 2004). Under Dutch colonial rule, which lasted just under four decades, the colonial settlers and Taiwanese indigenous peoples primarily interacted through trade, and the aborigines retained a great deal of autonomy over

many of their traditional territories. The Dutch colonial rule ended in 1661 with the start of the Zheng regime, which lasted until 1683. The Zheng period of colonization was primarily characterized by the exploitation of Taiwanese indigenous peoples as a cheap source of forced labor, often resulting in state seizure of traditional indigenous lands (Brown 2004). Following the Zheng regime, the Qing government took control of Taiwan. Qing rule on the island lasted from 1683 to 1895 and was marked by Qing suppression of indigenous uprisings, a continuation of the forced labor system, and further losses of indigenous land rights (Brown 2004). In 1873, near the end of Qing rule, the government established the first forestry agency in Taiwan, which dissolved shortly thereafter as Taiwan was ceded to Japan just two years later (Forestry Bureau 2016).

Japanese colonization of Taiwan began following the defeat of Chinese forces in the Sino-Japanese war in 1895. It goes without saying that "the Japanese occupation had an impact on what became of indigenous culture and society" (Faure 2009). This is especially owing to the fact that the pacification and assimilation policies pursued by the Japanese colonists were "based on the colonial purposes of protection, assimilation, and recognition" and were justified as being for the good of the indigenous peoples (Mona 2007). Additionally, because the Japanese colonial government focused on "developing Taiwan's infrastructure, production, and population," much of the land that had remained under indigenous control to that point was seized by the government for development (Brown 2004). With regard to the forested lands of Taiwan, forestry matters fell under the jurisdiction of the Office of Agricultural Production, which reported to the Japanese Governor General's Office (Forestry Bureau 2016). Given the nature of Japanese policies in suppressing aboriginal uprisings and enforcing assimilationist policies, it is reasonable to conclude that the Office of Agricultural Production did not consult with Taiwanese indigenous peoples concerning the development of their traditional forest lands.

Japanese colonial rule in Taiwan came to an end in 1945, when the island was given over to Chinese rule following the Japanese defeat in World War II. When Taiwan was initially ceded to Chinese rule, matters of forest conservation and development were assigned to the Office of Forestry Administration under the Department of Agriculture and Forestry (Forestry Bureau 2016). At this time, Taiwan was also divided into ten forestry administration zones (Forestry Bureau 2016). Two years later, in 1947, Chiang Kai-Shek and his Nationalist Party (KMT) troops fled to Taiwan and occupied the island for the next 40 years under rule of Martial

Law. During this period of colonization, not only did Taiwanese indigenous peoples experience extensive political marginalization, but the government also "continued a modified version of the Japanese household registration system as a means of monitoring the population" (Brown 2004). When the island came under KMT rule, the Taiwanese provincial government dissolved the Office of Forestry Administration and reorganized it as the Forestry Administrative Division, which retained control over the production and supply of lumber and afforestation affairs (Forestry Bureau 2016). At this point, the responsibility for forest management was transferred to the Department of Agriculture and Forestry. It should be noted that during the KMT Martial Law period, none of the aforementioned departments or bureaus consulted with or integrated local indigenous communities into their forest management practices. Later, in 1960, the Forestry Administration Division was reorganized once more and was renamed the Forestry Bureau (Forestry Bureau 2016).

In 1968, the KMT established a reserved land system as a way of legally registering indigenous territory in Taiwan. Despite the original intent of the system to reserve land for use by indigenous peoples, "legal loopholes actually gave the Taiwanese government as well as Han Chinese individuals and corporations access to indigenous land" (Simon 2014). Shortly after the KMT instituted the reserve land system, the government passed the first National Parks Law in 1972 and revised the Forestry Law (Edmonds 1996). By 1984, five national parks had been established, including Kenting, Yushan, Yangmingshan, Taroko, and Shei-pa National Parks (Edmonds 1996). These parks were under the jurisdiction of the Ministry of the Interior's National Parks Department and accounted for over 8.5 percent of Taiwan's total land (Edmonds 1996). In the creation of the parks system and the establishment of the aforementioned parks, not only did the government neglect to consult with local indigenous communities about the parks' creation, but many indigenous peoples were actually displaced from their traditional lands in the process. In essence, the failure of the Taiwanese government to effectively incorporate indigenous peoples into the land planning and policy-making process during KMT rule marks yet another period in Taiwanese colonial history during which indigenous peoples were completely subordinate to the state government.

Since the end of KMT Martial Law in 1987, Taiwan has undergone three decades of democratization. In doing so, the government has opened a small space for the involvement of indigenous peoples in the political landscape and legislature. In 1989, the Forestry Bureau

changed from being an "enterprise organization" to a "civil service agency," allowing for greater community engagement in matters of forest development and protection (Forestry Bureau 2016). Several years later, in 1994, according to the usage policies of the Taiwan Agricultural and Forestry Bureau, 20 nature reserves were converted to national forest lands (Edmonds 1996). Additionally, national parks were classified into five zones: 1) ecological protection, 2) significant scenic, 3) historical and cultural preservation, 4) recreational, and 5) general protection (Edmonds 1996). Regarding forest lands in Taiwan, in 1999 the Forestry Bureau was relegated under the central government as the Forestry Bureau of the Council of Agriculture, under the authority of the Executive Yuan (Forestry Bureau 2016). While the Bureau has been responsible for forestry matters for the past 60 plus years, it falls under the authority of the Forestry Administration, which reports to the Taiwan Provincial Government, and through such to the Executive Yuan (Edmonds 1996). In cases where forested land is within the delineated borders of a national park, however, ultimate control over said piece of forest lies with the national park and the Construction and Planning Administration under the Ministry of the Interior (Edmonds 1996).

For many years, both the National Parks division and the Forestry Bureau have failed to actively engage local indigenous communities in the planning, development, and protection of traditional lands delineated as forests and parks. In more recent years, the Forestry Bureau has promoted balancing "traditional forestry work against the needs of nature conservation," but the active incorporation of indigenous peoples into this process has remained unclear (Edmonds 1996). At the same time, the Taiwan Forestry Act, which was initially passed in September of 1932 and has since been revised and amended a number of times, most recently in May of 2015, states in Article 38-1 that "for national forest located within the traditional territory of aboriginal peoples, the central government agency shall make it a priority to advise aboriginal peoples community development associations, legal entities, or individuals with reforestation and forest protection" (Forestry Act 2015). While this article does address the possibility of national forests falling within traditional aboriginal lands, it does not propose a way to engage indigenous communities in the planning stages so much as it stipulates that the central government agency must provide guidance regarding these conservation efforts. This concept of top-down, government-imposed environmental protection and management is reflective of the general Taiwanese government approach to land planning and forest management. Because the

government has yet to establish a model for indigenous-state relations in which negotiations between the two can take place on an equal plane, although Taiwan is technically in a state of post-colonialism, on a day-to-day basis, indigenous peoples experience life in a continued state of colonialism (Simon 2016). Therefore, one might reasonably conclude that indigenous-state national park and forest management efforts to this day have yet to be realized on a basis of equality, but rather are still conducted in a top-down manner.

Canada

Similar to Taiwan, Canadian history has also been characterized by over four centuries of colonial rule. The first French colonists began to arrive in Canada in 1537. At this point, "France saw Aboriginal nations as allies, and relied on them for survival and fur trade wealth" (Jaenen 2007). Additionally, although France claimed sovereignty over a great deal of land in the St. Lawrence basin and hinterland, "the French Crown also recognized that Aboriginal peoples were part of independent nations governed by their own laws and customs" (Jaenen 2007). In the 17th and 18th centuries, "French and British colonies pushed further inland" and continued to compete for control of land and resources (A History of Indian and Northern Affairs Canada 2011). As the colonial powers fought each other, their "commercial alliances transformed… into vital military alliances" (A History of Indian and Northern Affairs Canada 2011).

When the Seven Years' War ended in 1763, "Britain replaced France as the preeminent colonial power in the land that is now Canada" (Miller 2006). That same year, the British Crown also issued the Royal Proclamation of 1763, in which it was established that "all lands to the west became the 'Indian Territories' where there could be no settlement or trade without the permission of the Indian Department and strict control by the British Military" (A History of Indian and Northern Affairs Canada 2011). For the next several decades, the British colonial government continued to interact with Aboriginal nations on the basis of commercial and military treaties with the Crown.

In the 1820s, however, the British colonial government began to enact policies "encouraging First Nations people to abandon their traditional ways of life" in hopes that they would assimilate into the larger British society (A History of Indian and Northern Affairs Canada

2011). Over the following century, the British colonial powers instituted assimilation programs and initiatives to "civilize" the indigenous peoples. Rather than respect aboriginal lands, British colonial assemblies enacted programs and legislation to protect Indian reserve lands and incentivize indigenous peoples to give up their traditional ways of life and adopt agricultural lifestyles (A History of Indian and Northern Affairs Canada 2011). In 1876, the government passed the Indian Act, which further stripped indigenous peoples of their unique rights and identity (Henderson 2006). This Act was soon followed by the establishment of Indian residential schools in 1883.

Around the same time, the earliest of Canada's National Park legislation began emerging in 1887. Just 14 years after the Department of the Interior had been established (1873), the Rocky Mountains Park Act created the first national park and provided park administration (Parks Canada 2013). This act was followed in 1911 by the Dominion Forest Reserves and Parks Act, and the National Parks Act and Natural Resources Acts were passed in 1930 (Parks Canada 2013). It was at this time that control over public lands and resources was given to the provincial governments, but these acts failed to account for indigenous claims over lands being delineated as national parks and forest reserves. From 1911 to 1936, the Dominion Parks Branch was run by Commissioner James B. Harkin, who oversaw the establishment of nine new national parks (Finkelstein and McNamee 2012).

Later that century, in 1969, the Trudeau Government proposed a policy called the "White Paper." This policy "called for a repeal of the Indian Act, ending the federal responsibility for First Nations and terminating their special status, as well as the decentralization of Indian affairs to provincial governments who would then administer services for First Nations communities and individuals" (A History of Indian and Northern Affairs Canada 2011). The government failed to consult with First Nations peoples in the passage of this legislation, and the White Paper was thus vastly rejected by aboriginal peoples.

In the 1970s, Canadian government began to develop new policies to better address First Nations rights claims. One particular policy resulted in a "process to settle land claims through negotiation where Aboriginal rights and title would be transferred to the Crown through a settlement agreement which guaranteed defined rights and benefits for the signatories" (A History of Indian and Northern Affairs Canada 2011). This agreement assigned more decision-making power to the First Nations themselves. Similarly, in 1973, the government adopted a

Comprehensive Claims Policy and a Specific Claims Policy to better address issues of claims to Aboriginal title and non-fulfillment of obligations outlined by various treaties.

Since the 1970s, the government and Parks Canada have sought closer working relations with formerly displaced communities and Canada's indigenous peoples, including the First Nations, Inuit, and Métis (Routledge and Dick 2011). Through revisions to the National Parks Act, now titled the Canada National Parks Act, Aboriginal communities are now allowed to participate in traditional subsistence harvesting, which had previously been prohibited by park legislation (Finkelstein and McNamee 2012). Additionally, Parks Canada has emphasized that collaboration between the Parks and Aboriginal communities is essential to the establishment of new national parks (Finkelstein and McNamee 2012). One example of such collaboration is reflected in the expansion of the Nahanni National Park Reserve in 2009, which entailed cooperative efforts between Parks Canada and the Dehcho First Nations (Finkelstein and McNamee 2012). Other collaborative methods for conserving resources and co-managing traditional territories that are encompassed within public lands are through management boards, which are ideally comprised of an equal number of indigenous and state representatives. Most recently, Parks Canada collaborated with the Labrador Inuit peoples to establish the Torngat Mountains National Park Reserve in 2005 (Rice 2015).

In the past two and a half decades, it appears that the Canadian government has made great strides in addressing past wrongs and attempting to return lost power and rights to First Nations peoples. In 1995, the government launched a new process, "the Inherent Right to Self-Government Policy, to negotiate practical arrangements with First Nations to make self-government a reality" (A History of Indian and Northern Affairs Canada 2011). Additionally, Parks Canada has continued to engage in partnerships with forestry and agriculture industries, Aboriginal communities, private landowners, environmental groups, and provincial park agencies (Finkelstein and McNamee 2012). The government's proactive approach in pursuing partnerships and engaging local indigenous communities during the early stages of national park and forest management is indicative of the evolving nature of indigenous-state negotiations in Canada.

III.b. Indigenous-State Relations

Indigenous-state relations in Canada and Taiwan have long and varied histories. Both states have clearly been influenced by various international milestones in the recognition and protection of indigenous and human rights, including the Universal Declaration of Human Rights and the United Nations Declaration on the Rights of Indigenous Peoples. However, the manifestations of such influences have appeared in differing forms in each state. In Canada, because of the state government's history of negotiating with indigenous peoples by way of signing treaties on somewhat of a nation-to-nation basis, Canada's indigenous-state relations today, especially with regard to national park planning and management, assign a larger decision-making role to those indigenous communities involved. On the other hand, because of Taiwan's varied colonial history, especially beginning with the Japanese removal of indigenous peoples from their traditional territories and the development of public lands, it was not until more recently, through the 2005 Basic Law on the Rights of Indigenous Peoples (原住民族基本法 *yuanzhuminzu jibenfa*), that indigenous peoples were allotted more recognition in the Taiwanese government. While Taiwanese legislature mandates that the National Parks Bureau must collaborate with local indigenous peoples in the establishment and management of parks, little real decision-making power is assigned to local communities. Thus, in comparing the forest and national park co-management models of Taiwan and Canada, it is essential to bear in mind the differences in past and present indigenous-state relations in both states. As a result, while the two may be compared to derive a more comprehensive model, we must remind ourselves that those mechanisms that are successful in one model may not necessarily be directly applied to the other.

International Milestones

International recognition of indigenous peoples' rights is very closely tied to the development and relative consolidation of an international human rights regime. The Universal Declaration of Human Rights, adopted by the UN General Assembly in Paris in 1948, puts forth some of the fundamental rights of all peoples, including rights to own property, rights to life, liberty, and security of person, and the statement that "all humans are born free and equal in

dignity and rights" (Universal Declaration of Human Rights 1948). Years later, in 1966, the International Covenant on Civil and Political Rights was passed, in which Article 27 addressed the rights of ethnic minorities and implied that there existed minorities in need of protection. In 1989, the International Labor Organization (ILO) convened concerning the protection of Indigenous Tribal Peoples in Independent Countries, referred to as ILO Convention No. 169 (Mona 2007). Finally, in 2007, the UN General Assembly adopted the Declaration on the Rights of Indigenous Peoples, which recognizes historical injustices committed against indigenous peoples, denounces practices of superiority, calls for self-determination, and emphasizes indigenous land rights (United Nations Declaration on the Rights of Indigenous Peoples 2007).

Additionally, 1995-2004 was deemed to be the "first United Nations' International Decade of the World's Indigenous People" (Corntassel 2007). Because the goals of the first decade were rather ambitious: "to strengthen international cooperation for the solution of problems faced by indigenous peoples in the areas of human rights, culture, the environment, development, education, and health" through "partnership in action," not every facet was satisfied (Corntassel 2007). As a result, "indigenous delegations successfully lobbied for the passage of a Second Indigenous Decade (2005-2014)" (Corntassel 2007). The second decade was intended to allow for the "further strengthening of international cooperation for the solution of problems faced by Indigenous people" (Corntassel 2007).

On a more regional level, indigenous rights movements have also been occurring throughout North and South America, Australia and New Zealand, Africa, and elsewhere in Southeast Asia for the past several decades. As these movements have taken place, they have opened up space in the dialogue for scholars to asses to what degree post-colonial governments protect fundamental indigenous rights, particularly rights to land and traditional territories. One such scholar is Roque Roldán Oritga, who conducted case studies on numerous Latin American countries to assess "common problems in the legal framework for the recognition of indigenous lands" (Ortiga 2004). In doing so, Ortiga utilized six key criteria to evaluate and classify the indigenous land rights regimes in Colombia, Costa Rica, Panama, and Peru (Ortiga 2004). These criteria include: 1) land tenure regime, 2) territorial recognition, 3) natural resources rights, 4) tenure security, 5) autonomy, and 6) legal recourse[2] (Ortiga 2004). By measuring the degree to

[2] Oritga defines these criteria as following: 1) Land tenure regime- "the character of the right over land that has been recognized, which can range from outright (fee simple) ownership through several types of restricted ownership to

which each of these criteria were met in the aforementioned states, Ortiga was able to classify the indigenous land rights regimes into three typologies: 1) countries with a superior legal framework, 2) countries with a legal framework in progress, and 3) countries with a deficient legal framework (Ortiga 2004). Ortiga also took into account whether or not these and other Latin American countries had ratified the ILO Convention No. 169. His research led him to conclude that the following countries fell into each of these three legal regime typologies:

Box 2
Typology of Indigenous Legal Regimes

Superior legal framework	*Legal framework in progress*	*Deficient legal framework*
Bolivia	Argentina	El Salvador
Brazil	Guatemala	Guyana
Colombia	Honduras	Suriname
Costa Rica	Mexico	Uruguay
Panama	Nicaragua	
Paraguay	Venezuela	
Peru		

Figure 1- Legal Regime Typologies, Ortiga 2004

Important to note, however, is that this type of evaluation and classification is not limited to Latin American countries (Ortiga 2004). In fact, similar criteria can reasonably be adapted and adopted to assess indigenous land rights regimes and management efforts in other states worldwide, more specifically those cases at hand in Taiwan and Canada.

With regard to those covenants and conventions adopted on an international level, as well as the more regional indigenous rights movements that have affected change in numerous states' domestic legal frameworks, these movements have served as models and sources of inspiration and potential alliance for Taiwan and Canada's own indigenous movements.

Taiwan

simple use rights (usufruct)"; 2) Territorial recognition- "recognition of land in a form that corresponds to the concept of an indigenous territory, as defined by ILO 169"; 3) Natural resources rights- "the sorts of rights over natural resources ownership, administration, and use granted as a consequence of the land right"; 4) Tenure security- "the degree of security of the type of land title"; 5) Autonomy- "the amount of autonomy in managing their own affairs that is accorded to an indigenous group as a consequence of their land rights, including legal recognition as an indigenous group, and their ability to use their own traditional legal and justice systems"; and 6) Legal recourse- "the legal actions to which they have recourse in order to defend their lands" (Ortiga 2004). For a more detailed explanation of Ortiga's evaluation, please reference his paper *Models for Recognizing Indigenous Land Rights in Latin America*.

Because KMT Martial Law in Taiwan did not end until 1987, Taiwanese indigenous peoples were relatively limited in their ability to protest dispossession and discrimination by the government and corporate powers. This limitation did not prevent the "younger generation of indigenous people" from starting the newspaper Gaoshanqing (Mountain Greenery) in 1983 and voicing their frustrations with being "victims of harassment and social injustice" and lacking "local economic outlets" (Allio 1998). One year later, in 1984, "the Alliance of Taiwan Aborigines (ATA) was founded, the first secular aboriginal organization bringing together representatives of each ethnic group" (Allio 1998). When Martial Law ended in 1987, the number and "mobilization of the aboriginal people was greatly extended" (Allio 1998). The theme of Taiwanese indigenous rights movements appeared to shift in the mid-1980s, however, when activists turned "from an initial concern for social welfare and individual rights to a focus on collective rights" (Simon 2014, Ku 2005).

In the years following, many of the indigenous movements in Taiwan have largely been based on street demonstrations (Allio 1998). One of the best known indigenous movements was the Correcting the Name (正名 *Zheng Ming*) movement in 1994, which demanded more accurate terminology for the identification of Taiwanese indigenous peoples as the original inhabitants of the island. Another well-known movement was the Give Us Back Our Lands! (還我土地 *Huan wo tudi*) movement, of which the Asia Cement Case and Taroko people were a part. While the Correcting the Name movement was evidently successful in changing Taiwanese aborigines name to "indigenous peoples" (原住民 *yuanzhumin*), the Give Us Back Our Lands! Movement "has been slow in achieving a similar success" due to the reserve land system (Allio 1998). A third notable indigenous movement in Taiwan was the Taking Our Place in the Constitution movement (入線 *Ruxian*). This movement "was rewarded in 1997 with the adoption of the clause contained in article 10 of the amended constitution" (Allio 1998). In 1996, just prior to the adoption of the constitutional reform, the Council of Indigenous Peoples was established to "govern indigenous affairs" (Chi and Chin 2016). Later, in 1999, when DPP presidential candidate Chen Shui-bian was campaigning on Orchid Island (蘭嶼 *lanyu*), he signed the New Partnership Between the Indigenous Peoples and the Taiwanese Government (Simon 2014). Several years later, the Taiwanese government, under President Chen Shui-bian's administration,

adopted the 2005 Basic Law on Indigenous Peoples, "which promised to meet most of the demands of the indigenous social movement, including political autonomy" (Simon 2014).

Also during the 1990s, the indigenous movements' leaders "looked toward the international community" for further support in their struggles (Allio 1998). In 1991, the ATA sent two members to Geneva "to participate as a non-governmental organization in the ninth session of the Working Group on Indigenous Populations" (Allio 1998). In the Asia Cement Case, Igung Shiban reported her case to the United Nations Working Group on Indigenous Populations in 1997. In more recent years, as the Taiwanese independence movement has gained traction, so too has the push for Taiwanese indigenous peoples to obtain greater rights to land, self-determination, and autonomy. Article 21 of the Basic Law on Indigenous Peoples, passed in 2005 during Chen Shui-bian's presidency, "explicitly requires that any land development or use of resources on indigenous land has to be done with the permission and participation of the indigenous peoples concerned" (Simon 2010). In August 2016, newly elected DPP President Tsai Ying-wen issued an apology to the indigenous peoples of Taiwan for all of the wrongdoings they have faced over the past four centuries (President Tsai's Apology 2016). In this speech, the President also acknowledged that in responding to "the appeals of indigenous movements… [the government's] actions have not been fast enough, comprehensive enough, or sound enough" (President Tsai's Apology 2016). President Tsai announced that the government would be setting up an Indigenous Historical Justice and Transitional Justice Commission under the Presidential Office. She also requested that the "Executive Yuan convene regularly the Indigenous Peoples Basic Law Promotion Committee, and use the Yuan's authority to coordinate and handle matters related to any consensus reached by the above-mentioned commission" (President Tsai's Apology 2016). Furthermore, President Tsai stated that the government would set up an Indigenous Legal Service Center to settle disputes between modern laws and indigenous traditional cultures with a high degree of cultural sensitivity (President Tsai's Apology 2016). Unfortunately, at this point, many of these promises have yet to come to fruition. However, the acknowledgement by the head of state for the unfair treatment and abuses of Taiwanese indigenous peoples and the promise of further incorporation into the decision and policy-making processes in the coming years appears to indicate that a space has opened for indigenous peoples to become more actively engaged in Taiwanese governance.

Canada

While today, the Canadian government and Parks Canada pride themselves on their partnerships and active engagement with Aboriginal communities, indigenous-state relations have not always been so amicable (Langdon, Prosper and Gagnon 2010). In fact, when Banff Park was created in 1885, the Stoney Indians, the original inhabitants of the area, were "kept out" and forced to relocate (Langdon, Prosper and Gagnon 2010). Later, in 1930, the establishment of the Riding Mountain National Park resulted in the "forced removal of [what is now known as] the Keeseekoowning First Nation" (Langdon, Prosper and Gagnon 2010). Nowadays, however, Parks Canada has ongoing relations with 130 plus Aboriginal groups, and approximately 68 percent of park lands have come about as a result of formal agreements with said groups (Langdon, Prosper and Gagnon 2010).

As defined in the Constitution Act of 1982, Canada's government formally recognizes three distinct groups of indigenous peoples: the First Nations, the Inuit, and the Métis (Langdon, Prosper and Gagnon 2010). According to this Act, with regard to the aboriginal population of Canada, the government is responsible for negotiating and implementing indigenous land claims and self-government agreements (Langdon, Prosper and Gagnon 2010). Prior to this Constitution Act, the Calder Decision of 1973 by Canada's Supreme Court determined that aboriginal title was to be recognized by Canadian Common Law (Langdon, Prosper and Gagnon 2010). Currently, largely due to comprehensive land claims and treaty settlement agreements, Canadian indigenous people own approximately 40 of Canada's land mass, over 600,000 square kilometers, and have been compensated $2.8 billion Canadian dollars to further aboriginal traditional ways of life, invest in future resource development (Langdon, Prosper and Gagnon 2010). Additionally, Canadian indigenous peoples actively participate in land and resource management decisions and cooperative management of national parks in aboriginal settlement areas (Langdon, Prosper and Gagnon 2010).

After 1982, the Parks Canada policy decreed that "in areas subject to existing Aboriginal or treaty rights or to comprehensive land claims by Aboriginal peoples, the terms and conditions of parks establishment will include provisions for the continuation of renewable resource harvesting activities, and the nature and extent of Aboriginal peoples' involvement in park planning and management" (Parks Canada, Section D). Both the 1984 Inuvialuit Final

Agreement and the 1993 Nunavut Land Claims Agreement involved negotiations to establish parks that included provisions for cooperative management boards (Parks Canada, Introduction 2016). These boards were intended to increase indigenous participation in the planning and operation of proposed national parks and are indicative of improved indigenous-state relations and the use of various tools to move toward better methods of effective co-management (Parks Canada, Introduction 2016).

Several years later, in 1999, the Indigenous Affairs Branch was established with the goals of "support[ing] relationship-building with Indigenous partners, promot[ing] economic development and tourism, present[ing] indigenous themes, [and] encouraging Indigenous employment" (Parks Canada, Introduction 2016). When the CEO of Parks Canada established the 12-Member Aboriginal Consultative Committee (ACC) in 2000, this allowed for more open dialogue between Parks Canada and Indigenous Partners (Parks Canada, Introduction 2016). In 2008, the Parks Canada CEO announced his goal to develop a better framework for engaging Indigenous communities in the planning and management of national parks and national historic sites, which indicates the government and the park agency's willingness and commitment to establishing formal relationships with Indigenous partners through collaborative structures (Parks Canada, Chapter 1 2016). This commitment, coupled with the appearance of other remedial projects, including the steps to reconciliation through the Jasper Indigenous Forum regarding the Jasper National Park and the Healing Broken Connections project with the Champagne, Ashihik, and Kluane First Nations, reflect the path that Canada's government has taken toward ameliorating relations with Canadian Indigenous peoples in more recent years (Parks Canada, Chapter 1 2016).

III.c. Co-Management Studies

As scholars, state policy-makers, and local community members alike have grown increasingly concerned with increasing environmental degradation and challenges in the past several decades, co-management has come to be a method by which governments and local communities have attempted to collaborate to address such issues. While it has many definitions, co-management is commonly understood as "a situation in which two or more social actors negotiate, define and guarantee amongst themselves a fair sharing of the management

functions, entitlements and responsibilities for a given territory, area or set of natural resources" (Borrini et al. 2000). More simply, co-management can be interpreted as "the sharing of power and responsibility between the government and local resource users" (Berkes, George and Preston 1991). Some scholars go further to propagate the idea of adaptive co-management, which is "a process by which institutional arrangements and ecological knowledge are tested and revised in a dynamic, ongoing, self-organized process of learning-by-doing" (Folke et al. 2002). Within each of these definitions, however, the idea of co-management refers to a collaborative approach to planning for, establishing, and managing the use of shared land or resources. Within this idea of co-management, there exist a number of degrees of involvement, or levels to which the government has incorporated the local community, indigenous peoples, or other shareholders into the actual decision-making process. According to Pomeroy and Berkes, the actualization of co-management can range from government-based management to community-based management, and varies among informing, consultation, cooperation, communication, information exchange, advisory role, joint action, partnership, community control, and interarea control (Pomeroy and Berkes 1997). Some of the more common applications of co-management that seem to appear are co-management boards, as is the case in many of Canada's national parks, and co-management as consultation, as seems to be the case in many of Taiwan's national parks and forested areas.

In addition to these varying degrees and components of co-management, those actors involved typically include the state, provincial, or federal government, the local community, indigenous peoples with traditional territories located within the relevant area of land, and other stakeholders. From the state government, the planning and decision-making power is typically deconcentrated to a local bureau, in these cases Taiwan's National Parks Bureau and Forestry Bureau and Parks Canada (Pomeroy and Berkes 1997). Some scholars cite the numerous conditions that are necessary for successful adaptive co-management, including a "well-defined resource system, small-scale resource use contexts, clear and identifiable sets of social entities with shared interests, reasonably clear property rights to resources of concern, access to [an] adaptable portfolio of management measures, [and] commitment to support a long-term institution-building process," among others (Armitage et al. 2008). The resulting co-management agreement, be it in the form of a co-management board, advisory division, etc. can

then manage the area in question, which in these cases are the specified National Parks, forested areas, and indigenous traditional territories.

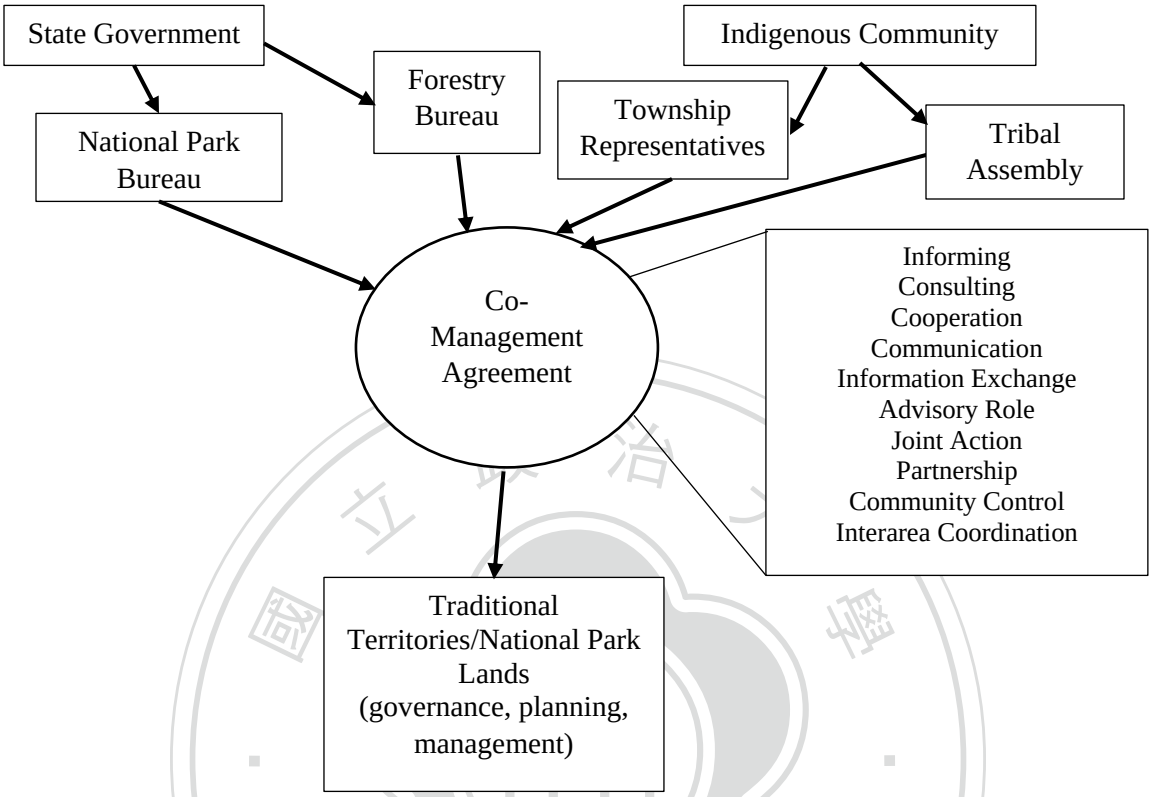

Figure 2- Co-Management Agreement Framework

This growing awareness and concern for environmental issues and co-management efforts have resulted in an increasing number of cases involving the application of such. Many exemplary cases of co-management regimes exist across the globe, notably in various Latin American countries, the United States, Canada, and New Zealand, to name a few. A majority of successful co-management efforts pay special attention to the incorporation of local and traditional knowledge, in addition to modern scientific findings. In this section, I will highlight some relevant cases of co-management in several of the aforementioned states.

The first case is that of fishery management in British Columbia, Canada (BC). Through the use of "archaeological evidence, oral histories, and historical documentation," scholars have shown that

> Northwest Coast Indigenous Peoples not only utilized immense quantities of salmon and other marine fish and shellfish, but sustainably managed stocks for millennia, using

> combinations of selective harvesting, habitat creation, maintenance and monitoring, systems of proprietorship and cultural constraints against overharvesting (Turner et al. 2013).

Such a revelation is quite contrary to the drastic decline in Canada's salmon fishery stocks, which demonstrates the large impact that externally imposed policies can have on local food security (Turner et al. 2013). In fact, scholars have pointed out that "the near-ubiquitous decline in the stocks of all five species of Pacific salmon coincides with the loss of control of the resource by local indigenous peoples and the start of commercial salmon fisheries" (Turner et al. 2013). Unfortunately, in spite of the fact that some "landmark legal cases in BC have helped define and assert Aboriginal treaty rights relating to the fisheries," indigenous fishers are continually disadvantaged by government policies- "even in cases where co-management regimes and consultation efforts were in place" (Turner et al. 2013). However, one might reasonably conclude that the negative implications on the livelihoods of indigenous fishers might have been much greater had such co-management regimes not been in place. Additionally, this case affirms the idea that the starting point of the co-management initiative (with whom the idea originated) is key, seeing as those regimes initiated by the local indigenous peoples themselves tend to be more successful in protecting indigenous rights and the environment.

The second case, which is also one of fishery management, takes place in Aotearoa New Zealand (ANZ). Similar to the case in BC, the ANZ government imposed a Quota Management System (QMS), which replaced unrestrained access to fisheries with a market-based approach and "created property rights in specific species" (Turner et al. 2013). The indigenous peoples of New Zealand, the Māori, "took a claim to the courts for recognition of indigenous ownership rights based on the Treaty of Waitangi" and were awarded a share in the commercial quota (Turner et al. 2013). The management of the fisheries, however, remained largely in the government's control and many of the traditional species continued to decline (Turner et al. 2013). In addition to the losses in abundance and biodiversity, ANZ has also seen losses in traditional, cultural knowledge. In the late 1990s, the ANZ government passed a statute requiring the involvement of "Māori in certain decision-making processes… [but] most tribes continue to have a very limited role" (Turner et al. 2013). This particular case serves to show how in circumstances where the necessary legal framework is not present to protect and enforce

the role of indigenous peoples in co-management agreements, such efforts are likely to prove less effective.

Another co-management case is that of the Renewable Resource Councils (RRCs) in the Yukon Territory. After the settlement of the Yukon Umbrella Final Agreement (UFA), Yukon First Nations were awarded great settlements of land, including "resource management and land planning responsibility" (Natcher, Davis and Hickey 2005). In addition, the UFA "established a framework by which Renewable Resource Councils (RRCs) would be created" (Natcher, Davis and Hickey 2005). While the intention was for RRCs to incorporate traditional knowledge into the management regimes of local resources, some concerns have been raised regarding the "participatory effectiveness and social equity of these cross-cultural arrangements" (Natcher, Davis and Hickey 2005). The Carmacks Renewable Resources Council (CRRC) addresses many of the concerns of the Yukon First Nations and emphasizes having "intimate knowledge of the land… [in order to] make informed management decisions on the Nation's behalf" (Natcher, Davis and Hickey 2005). This case demonstrates that while not all co-management regimes are effective in devolving power to the community level, those that are more successful tend to involve groups that actively engage with local indigenous communities and share similar interests and goals.

Expanding upon the history of Canada's forest management, over the past several decades, "the dominant forest management paradigm… has been industrial timber production through long-term leases to private forest products companies" (Charnley and Poe 2007). In the 1990s, however, the public began to criticize this model for allotting too much decision-making power to the forest industry and federal and provincial governments. As a result, over the following decade, there was increased community participation in the forest management process, as exemplified by Canada's Model Forest Program and various forest stakeholder advisory committees (Charnley and Poe 2007). These programs and committees allow for "local forest users to share forest management power and responsibility with the government, industrial lease-holders, or forest owners" (Charnley and Poe 2007). The rise of communities as forest management institutions has also allowed for increasing First Nation participation in forest co-management initiatives, which in turn allows for communities to better meet the needs of local peoples for forest resources.

A fourth case in co-management is that of the Forest, Agriculture and Services Communal Enterprise of Ixtlán de Juarez, "a forest community in the Sierra Norte of Oaxaca" (Bray 2010). This communal enterprise "evolved from traditional forms of governance developed by the Zapotec ancestors of the people of Ixtlán that were later reinforced with agrarian governance structures mandated by the Mexican government" (Bray 2010). In order to lift hundreds of impoverished Mexican citizens out of poverty, this initiative "fused communal democratic traditions with the principles of competitive market enterprises to achieve economic equity" (Bray 2010). As a result, the communal enterprise offers a great incentive through common property, and is administered by a system based on the indigenous cargo system. Not only has the co-management of the local forest brought great wage and social benefits to the local community, but it has also increased the number of opportunities for women (Bray 2010). With regard to the environmental attractiveness of this type of co-management, scholars point out that "community forests conserve forest cover at similar or greater rates than public protected areas in Mexico and with far more benefits to local communities" (Bray 2010). Thus, one might argue that the successful case of forest co-management of Ixtlán can serve as a model for future forest co-management initiatives elsewhere.

Finally, in his examination of adaptive forest management approaches, Daniel James Klooster emphasizes the significance of integrating local knowledge, scientific forestry, and institutional parameters into these particular arrangements (Klooster 2002). In his case studies, Klooster focuses on two indigenous communities in Michoacán, Mexico. From 1963 to 1990, the Lake Pátzuaro Basin saw a rise in population but a decrease in agriculture (Klooster 2002). As this trend continued, agricultural activities were increasingly replaced and supplemented by forest-dependent activities, which resulted in a 45 percent decrease in forested area and density (Klooster 2002). Two indigenous communities border Lake Pátzcuaro, those being Santa Fé and San Jerónimo, and approximately 40 percent of the territory of each is covered by forests (Klooster 2002). Because both communities have historically been very dependent on wood-cutting and forest resources, these activities have affected the health and density of the forests (Klooster 2002). Klooster points out how woodcutters in Santa Fé seem to have a "great deal of knowledge about the forest" and promote cutting more mature and dry trees over young ones (Klooster 2002). This traditional form of knowledge, however, falls short in addressing and promoting long-term forest succession (Klooster 2002). On the other hand, scientific forestry

suggests that the two communities divide the forests into smaller management units and "return to each block every five years," allowing for woodcutters to eliminate damaged, burned, or diseased trees and promoting more quickly accumulating biomass (Klooster 2002). The scientific forestry method faces several challenges, however, in that it requires extreme spatial control and must combat "bias toward the industrial production of pine-saw logs" (Klooster 2002). Given the need for management systems "based on adequate knowledge of the resource and an institutional framework that encourages forest users' compliance with restrictions and prescriptions for action," components that traditional management practices and local indigenous knowledge tend to lack, Klooster argues for the benefits of adaptive community forest management (Klooster 2002). "Through the adaptation of the restrictions of scientific forestry to community management traditions and ethics, successful communities avoid the problems of poor institutional fit that often plague conventional scientific resource management and accompanied past approaches to forestry in Mexico" (Klooster 2002). In essence, the Mexican government's reforestation efforts, coupled with the adoption of adaptive forest co-management practices in the Santa Fé and San Jerónimo have expanded the potential for increased forest density and expanded forest succession. Thus, by incorporating local indigenous knowledge with scientific forestry and supporting the efforts through governmental institutions, these two Mexican communities have been able to decrease their negative impacts on the surrounding forest density.

III.d. Key Elements of the Canadian Co-Management Model

While one cannot say that the Canadian model for co-management is without faults, it has proven to be one of the more successful models for co-management in the world. This high rate of success and aboriginal participation is largely owing to several common elements of Canadian co-management, including "ensuring equal Aboriginal and government representation, providing advice to the minister on cultural matters and other issues of importance to the Aboriginal partners, and providing input into park, site, or national marine conservation area management plans" (Langdon, Prosper and Gagnon 2010). Throughout Canada, co-management agreements have been established in national parks and other traditionally indigenous territories to foster cooperation and collaboration between the central Canadian government, other

interested parties, and the local indigenous peoples. In the context of Parks Canada, "cooperative bodies range from informal structures that provide *ad hoc* advice to those that are established through formal agreements, such as park establishment agreements" (Langdon, Prosper and Gagnon 2010). Oftentimes, "dispute resolution mechanism[s] are built into the [co-management] agreements" (Langdon, Prosper and Gagnon 2010). This enables the interested parties to resolve conflicts, such as resource use, hunting rights, water collection, etc., directly through the co-management agreement itself. This type of streamlined dispute resolution mechanism helps to reduce the communication gap between local indigenous communities and the central government agency.

Another outstanding element of Canadian co-management cases that sets it apart is the nature of Canadian land claims agreements. Oftentimes,

> successful cases of co-management in Canada are related to aboriginal peoples and land claims agreements, not because native groups and governments work particularly well together, but because land claims agreements provide legally defined management rights of local resource users—a feature missing in other kinds of co-management arrangements (Pomeroy and Berkes 1997).

All of the major Canadian land claims agreements, including the 1975 James Bay and Northern Quebec Agreement, the Inuvialuit Final Agreement of 1984, and the 1993 Nunavut Agreement, contain a "chapter that specifies the sharing of jurisdiction for fisheries and wildlife management, and establishes an institutional structure (in the form of management boards and joint committees) to implement co-management" (Pomeroy and Berkes 1997). Hence, as these cornerstone cases demonstrate, the formalization of shared power and the establishment of an institutional structure are key components in establishing a successful co-management regime.

Furthermore, in more recent Canadian agreements, "the rights of aboriginal fishers and hunters are established in law" (Pomeroy and Berkes 1997). This legal framework solidifies the foundation on which Canadian indigenous peoples can continue their relationship with the land and maintain their traditional cultural and subsistence practices. In Canada's forested areas in particular, "co-management occurs when local forest users share forest management power and responsibility with the government, industrial leaseholders, or forest owners" (Charnley and Poe 2007). In some cases, Canada has community forests, which are "public forest areas managed by the community as a working forest for the benefit of the community" (Teitelbaum, Beckley and

Nadeau 2006). In these cases, "communities as forest management institutions must be legal entities and place based… [and] have included First Nations, municipal governments, environmental nonprofit organizations, and local societies and cooperatives" (Charnley and Poe 2007). The success of community forest management by First Nations peoples shows the potential for indigenous management of forested lands in other settler states, while also highlighting the need for a legal foundation of such entities.

Over time, indigenous peoples in Northern Canada have increasingly been entering into co-management agreements with "provincial, territorial, and federal governments" (Stevenson 2004). These agreements have typically materialized in one of three forms: "land claims-based agreements, conflict- or crises-based co-management agreements, and multi-stakeholder environmental management agreements" (Stevenson 2004). The first type, land claims agreements, typically results in "an increase in management authority on both Aboriginal lands and Crown lands" and is accomplished "by the creation of cooperative wildlife, water, and environmental management boards" that allow for shared "decision-making… between representatives of the state and the Aboriginal signatory" (Stevenson 2004). The second form is a crisis-based agreement, which typically arises as the result of some perceived environmental threat to specific resources. Aboriginal peoples typically enter into this type of agreement to "protect their rights of access to specific resources" and avoid being "implicated in either creating or contributing to the problem through over-hunting or misuse" (Stevenson 2004). While this type of agreement usually results in restrictions being placed on aboriginal communities regarding the use of aforementioned resources, it nonetheless helps to reduce the severity of the potentially negative impact on these communities. The third and final type of agreement is a multi-stakeholder agreement, which "arise in the context of growing general public concern over the effects of… industrial developments on important species or habitats" (Stevenson 2004). This type of agreement results in the creation of "boards with varying levels of authority that involve Aboriginal, public, industry, government, and non-governmental organization representatives" (Stevenson 2004). This form of management agreement clearly demonstrates the notion that in certain cases, multiple actors and governmental/non-governmental agencies may be interested parties. As a result, the co-management mechanism may call upon such outside agencies to participate in the discussion about the management of relevant lands or resources. These three forms of co-management agreements between Northern

Canadian government agencies and Aboriginal peoples signifies the adaptability of Canadian co-management mechanisms.

Additionally, and perhaps most importantly, co-management agreements in the Northern Territories of Canada are especially successful "because settled land claims clarify who has rights and access to land and resources surrounding aboriginal communities" (Campbell 1996). Even more importantly, "First Nations in the territories have a legally defined place at the negotiating table to develop, implement, and institutionalize co-management structures, which in turn, gives them a clear voice in the process of resource management and development" (Campbell 1996). In a forum held at the Taiwan Forestry Bureau in April 2017, Fikret Berkes also drew attention to the fact that these modern land claims settlements include "provisions for self-governance, Aboriginal ownership over 600,000 km^2 of land, special rights over traditional territories, protection of traditional ways of life, access to resource development opportunities, and participation in land and resources management decisions" (Berkes 2017). As such, these elements are essential in securing indigenous rights within these co-management agreements.

Among Canada's national parks system, "cooperative management with First Nations, Inuit, and Métis peoples has become a common practice within Parks Canada" (Langdon, Prosper and Gagnon 2010). Parks Canada, which currently consists of and manages 42 national parks, has engaged in "eighteen formal cooperative management agreements, twelve formal cooperative structure, and numerous other project-specific or informal cooperative arrangements" (Langdon, Prosper and Gagnon 2010). While Fikret Berkes asserts that projects alone do not constitute co-management, he does recognize the importance of them as starting points for co-management (Berkes 2017). Moreover, Berkes also emphasizes the importance of bridging organizations in narrowing the gap "between government and indigenous organizations to carry out a number of tasks," including: "deliberation and visioning, making management decisions, co-production of knowledge, [and] building social capital, trust, and institutions" (Berkes 2009). Perhaps the three most successful cases of co-management in Canada, as mentioned previously, are the James Bay Agreement, the Nunavut Agreement, and the Inuvialuit Final Agreement. Each of these three cases contained a bridging organization, whereby the government and indigenous parties could better communicate. The realization of these agreements highlights the importance of their respective bridging organizations, and the significance can thus be expanded to co-management regimes elsewhere.

All in all, the Canadian cases of co-management that tend to be most successful and serve as the best model for co-management in Taiwan and other settler states are those that follow the process prescribed by Berkes. The six-step process is:

1. Define the social-ecological system
2. Identify essential management tasks
3. Clarify the participants
4. Analyze linkages
5. Evaluate capacity-development needs
6. Prescribe remedies (and start the planning cycle all over again)

(Carlsson and Berkes 2005)

This process aside, the other elements that appear to be key to the success of Canadian co-management agreements have been:

- Equal participation of Aboriginal and government representatives
- Dispute resolution mechanisms built into co-management agreements
- Legally defined management rights
- Formalization of shared power
- Bridging organizations
- Provisions for self-governance

These key elements also overlap with the conceptual framework that I will define in chapter one section VI and will then apply in chapter four of this thesis. Because the Canadian model tends to satisfy more of the criteria laid out in the aforementioned sections, these co-management cases have shown more positive outcomes. Furthermore, by ensuring the legal foundation and creating an institutional mechanism for co-management, the Canadian model has been better able to reflect and protect indigenous rights to land and resources within their traditional territories.

IV. Research Area

Case 1: Taroko National Park Co-Management Committee

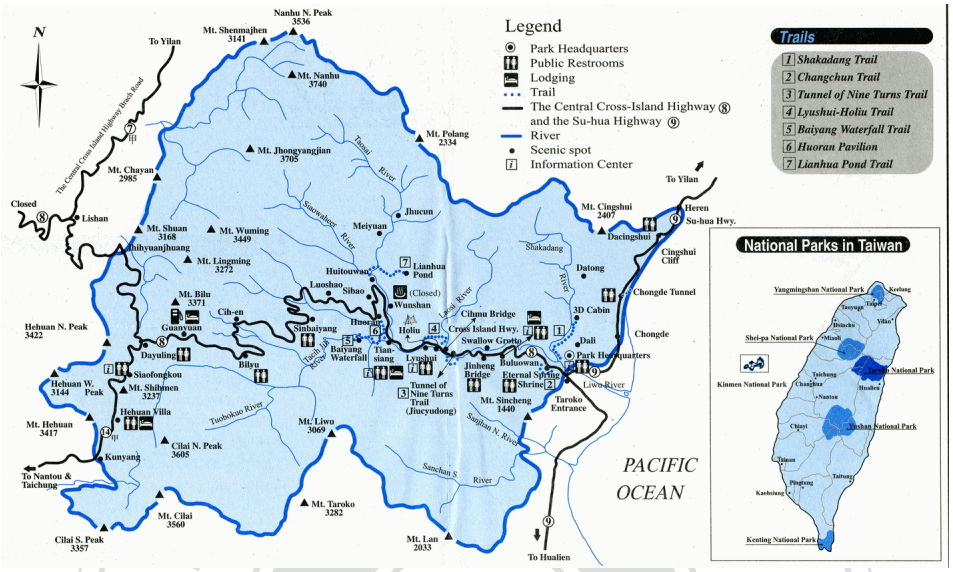

Figure 3- Map of Taroko National Park 2006

The Taroko National Park in Taiwan was first established in November of 1986 (Construction and Planning Agency 2009). The National Park covers over 92,000 acres of land and spans across areas in the Hsiulin rural township, Hualien County, the Heping rural township, Taichung County, the Renai rural township, and Nantou County (Construction and Planning Agency 2009). In terms of its landscape, Taroko National Park is located on the eastern coast of Taiwan and "is a mountain national park with almost 50% of the area located over 2000m above sea level" (Construction and Planning Agency 2009). Regarding the indigenous inhabitants in the area, the Taroko (Truku) peoples were the 12th of the 14 originally recognized indigenous tribes in Taiwan (Taroko National Park 2017).

In 2005, the Taiwanese government passed the Basic Law on the rights of indigenous peoples. In this law, Article 22 stipulates that "the government shall obtain free and prior informed consent (FPIC) from the affected Indigenous Peoples on the site and formulated a common management mechanism prior to establishing national parks, national scenery, forest district, ecological protection zone, recreation zone, and other resource management institutions" (Indigenous Peoples Basic Law 2005). While Taroko National Park had been established two

decades earlier in 1986, the common (or collaborative) requirements of this law still apply. As a result, the National Parks Bureau has enlisted the local township governments surrounding the Taroko National Park area to engage with local indigenous peoples on somewhat of a consulting basis. In order to do so, the National Parks Bureau established a co-management committee just over ten years ago. Unfortunately, due to the irregularity of the committee's meetings, as well as the information gap between the committee members and the local Taroko communities, this type of co-management fails to actively recognize and incorporate all interested Taroko peoples into the planning and management of the park. At this point, the National Parks Bureau retains a majority, if not all of the decision-making power when it comes to the reforestation and conservation of park lands that overlap with traditional territories.

In addition to the challenges that Taroko peoples face in asserting their claims to traditional lands within the park, some villages remain unrecognized by the township government, and thus have no voice in the negotiations with the National Park Bureau. Even those villages that are recognized face difficulty in asserting their land claims because they were relocated to lowland areas out of the mountains during Japanese colonization. These communities are now required to show proof of continuous land use to substantiate their claims, and because of the prior relocation, are often unable to do so.

In addressing questions of co-management in the Taroko National Park area, it appears that there are two primary issues: 1) who are the subjects involved? and 2) what are the aspects being co-managed? In the case of the Taroko peoples in Taroko National Park, those aspects include traditional land rights, hunting rights, and the ability to build roads to access their traditional lands, particularly ones that will better withstand typhoons. In analyzing the case of co-management in Taroko National Park in Taiwan, I will focus on those actors involved, the components of the co-management agreement and its stipulations, as well as the effectiveness of the agreement in actively engaging local indigenous peoples in the decision-making and power-sharing process.

Case 2: Taiwan Forestry Bureau-Rukai Indigenous Peoples Co-Management Initiative

Figure 4- Rukai Distribution Map 2008

The Rukai indigenous peoples are one of the 16 officially recognized indigenous tribes in Taiwan. The "Rukai tribe's population is about 11,600" and Rukai communities are typically located near Maolin Township in Gaoxiong County, Wutai Township in Pingdong County, and Dongxing Township in Taidong County (Council of Indigenous Peoples 2010). Approximately 90 percent of Rukai lands are forested, so the Forestry Bureau often claims to control much of these ancestral territories. Historically, many Rukai communities, including those of Adiri, Labuwan, Rinari, and Taromak were mountain communities living in the southern mountain region of Taiwan. During the period of Japanese colonization, however, like many other mountainous indigenous peoples, these communities were forced to resettle in the lowlands and plains. The Japanese colonial government's Forestry Bureau then took control of the previously indigenous forested lands for logging and afforestation practices. Control over this land was then passed to the Taiwanese Forestry Bureau when the KMT government took control of the island in 1947 and has remained in the Taiwanese state government's control since.

Not only have Rukai indigenous communities been displaced by colonial governments, but natural disasters, particularly typhoons, have forced several Rukai communities to relocate to

lower altitudes. In 2009, Typhoon Morakot struck Taiwan, resulting in serious landslides, destroying roads, and forcing mountain-dwelling indigenous communities to leave their ancestral villages and settle in the lowlands (Chern and Liu 2013). Since then, many communities have been restricted from returning to these village sites because the roads have yet to be repaired, the Taiwanese government has deemed the areas to be unstable and unsafe, and the Forestry Bureau continues its own afforestation practices with trees that many indigenous experts claim to be unsuitable for the land.[3]

In early April 2017, the Rukai indigenous peoples became the first tribe to declare their own Rukai Community Council, an organization that has yet to be officially or legally recognized by the state government, yet aims to represent the needs of the Rukai peoples as a whole. Later that same month, the Taiwan Forestry Bureau, along with various other scholars, researchers, students, and Canadian co-management expert, Fikret Berkes, traveled to nine different Rukai villages to discuss the potential for establishing a co-management committee for forested lands that were traditionally Rukai territories.

In discussing an emerging co-management agreement between the Rukai indigenous peoples and the Taiwan Forestry Bureau, it appears that there are three primary issues to be addressed (similar to the Taroko case): 1) who are the subjects involved?; 2) what are the areas/resources being co-managed?; and 3) what are the primary concerns and sources of conflict? In discussing the case of the emerging co-management agreement between the Rukai peoples and the Taiwan Forestry Bureau, I will elaborate on the basis for the agreement, the primary actors involved, the concerns of both the Rukai peoples and Forestry Bureau in pursuing the agreements, and should the efforts continue on their current trajectory, the likelihood of the co-management agreement effectively sharing power and engaging local indigenous peoples in the decision-making process.

[3] This information was collected as a result of my participation in a five-day "walking workshop," during which I accompanied Forestry Bureau representatives, Rukai leaders, indigenous scholars and experts, and other students in visiting nine different Rukai villages in Gaoxiong, Pingdong, and Taidong. During this workshop, I participated in discussions and forums with local Rukai leaders and community members, visiting scholar Fikret Berkes, as well as representatives from the Taiwan Forestry Bureau. Additionally, I partook in tours of local village sites, farms, and forested areas. During this workshop, the participants and I stayed in Rukai homestays, or *minsu* 民宿, and were hosted by local Rukai community members. I present the information I have collected through participating in discussions and taking detailed notes on the information shared and my own observations throughout this thesis. Any errors in translation or interpretation are entirely my own. I will henceforth refer to information collected in this manner by reference of *Walking Workshop 2017*.

V. Research Question

Having considered the historical backgrounds of Taiwan and Canada, the evolution of the international indigenous rights framework, as well as the co-management cases and relevant theories presented above, I aim to answer the following primary research question: how do local Taiwanese indigenous peoples engage in co-management agreements with the state government of Taiwan?

As a result of the scope of my research, I will also develop subsequent minor research questions, including: how has the co-management agreement in Taroko National Park come to fruition? What steps have been taken in working toward a co-management agreement between the Taiwan Forestry Bureau and Rukai indigenous peoples? To what degree are indigenous interests reflected, considered, and incorporated in the process of these co-management efforts? How well does the legal infrastructure of Taiwan protect indigenous land rights claims in these co-management cases? In answering each of these secondary questions, I hope to supplement my response to my primary research question.

VI. Conceptual Framework

Criteria	Question for Application
1. Land Tenure Regime	1. Within the co-management agreement, how is land ownership over the given territory defined?
2. Territorial Recognition	2. Does the co-management agreement recognize the territory about which the agreement is made in a way that corresponds with the idea of indigenous territory?
3. Natural Resources Right	3. How does the co-management agreement assign rights to the natural resources found within the specified territory?
4. Tenure Security	4. How is indigenous title over the land within the co-management agreement secured?
5. Autonomy	5. Within the co-management agreement, to what extent do indigenous peoples retain autonomy over their own affairs (ie. Land rights, legal recognition, ability to use traditional justice system)?
6. Legal Recourse	6. What types of legal recourse are available to relevant indigenous peoples to defend their rights to land within the scope of the co-management agreement?

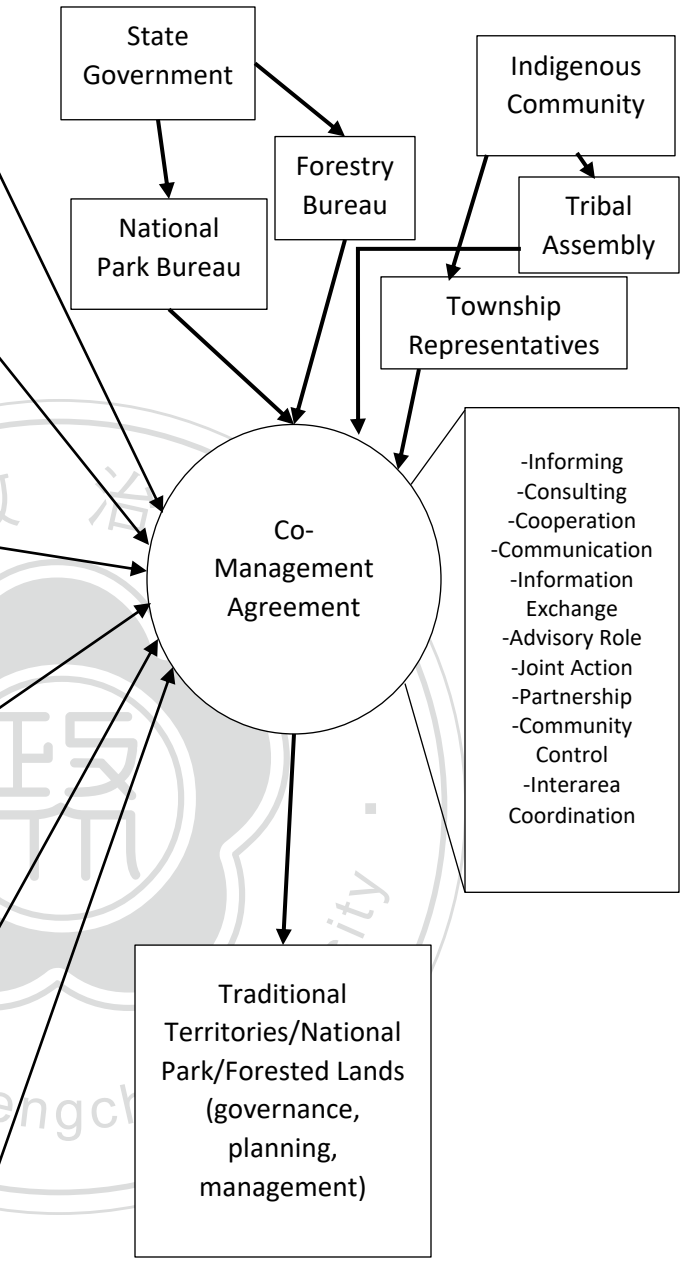

Figure 5- Conceptual Framework Applied to Co-Management

Through reviewing the other previously discussed cases of co-management, as well as the existing literature on the components and application of co-management and Ortiga's criteria for the recognition of indigenous lands, I have formulated my conceptual framework for this comparative case study. In classifying the indigenous land rights regimes of Colombia, Costa Rica, Panama and Peru, as well as other Latin American countries into three typologies (superior

legal framework, legal framework in progress, and deficient legal framework), Ortiga identified and utilized six key criteria, including: 1) land tenure regime, 2) territorial recognition, 3) natural resources rights, 4) tenure security, 5) autonomy, and 6) legal recourse (Ortiga 2004). As pictured in the visual above, I have adapted these criteria and created six questions to be applied specifically to the co-management methods in each the Taroko National Park and the Taiwan Forestry Bureau and Rukai peoples co-management cases. The questions are as follows:

1. Within the co-management agreement, how is land ownership over the given territory defined?
2. Does the co-management agreement recognize the territory about which the agreement is made in a way that corresponds with the idea of indigenous territory?
3. How does the co-management agreement assign rights to the natural resources found within the specified territory?
4. How is indigenous title over the land within the co-management agreement secured?
5. Within the co-management agreement, to what extent do indigenous peoples retain autonomy over their own affairs (ie. Land rights, legal recognition, ability to use traditional justice system)?
6. What types of legal recourse are available to relevant indigenous peoples to defend their rights to land within the scope of the co-management agreement?

I will apply each of these questions to the two case studies at hand, and the analysis of the application of such will enable me to determine the more and less successful components of each type of co-management model.

The right side of the visual above depicts the components and framework of the co-management agreements as appears in many co-management cases. It depicts the flow of power from the state government to the relevant national park bureau and the resulting interest in the national park land, as well as the indigenous communities' interests in their traditional territories encompassed within said piece of land. As discussed by Pomeroy and Berkes, co-management can be realized in a range of methods, from an informing and consulting basis to community control and interarea coordination, with joint action and partnership somewhere in the middle (Pomeroy and Berkes 1997). The emerging form of co-management is then reflected in the governance, planning, and management of the relevant national parks land and traditional territories.

VII. Methodology and Procedure

I will research and carry out this thesis using a multiple case study method. As such, I will conduct two independent case studies, in which I will analyze two specific co-management agreements between the state government of Taiwan and local indigenous communities. One of these cases is that of Taiwan's Taroko National Park and the other is between Taiwan's Forestry Bureau and Rukai indigenous peoples. I will then go on to analyze the components of each case in order to answer my primary research question: how do local Taiwanese indigenous peoples engage in co-management agreements with the state government of Taiwan? In my ensuing discussion, I will draw from the similar Canadian experiences to provide potential solutions for the challenges currently faced by Taiwan in forming these co-management agreements.

In order to establish the foundations of these cases, I have begun by providing the context of each case, especially focusing on the more recent periods of Taiwan and Canada's colonial histories and the evolution of indigenous-state relations since. Because this thesis focuses on co-management efforts within what are now national park territories and forested lands, I have traced the progression of Forestry Bureau and National Park legislation in Taiwan and Canada. I have also highlighted the changing international context and described the emerging and evolving international indigenous rights regime. Having provided a clear historical and international context for these cases, I will go on to compare the institutional and legal frameworks of national park and forest management projects in Taiwan.

Upon establishing the historical and international contexts for my case studies, I then went on to finalize my conceptual framework by analyzing similar case studies of co-management. Following the development of my conceptual framework, I began collecting information on my two specific case studies: that of the Taroko National Park co-management committee and the co-management process between the Taiwan Forestry Bureau and Rukai indigenous peoples. In order to collect as much information as possible regarding these co-management agreements, I have read literature on the subject, made several visits to the Taroko case site, participated in a walking workshop with the Forestry Bureau and Rukai peoples (visiting nine different Rukai villages), and conducted interviews with indigenous leaders, scholars, experts, and Taroko and Rukai community members. I conducted interviews both in

English and Chinese, some with the help of a translator and some on my own. Any translation errors are entirely my own. After synthesizing this information, I will apply the criteria established in my conceptual framework to each of the co-management agreements and evaluate the effectiveness of each agreement based on the degree to which these criteria are met.

In the process of evaluating the effectiveness of the co-management agreements in the Taroko National Park and between the Forestry Bureau and Rukai peoples, I will look specifically at both cases and expand upon the following: 1) with whom did the idea for the co-management agreement originate?; 2) what was the process that the indigenous communities and state government underwent in formulating and carrying out the agreement?; and 3) what was the outcome of each co-management agreement? I will identify those components that appear to be the most successful aspects of the co-management agreements in each case. Finally, I will draw from similar experiences in Canadian national park co-management agreements and use these observations to inform my suggestions for remedying and forming future co-management agreements in Taiwan.

Procedural Flowchart

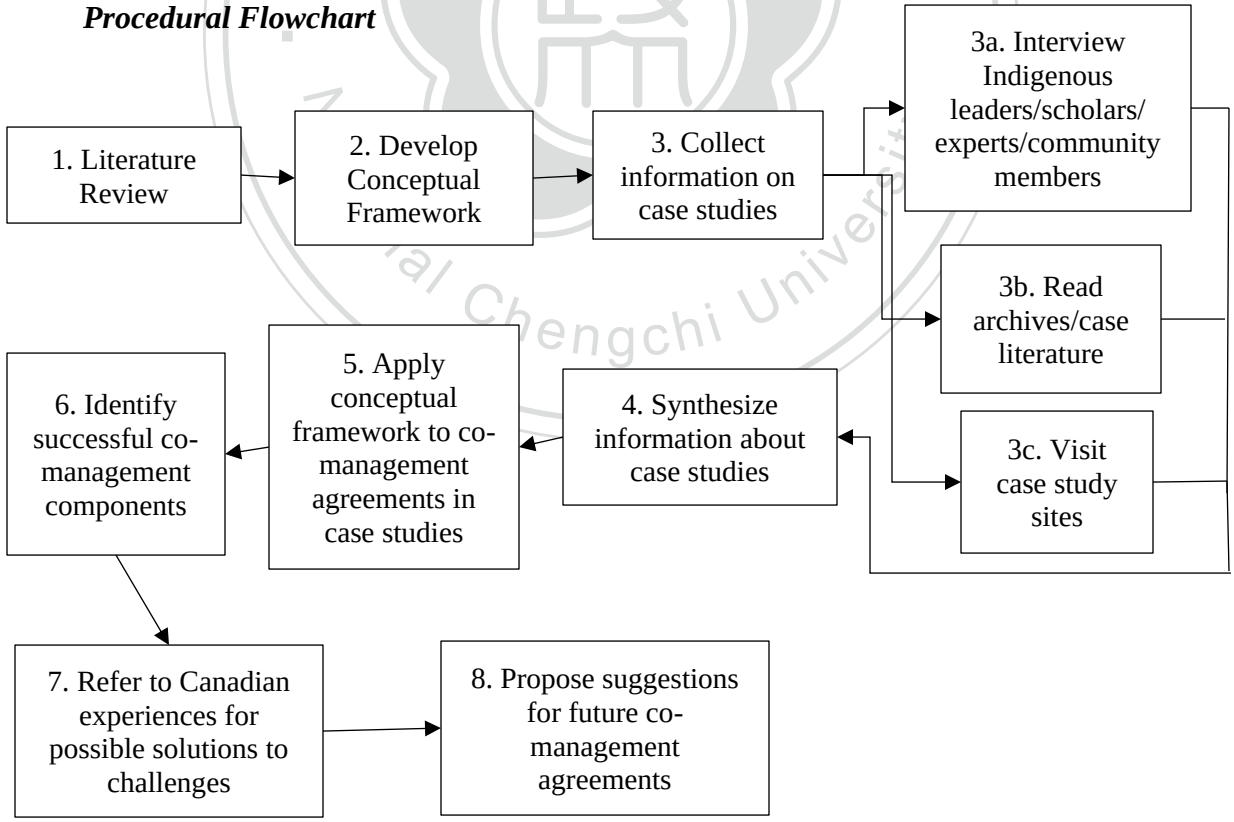

Figure 6- Procedural Flowchart

Chapter Two: *Taroko National Park Co-Management Committee*

In my first case study, I will outline the steps leading to the creation of the Taroko National Park, the establishment of the co-management committee, and the committee's operations and intended functions. I will then highlight the ongoing conflicts and concerns regarding the effectiveness of the Taroko National Park co-management committee. I will also elaborate on disputes surrounding Taroko indigenous peoples' access to land and resources within the national park, as well as traditional land rights claims and hunting rights issues. The information I present is a result of an extensive literature review, interviews with Taroko indigenous community members, scholars, and a co-management committee member, as well as field research at the case site.

I. Taroko National Park Case Context

Historical Background

Taiwan is an extremely biodiverse island of which nearly 65 percent of the land is mountainous and approximately 59 percent is forested (Simon 2012). The island is home to thousands of plant species, over 60 different species of mammals, 400 some species of birds, 92 reptile species, over 100 different types of fish, and 50,000 some insect species (Simon 2012). Because of the island's expansive biological diversity, over the years, government institutions like the Forestry Bureau and the National Parks Bureau, along with the Ministry of the Interior, have worked to protect Taiwanese wildlife by establishing national parks, scenic areas, and protected areas. The National Park Law of Taiwan was passed on June 13, 1972 in order to preserve "the nation's unique natural scenery, wild fauna and flora and historic sites and provid[e] public recreation and areas for scientific research" (Construction and Planning Agency 2006). Article six of this law sets forth the criteria for the selection and creation of national parks, including "areas representing the natural heritage of the nation" and "areas of educational significance for the perception of nature and important prehistoric and historic sites and their surroundings" (Construction and Planning Agency 2006). Furthermore, the National Park Law identifies the Ministry of the Interior as the "responsible authority for national parks" and

prohibits hunting, fishing, and removing any vegetation from within the park (Construction and Planning Agency 2006). As a result of this legislation, Taiwan is now home to eight national parks, including Taroko National Park.

Taroko National Park was established on November 28, 1986 (Taroko National Park 2016). As previously mentioned, the park is located along the central eastern coast of Taiwan and spans across three counties, including Hualian, Taizhong, and Nantou County (Taroko National Park). The park itself, like the rest of Taiwan, is mostly mountainous, with nearly 50 percent of the park's area being more than 2000 meters above sea level (Construction and Planning Agency 2009). Because of the park's mountainous and rocky terrain, the mountainsides are prone to landslides and rockslides during and after typhoons. Since the park's foundation, it has attracted more than 1.5 million visitors each year (Urban Planning 2014). The National Park boasts its goal of continuing "environmental education and ecological conservation projects" (Urban Planning 2014). The National Park also "strongly promotes the Central Cross Island Highway scenery-road model project" in an effort to "preserve the initial ecological environment of this area" (Urban Planning 2014). In the past 12 years, the National Park claims to have established systems for monitoring ecosystems and holding eco-tour guide trainings (Urban Planning 2014).

Prior to the founding of Taroko National Park, however, the area was long inhabited by the Taroko, Seediq, and Atayal indigenous peoples. The Taroko tribe, which I will focus on in this thesis, consists of "approximately 26,000 people in three Hualian townships and Ren'ai Township of Nantou" was officially recognized as a tribe in 2005, making it the twelfth of Taiwan's sixteen officially recognized indigenous tribes (Simon 2006). The Taroko peoples consist of three subgroups, the Truku, the Tkedaya, and the Teuda (Simon 2006, Zheng 2017). The Taroko peoples are historically known for being a group of fierce warriors, as exemplified in their prolonged resistance against Japanese pacification during the Japanese colonial era. When the Japanese colonial government took control of Taiwan, Japanese forces "contained indigenous communities into 'mountain reservations', and opened up their traditional lands to natural resource extraction" (Simon 2010). Eventually, due to Japanese assimilation and resettlement efforts, "the Taroko were forced to move into the plains and adopt settled agriculture as a lifestyle," leaving their traditional lands in the mountains behind (Simon 2010). Years later, when the KMT government took control of the island, those Taroko communities that had

previously been allowed to stay in the mountains "were forced in 1980 to relocate into Minle District of the village of Bsngan to make way for the national park," where "the government nationalized the few remaining traditional territories, hunting grounds and ritual sites, forbidding the activities of hunting, fishing and slash-and-burn agriculture" (Simon 2010).

Not only has the establishment of the Taroko National Park limited the ability of Taroko peoples to access, cultivate agriculture, and hunt in their traditional lands, but the actions of the Asia Cement Company have also greatly encroached on Taroko land rights. Under the reserve land system, which began in 1968 under KMT rule, the Asia Cement Company "applied to rent land from the Hsiulin Township Office and held its first consultative meeting with Taroko people" in 1973 (Simon 2002). Township officials in Hsiulin encouraged the local indigenous peoples of Taroko to rent the land to the Asia Cement Company on the premise that development of the land would bring employment opportunities and wealth to the community. Additionally, the company promised to return the land to its original Seediq and Truku owners in twenty years' time. Unfortunately, many of these promises turned out to be false, and "only 30 people actually got work doing low-level jobs as laborers, drivers, and machine operators" (Simon 2002). Many of these workers developed serious health problems as a result of their work. By 1990, a large portion of these "dangerous jobs were being filled by migrant workers from Southeast Asia" (Simon 2002). Because Taiwanese indigenous peoples do not just consider land to be a "means of livelihood, [but] also the meaning of life, and source of history, culture, oral traditions, religious beliefs, rituals, and the solidarity of the group" (Shiban 1997), twenty years after the initial rental agreement was signed, some of the original owners of the traditional land in Taroko attempted to reclaim their lands. At this point, "Asia Cement claimed that the Taroko people had relinquished their rights to the property and that the company had the legal papers to prove it" (Simon 2002). During the 1990s, the Control Yuan heard five petitions regarding the Asia Cement Company's use of Taroko lands (Lo 2013). These petitions were accompanied by local demonstrations against official institutions and the Asia Cement Company for having wrongfully seized their traditional lands for corporate use and grassroots movements to reclaim said lands.

One of these movements was the formation of the Return Our Land Self-Help Association by the Taroko people of Hsiulin Township in Hualien County. The association then petitioned the "county government and brought the suit to court" (Shiban 1997). One of the most active voices in this campaign against the county government and Asia Cement in

demanding the return of traditional lands was Igung Shiban, whose father had traditional property rights to the land taken by the Asia Cement Company (Simon 2002). Shiban, who collected and examined the documents pertaining to the Asia Cement Company's rental of the Taroko lands, "found that they were filled with irregularities. Some were missing dates or official seals" and "the signatures of many former owners who had supposedly given up their property rights were all written in the same handwriting" (Simon 2002). After year of investigating and facing intimidation attempts by the Asia Cement Company, Shiban found that many of the signatures and documents showing the relinquishment of land by the original owners were actually forged papers. Later in 1997, Shiban took a report to the United Nations Working Group on Indigenous Populations entitled "Our Experience of the Incursion of Cement Companies onto the Land of the Taroko People, Hwalien, Taiwan" (Shiban 1997). She appealed to the United Nations to "show its concern for the fair treatment of the indigenous people of Taiwan" (Shiban 1997) and noted that because "the government of Taiwan is so concerned about its international standing, this concern is likely to make a considerable difference in our situation" (Shiban 1997). Shiban argued that support from the UN could "help…push through this precedent in returning indigenous land to its rightful owners" (Shiban 1997). Several years later, "in August 2000, the Taroko people finally won cultivation rights in court, partly due to pressure on their behalf from Yohani Isqaqavut, chair of the Executive Yuan Council of Aboriginal Affairs" (Simon 2002).

Years later, the disputed Taroko traditional lands are still in use by the Asia Cement Company. While these particular lands are located outside of the boundaries of Taroko National Park, the proximity of the Asia Cement Company to Taroko National Park has left many Taroko indigenous communities sandwiched between two government-backed agencies, both of which are refusing access to Taroko traditional territories.

Legislation

Restrictions on Taroko traditional activities, especially hunting in traditional territories, have not only affected the economy of Taroko communities, but also conflict with the traditional Taroko law of *Gaya*. *Gaya* refers to the "sacred law passed down from [Taroko] ancestors" and among Taroko peoples is believed to deserve "recognition on a level of ontological parity with

state law" (Simon and Mona 2015). Because "customary law is a part of daily life" for Taroko peoples, this calls into the question the feasibility of "legal pluralism," through which local actors must "negotiate national law and *Gaya*" (Simon and Mona 2015). Legal pluralism, as it is commonly defined, refers to "a situation in which two or more legal systems coexist in the same social field" (Simon and Mona 2015). With respect to Taiwan's national law, the Wildlife Conservation Act, which was most recently amended in 2013, classifies wildlife into two categories, protected species and general wildlife (Wildlife Conservation Act 2013). In Article 16 of Chapter 2 it states that "protected wildlife shall not be disturbed, abused, hunted, killed, traded, exhibits, displayed, owned, imported, exported, raised or bred, unless under special circumstances recognized in this or related legislation" (Wildlife Conservation Act 2013). In Article 17, the Act then goes on to articulate that "with the exception of academic research or educational purposes, hunting of General Wildlife, including mammals, birds, reptiles and amphibians, shall be conducted in areas designated by the local authorities and only after obtaining the proper permit issued by local authorities or contracted organizations or groups" (Wildlife Conservation Act 2013).

This Act, which also applies within the boundaries of Taroko National Park, specifically limits the ability of Taroko hunters to hunt within their traditional territories, as defined by their law of *Gaya*. The conflicts resulting from the enforcement of this Act within Taroko National Park have been making headlines in recent years, as the park authorities and police have, on several occasions, arrested Taroko hunters for hunting within their traditional territories with and without permits. The enforcement of these alleged hunting violations, however, seems to conflict with Article 23 of the ILO 169, which "is based on the principle that indigenous peoples have the inherent right to preserve their own cultures and identities" and "clearly recognizes indigenous hunting rights" (Simon and Mona 2015). While Taiwan was unable to sign ILO 169 because it had "already been excluded from UN institutions," social activists argue that Taiwan should accept the norms set forth on a moral basis. I will elaborate on these issues in section VI of this chapter. However, the restrictions on hunting combined with the limitations on the collection of non-timber forest resources outlined in the Wildlife Conservation Act have severely impacted the once sustainable lifestyle of the Taroko peoples.[4]

[4] This information was collected through an interview by the author conducted on April 21, 2017. The informant is a member of the Taroko community and currently works for an indigenous rights activism organization. As the

Hunting and gathering restrictions aside, the formation of Taroko National Park has had other implications on the local economy. Because of the high volume of tourists that the park attracts, communities near the park, including the village of Bsngan, have opened various enterprises catering to the local communities and the park's visitors. In Bsngan, for instance, as of 2005, "55 out of 82 business in Bsngan were run by indigenous people," however these enterprises mostly catered to local, indigenous clients (Simon 2012). With regard to those businesses aimed at serving tourists, 17 of 21 enterprises "were run by Hoklo Taiwanese entrepreneurs" (Simon 2012). While this village serves as just one example, other villages located near the park face similar challenges in offering sustainable ecotourism alternatives. Some Taroko people have voiced that they feel that Taroko sharing "culture is incompatible with capitalist development" because the "Taroko customary law of *Gaya* is based on an egalitarian ethos of community-based sharing" (Simon 2012). Moreover, while the presence of Taroko National Park in the Taroko peoples traditional territories arguably affords an economic opportunity of development to the local communities, the conflicting conceptions of economic development and affluence remains problematic.

As previously mentioned, in 2005, Taiwan passed the Indigenous Peoples Basic Law (Indigenous Peoples Basic Law 2005). Within this law, Article 19 stipulates that

> Indigenous persons may undertake the following non-profit seeking activities in indigenous peoples' regions: 1) hunting wild animals; 2) collecting wild plants and fungus; 3) collecting minerals, rocks, and soils; 4) utilizing water resources (Indigenous Peoples Basic Law 2005).

As is apparent in both this case and the case of emerging co-management between the Forestry Bureau and Rukai indigenous peoples, the ability of indigenous peoples to carry out these activities is being curtailed by various other pieces of legislation, including the National Park Law, the Wildlife Conservation Act, and other restrictions on firearms. Furthermore, Article 22 states that

> the Government shall obtain free and prior informed consent (FPIC) from the affected Indigenous Peoples on the site and formulate a common management mechanism prior to establishing national parks, national scenery, forest district, ecological protection zone,

informant has requested, the interviewee's identity will remain anonymous, and I will hereon refer to the interviewee by the pseudonym Yulin Zheng.

> recreation zone, and other resource management institutions. Rules and regulations governing aforesaid policies, projects, and activities shall be duly prescribed by the concerned Central Competent Authorities in collaboration with the Central Competent Indigenous Affairs Authority (Indigenous Peoples Basic Law 2005).

Although this Article states that FPIC must be obtained before establishing a national park on sites affecting indigenous peoples' traditional territories and Taroko National Park was established nearly two decades prior to the Law's passage, Article 22 still applies. In this case, however, a co-management committee governing the affected areas within Taroko National Park was created after the Park's establishment in 1986, which I will discuss in the following section.

II. Coming to the Co-Management Committee

Taroko National Park was initially established in 1986, but the Taroko National Park co-management committee was not formed until more than two decades later. It was not until the 2005 Basic Law on Indigenous Peoples was passed that Article 22 stipulated the need for Free and Prior Informed Consent (FPIC) when developing a national park in what were historically indigenous-owned lands, as discussed in the previous section (Indigenous Peoples Basic Law 2005). As I stated previously, however, this article also applies in cases like Taroko, where the National Park was established prior to the passage of the 2005 Basic Law. Therefore, the Taroko National Park co-management committee came into being shortly after the law was passed in 2005. This law, enforced by the Ministry of the Interior, states that the Taroko National Park Bureau is required to co-manage traditional lands with Taroko indigenous peoples.[5]

When the Taroko National Park co-management committee was initially formed approximately 10 years ago, it was created as something of a "slogan" organization to demonstrate that the Park was in accordance with the 2005 Basic Law.[6] When the Basic Law was passed, it required all national parks in Taiwan to establish co-management mechanisms with the local indigenous peoples whose traditional territories were contained within the

[5] This information was collected as a result of an interview conducted by the author over the telephone with Apay Ai-yu Tang on May 01, 2017.

[6] This information was collected as a result of an in-person interview conducted by the author in Chinese with Tian Guifang on May 21, 2017. Translation assistance was given by anonymous interviewee, Yulin Zheng, and any errors in translation or interpretation are entirely my own.

boundaries of the park. In the case of the Taroko National Park, those peoples were the local Taroko communities. Some co-management committees in other countries have been formed as a result of any combination of factors, including demands from local indigenous communities, legal requirements on behalf of the state, and regional and international pressure to adopt human rights legislation. The Taroko National Park co-management committee, however, was founded solely based on the legal requirements contained in the 2005 Basic Law.[7] Therefore, from the start, the committee was intended to serve the needs of the government and appear to engage the local community. During the committee's earlier years, many of the committee members were Taroko peoples and were recognized by their respective communities as such.[8] In more recent years, however, many of the Taroko committee members are closely linked with the county governments, thus lending more authority to the counties and even less to the local communities.[9] After speaking with some present and past committee members, it seems that some feel as though they had been tricked into participating on the committee because it had been presented as a true form of co-management.[10] Others feel that while the committee may not represent real co-management at present, the best way to enact change is to do so from within and engage the younger Taroko peoples to participate in the co-management committee themselves.[11]

Figure 7- Author's interview with Tian Guifang in Taroko, May 21, 2017

[7] Interview conducted by the author with Tian Guifang on May 21, 2017.
[8] Ibid.
[9] Ibid.
[10] Ibid.
[11] This information was collected as a result of an in-person interview conducted by the author in Chinese and English with Teyra Yudaw on May 21, 2017. Translation assistance was given by anonymous interviewee, Yulin Zheng, and any errors in translation or interpretation are entirely my own.

Presently, the Taroko National Park co-management committee is composed of 21 members.[12] The distribution of these members is as follows: three representatives from the Taroko Gorge National Park Bureau, three representatives from the county government, four scholars who specialize in the National Park, and eleven indigenous representatives. In terms of the eleven indigenous committee members, it appears that one is a member of the county indigenous council, each indigenous township office has a representative, and one is the leader of the whole township of indigenous peoples.[13] The eleven indigenous representatives as a whole are chosen by their respective township offices, which unfortunately often results in a communication gap between the Taroko indigenous communities in each township and the co-management committee itself. This is largely because those indigenous representatives are often selected through bribery and favoritism within the township offices.[14] Thus, because of the socio-economic gap that is typical between the selected representatives and the local Taroko indigenous communities, some Taroko people, especially hunters, feel that the committee does not do much by way of helping or protecting their traditional rights.[15] When asked whether there might be a better way to select committee members, another interviewee said that because it is early on in the co-management process and the county government owns so many resources, it might be best that the government help in the selection process for now. Over time, however, she thinks that a volunteer system might be more effective in representing the public opinion of Taroko peoples.[16]

When the Taroko National Park co-management committee was first established, the primary goal was to show the Taiwanese legislature and the rest of the world that the park did, in fact, engage in co-management with local Taroko peoples. For the first couple years of its existence, the committee, which is largely run by the National Park Bureau, received 1,000,000 to 2,000,000 NTD each year from the Bureau to fund traditional culture activities and demonstrations at community centers in and near Taroko National Park.[17] In addition to providing funding for Taroko activities, the co-management committee intended to bridge the

[12] Telephone interview by the author with Apay Ai-yu Tang on May 01, 2017.
[13] Ibid.
[14] This information has come about as a result of interviews conducted by the author, the first in person with Yulin Zheng on April 21, 2017, and the second by telephone with Apay Ai-yu Tang on May 01, 2017.
[15] Telephone interview conducted by the author with Apay Ai-yu Tang on May 01, 2017.
[16] Interview conducted by the author with Yulin Zheng on April 21, 2017.
[17] Interview conducted by the author with Tian Guifang on May 21, 2017.

communication gap between the local communities surrounding Taroko National Park and the National Park Bureau authorities. Unfortunately, time has revealed that the goals that the committee set at its start have far from been accomplished.

III. Co-Management Committee Operations

Over the past 10 years of its operation, the Taroko National Park co-management committee has served a variety of functions. Initially upon its founding, the committee was intended to demonstrate that the Park had abided by the 2005 Basic Law and established a co-management mechanism with the interested Taroko peoples. During the first few years of its existence, the committee received funding from the National Park Bureau, each year totaling around 1,000,000 to 2,000,000 NTD.[18] This funding was used to sponsor traditional Taroko cultural activities in the activity centers located in and near Taroko National Park.[19] Shortly after, however, the committee stopped receiving such funding and the ability to carry out these cultural activities has become significantly limited. Nowadays, if Taroko peoples want to hold activities or cultural classes through the co-management committee, the committee receives 1,000 to 2,000 NTD at the most.[20]

With regard to the committee's actual management role concerning the land and resources within the Park, many sources have stated that the Taroko National Park co-management committee primarily serves an advisory role. According to one committee member, the committee itself has no rights and no decision-making power.[21] As a result, the committee is mostly called upon by the National Park Bureau to provide suggestions and advice for the management of the land and resources within in the park. When it comes to making decisions about the actual use and development of such, however, the National Park Bureau retains full decision-making power.[22] Therefore, the operations of the committee over the past decade have largely been characterized by providing advice to the state government about traditional Taroko lands.

[18] Interview conducted by the author with Tian Guifang on May 21, 2017.
[19] Ibid.
[20] Ibid.
[21] This information was collected as the result of an in-person interview conducted by the author in Chinese and English with Teyra Yudaw on May 21, 2017. Any errors in translation or interpretation are entirely my own.
[22] Ibid.

In terms of the committee's schedule and the frequency with which the committee meets, because the committee largely serves an advisory role, meetings are determined by the National Park Bureau. Accordingly, the co-management committee meets some years, but not others.[23] The actual functionality, schedule, and methods of holding the committee itself are decided by Taiwan's Ministry of the Interior (MOI), and thus reflect that which is most convenient and most beneficial to the MOI and the National Park Bureau, rather than the immediate concerns of neighboring Taroko communities.[24] Because of the committee's advisory nature, while some committee members are determined to enact change from within, it has so far proven very difficult. The committee itself is responsible for providing advice on all territories within Taroko National Park, in particular those territories that have historically been inhabited and cultivated by Taroko indigenous peoples. However, within the co-management committee, the government does not delegate decision-making rights to the local indigenous peoples. According to one interviewee and committee member, the Taiwanese government claims to retain full decision-making power because it believes it to be in the best interests of the concerned indigenous peoples. The government claims that if Taroko peoples had full access and rights to the land, they might sell it to Han people.[25] This claim seems to run contrary to the consistent narrative of the Taroko peoples, being that they wish to use their traditional lands to hunt, grow crops and collect natural resources. Some Taroko peoples argue that their traditional ecological knowledge and the laws of *gaya* help to inform them when carrying out these activities, thus it is unnecessary for the government to have such concerns.[26]

Because the Taroko National Park co-management committee provide advice about the lands contained within the Park, its advice and the use of the land and resources are severely limited by the National Park Law. The 2005 Basic Law on Indigenous Peoples states that every national park in Taiwan must have co-management, but the extent of the committee's influence is determined by what is and is not permitted under the National Park Law. For instance, hunting and trapping of wild animals within Taroko National Park appears to be one of the most contentious, commonly disputed issues. However, as previously discussed, because the National Park Law prohibits the hunting of wild animals within the Park, sometimes even with a permit,

[23] Interview conducted by the author with Teyra Yudaw on May 21, 2017.
[24] Ibid.
[25] Ibid.
[26] Interview conducted by the author with Yulin Zheng on April 21, 2017.

the co-management committee has very little influence over this issue. The same concept applies to the collection of natural resources within the Park, which is also prohibited. All in all, while the co-management committee appears to be able to provide suggestions on these types of issues, it can do very little by way of protecting indigenous peoples' rights and changing these laws.

IV. Current Concerns and Conflicts

As is the case with many other indigenous communities that have been displaced from their previously mountainous homes, there are numerous concerns and ongoing conflicts between the National Park Bureau and the Taroko indigenous peoples. These topics of dispute tend to center around hunting rights, access to natural resources, and the ability to return to historic village sites. While ideally, the Taroko National Park co-management committee should help to assuage some of these issues, due to the shortcomings of the committee, many of these concerns and conflicts persist.

One particularly contentious issue in the case of Taroko National Park co-management is the ability and right of Taroko indigenous peoples to hunt in their traditional lands. In fact, some present and past committee members insist that hunting rights are the most important issue within the Park and that Taroko peoples must fight to regain these traditional rights.[27] Another Taroko community member argues that from the moment the Japanese pushed the Taroko peoples out of the mountains, "Taroko started to lose their ability to hunt" (Simon 2006). In spite of the National Park Law and the Wildlife Conservation Act's strict regulations against hunting in the Park, some Taroko peoples continue to "hunt and defend hunting customs" as a way of engaging "in resistance against the Park and its strict enforcement of the law" (Simon 2006). While the law now states that Taroko peoples are allowed to hunt within their traditional territories with a permit, in recent years, "the Hualien County Government and Taroko National Park authorities [have forced] the Taroko community to violate Aboriginal tradition by refusing to issue hunting permits" (Wang and Chin 2015). In 2015, a hunting permit request filed by the

[27] This information was collected as a result of in-person interviews conducted by the author with Tian Guifang and Teyra Yudaw, both on May 21, 2017. Translation assistance was given by anonymous interviewee, Yulin Zheng, and any translation or interpretation errors are entirely my own.

Hsiulin community "was rejected by the Hualien County Government and Taroko National Park's administration center on the grounds that the National Parks Act forbids hunting and fishing in national parks" (Wang and Chin 2015). Some Taroko community members fear that the refusal of the government to grant the hunting permit signifies "that the government ha[s] lost interest in passing proposed amendments to the act to allow Aborigines to hunt for cultural and religious reasons," especially considering that the requested hunt was to take place the traditional Taroko Thanksgiving Day feast (Wang and Chin 2015).

Following the government's rejection of the aforementioned hunting bid, several Taroko hunters proceeded to carry out the traditional hunt in any event, and were then arrested and stripped of their firearms and game haul (Hua et al. 2015). This arrest, and others of a similar nature, have raised questions as to the government's respect for the stipulations of the Wildlife Conservation Act and the Indigenous Peoples Basic Law, both of which "explicitly allow 'the hunting and killing of wildlife' for the 'traditional, cultural or ritual' needs of indigenous peoples" (Hua et al. 2015). Another Taroko hunter who was recently arrested for hunting in her traditional lands within the National Park's boundaries feels that her rights to continue the cultural practice of hunting are not protected by the Park's co-management committee.[28] This hunter, among others, remains frustrated because she understands that the co-management committee is supposed to represent the interests of Taroko communities, but often fails to do so.[29]

Several years prior, in 2007, a similar incident took place in which two Taroko hunters were chased through Taroko National Park, "leading to one elderly man falling from a cliff to his death" (Simon and Mona 2015). This tragedy led to a Taroko pro-hunting protest at Taroko National Park, during which protestors demanded:

> 1) that the park police issue a public apology; 2) that, in the event police officers again 'have any behavior that violates human rights,' the captain and all officers involved should be removed from the 'territory of the Taroko Nation'; and 3) the government should implement the Article 19 Indigenous Peoples Basic Law in regard to hunting, by immediately revising or abolishing laws that criminalize hunting and trapping (Simon and Mona 2015).

[28] Telephone interview conducted by the author with Apay Ai-yu Tang on May 01, 2017.
[29] Ibid.

While some of these demands have yet to be met, the head of the park police station did issue a public oral apology following the hearing after the protest (Simon and Mona 2015). Further aggravating these issues, "violations of wildlife law can be enforced by conservation patrollers under the authority of the Council of Agriculture and its Forestry Division, National Park police forces, and regular police patrols" (Simon and Mon 2015). From the perspective of the Taroko National Park police officers, many are concerned with balancing "the duty to implement state law with Chinese moral norms of *qing* (情 which translates as "sentiment"), mediated by reason (*li* 理)" (Simon and Mona 2015). According to the captain during the post-protest hearing, the police force does "not want to arrest everyone, but if a tourist has seen a hunter and called the police," they must act (Simon and Mona 2015). Relatedly, a female Taroko hunter was arrested earlier this year when some neighbors called the police to report her activities.[30] Upon arresting her, the police accused her of "wasting resources," indicating the lack of public respect and understanding of indigenous traditional knowledge.[31] Even now, the police "must negotiate between values of public service, compassion, and pity," and hunters find this "uneven enforcement of the law… quite unreasonable and difficult to predict" (Simon and Mona 2015). Thus, is seems that "neither hunters nor police officers—those at the frontline of enforcement of wildlife laws—are content with the current regime" (Simon and Mona 2015). These recurring conflicts suggest the need for alternative management in Taroko National Park.

In addition to voicing concerns about the restrictions on hunting by Taroko peoples in their traditional lands, several community members have also raised points regarding the outdated status of the protected animals list and the effects such has on the ecological balance of the Park. One interviewee revealed that in a recent visit to an ancestral village site, she noticed that a majority of the trees and plants on the mountainside had been eaten down by muntjacs, indicating a natural imbalance and an overabundance of the small mountain deer.[32] The interviewee noted that in the past, animal populations were kept in check by Taroko hunters, however nowadays, because hunting is forbidden within the Park's limits, animal populations are growing out of control and creating an imbalance in the ecosystem.[33] Other community members have raised similar concerns, asking "why is hunting [protected] monkeys permitted,

[30] Telephone interview conducted by the author with Apay Ai-yu Tang on May 01, 2017.
[31] Ibid.
[32] Interview conducted by the author with Yulin Zheng on April 21, 2017.
[33] Ibid.

but hunting muntjacs and sambar forbidden?" (Hua et al. 2015). These questions are accompanied by demands for the endangered species list to be updated more frequently (Hua et al. 2015).

Limitations on hunting in Taroko territories are not the only restrictions that the National Park places on local Taroko communities. One Taroko community member expressed that when she was younger, the Taroko people could fish and collect orchids and golden lily plants, as well as other non-timber forest resources.[34] Since the Taroko National Park was established in those traditional territories, however, these resources can no longer be collected. These restrictions have created serious economic challenges for the Taroko peoples as well. Because many Taroko people cannot afford to purchase pork and other resources, they have long depended on the ability to hunt, cultivate the land, and collect resources for sustenance.[35] In addition to the economic challenges posed by the park, some Taroko communities are frustrated by the National Park Bureau's unwillingness to allow them to construct roads to access their ancestral homes. In many instances, either the roads have been damaged by typhoons, landslides, or other natural disasters, or there were no roads in the first place. Regardless, the National Park Bureau will not allow for the construction or reconstruction of roads because they fear it will upset the natural balance of the ecosystem and harm the environment within the park. Taroko peoples are frustrated by this rationale, however, because the National Park Bureau itself has long promoted the construction and maintenance of a cross-country highway that intersects the Park and has a far greater effect on the Park's environment than smaller access roads would. Thus, this restriction on the construction and reconstruction of roads has proven to be yet another contentious issue between the National Park Bureau and Taroko indigenous communities.

Relatedly, several Taroko scholars and community members have expressed their concern with the declining knowledge and education about traditional Taroko culture and practices among young children. While this issue is strongly connected to the declining use of the Taroko language, it is also deeply entwined with the current disconnect between Taroko children and traditional lands.[36] These problems are further aggravated by the National Park's restrictions on hunting and collecting forest resources. As Scott Simon argues, "hunting is an

[34] Interview conducted by the author with Yulin Zheng on April 21, 2017.
[35] Ibid.
[36] Telephone interview conducted by the author with Apay Ai-yu Tang on May 01, 2017.

intrinsic right for indigenous peoples, as a part of their basic human rights to preserve their cultural heritage," which highlights the role that hunting plays in sustaining Taroko cultural knowledge (Simon and Mona 2015). Nowadays, though proponents of the language revitalization movement cannot actually teach children to hunt and use other traditional skills, they do teach children to use hunting tools and take them out of the classroom to learn about plants and agriculture.[37] Older generations, however, who have difficulty maintaining their connection to their ancestral lands within the Park, seldom encourage their children and grandchildren to take part in these language and culture revitalization programs as they feel that these skills will not help young Taroko peoples to function in greater Taiwanese society today.[38]

One particularly notable concern regarding the actual co-management committee within Taroko National Park is the lack of awareness about the mechanism among Taroko indigenous community members. For instance, the female hunter mentioned previously was not even aware that such a co-management committee existed for Taroko National Park.[39] Few people understand the actual role or power of the committee, and even the Taroko National Park website contains very little information about the co-management committee.[40] The limited information that is presented on the website merely alludes to the committee covering eight points of interest and the necessity of including indigenous peoples in the co-management process, but reveals nothing about how this is accomplished or what those eight points are. Additionally, Taroko community members have voiced their concern about the absence of real decision-making power in the committee. One interviewee even stated that "members in the committee, especially the indigenous peoples, feel that they are just giving advice. When the National Park wants to do something, they ask: 'is this okay?' [The committee] doesn't have many conversations or decision-making rights."[41] Not only does the National Park Bureau fail to devolve decision-making rights to the Taroko National Park co-management committee, but the committee itself meets rather irregularly, convening some years but not others, and oftentimes determined by the National Park authorities rather than the Taroko indigenous peoples.[42] The result of this

[37] Telephone interview conducted by the author with Apay Ai-yu Tang on May 01, 2017.
[38] Ibid.
[39] Ibid.
[40] Interviews conducted by the author in person with Yulin Zheng on April 21, 2017, and by telephone with Apay Ai-yu Tang on May 01, 2017.
[41] Interview conducted by the author with Yulin Zheng on April 21, 2017.
[42] Ibid.

irregularity and advisory board is a large communication gap between the Taroko indigenous peoples and the National Park Bureau. Further widening this gap is the fact that a large portion of the National Park lands are controlled by Han people, particularly those working in the National Park Bureau, because they tend to have more access to funding than Taroko indigenous peoples do.[43] Not only has this led to unbalanced representation of indigenous and government interests, but it also seems to have stirred up more resentment among Taroko community members.

Furthermore, the nature of the co-management committee as an advisory council may be a result of the way Taiwanese legislature has written the law requiring co-management board in each National Park, however this leaves the committee without any legal infrastructure to support its rights and decisions. Thus, one of the greatest concerns with the functionality of the Taroko co-management committee is that it is far more effective in representing the interests of all parties in theory than it is in practice. The concerns and conflicts depicted above are not solely limited to the Taroko National Park territories, however, and I will discuss similar conflicts among other indigenous groups and government agencies in the coming chapter.

[43] Interview conducted by the author with Tian Guifang on May 21, 2017.

Chapter Three: *Taiwan Forestry Bureau-Rukai Indigenous Peoples Co-Management Initiative*

In my second case study, I will focus on the Rukai peoples of Taiwan, particularly their historical movements, claims to traditional territories, and ongoing disputes and discussions with the Taiwan Forestry Bureau. I will then describe the steps that the Rukai peoples and Forestry Bureau are taking to establish a co-management committee, the objectives for the potential committee, and any present concerns or conflicts the Rukai peoples and Forestry Bureau have regarding the lands and resources to be managed. Because of the newly emerging nature of these co-management discussions, the information I will present was largely collected through a walking workshop conducted across nine different Rukai villages, discussions and presentations by scholars, community members, and Forestry Bureau representatives at these villages, personal observations from such, as well as a supplementary literary survey.

Figure 8– Meeting at Kundagavane, Walking Workshop 2017

I. Forestry Bureau-Rukai Peoples Case Context

Historical Background

The Rukai peoples of Taiwan are one of the sixteen officially recognized indigenous group in Taiwan. As of 2014, "the Rukai numbered 12,699" and were the seventh largest of the

thirteen officially recognized indigenous peoples of Taiwan at the time (Rukai People 2016). Originally, the Rukai population was concentrated at Dalubaling ("the Big Ghost Lake"), but over time, Rukai peoples spread across southern Taiwan and are now primarily located in the counties of Gaoxiong, Pingdong, and Taidong (Rukai 2008). Nowadays, "the Rukai mainly live along two sides of the southern mountains of the Central Range" (Rukai 2008). Similar to the Taroko peoples, Rukai peoples have historically lived in the mountains, and thus often feel a special connection to their traditional lands in high mountain areas.

In the 1940s, the Japanese colonial government launched large-scale relocation plans for the Rukai peoples, resettling many villages from the high mountains to the lowlands for easier monitoring and assimilation. After relocating the Rukai villages, the Japanese Office of Agricultural Production often took control of the forested lands and used the forests for collecting timber, producing camphor, and harvesting other forest resources. In the forests near the village of Taromak, the Japanese army used caves and other hideouts to hide from Chinese soldiers during the war with China.[44] When Japan lost the war in 1945 and ceded Taiwan to Chinese control via the Treaty of Shimonoseki, these previously Japanese-controlled forests were then brought under the jurisdiction of the Taiwan Forestry Bureau. Initially, some Rukai peoples cooperated with the Forestry Bureau in caring for the forest, thinking that they were doing so to protect the land.[45] These same Rukai peoples were quickly disenchanted when they found out that the Forestry Bureau had actually rented out the land to Han peoples for other purposes and development, and many felt that the renting out of their traditional forest lands was extremely unfair.[46]

Recent Developments

During and following Japanese colonial rule and KMT rule, some Rukai villages had been allowed to remain in their original mountain territories. In the past decade, however, natural disasters and typhoons have forced these villages to resettle in lower altitudes as well. In 2009, Typhoon Morakot struck the southern and eastern parts of Taiwan. The typhoon caused severe damage to several mountain villages, including Adiri (Ali), Labuwan (Dawu), and several

[44] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[45] Ibid.
[46] Ibid.

others that were completely destroyed and forced to relocate to Changzi baihe and Rinari (Haocha). Not only did the typhoon cause damage within the villages themselves, it also precipitated landslides and rockslides, which destroyed roads to the traditional villages that have yet to be fully repaired to this day. As a result of the instability of the land and the hazardous state of the roads, the state government of Taiwan has deemed several of these traditional villages to be unsafe zones, and subsequently forced the relocation of the villages' inhabitants to the lower foothills.[47] Currently, former inhabitants of these mountain villages face great difficulty in returning to the lands which they had previously owned and cultivated, which has had both psychological and socio-economic impacts on numerous Rukai people, especially those in the older generations.[48]

Figure 9- Rockslide near village of Adiri (Ali), Walking Workshop 2017

Because Rukai peoples have historically lived in high mountain areas, many of their traditional subsistence practices included hunting and cultivating millet, sweet potatoes, quinoa, and other vegetables. According to legislation enacted by the Taiwanese Legislative Yuan, including the Wildlife Conservation Act, the Controlling Guns, Ammunition and Knives Act, and forest reserves delineated and protected by the Forestry Bureau, indigenous peoples are severely limited, if not prohibited, from carrying out these traditional activities. On the one

[47] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[48] Ibid.

hand, the illicit nature of hunting has had a significant social impact on many Rukai villages, particularly because hunting has historically been the primary way by which Rukai men have demonstrated their contributions to society and gained their status among their peers.[49] Additionally, the restrictions on hunting have had an economic impact as well, as many Rukai villagers who used to live off of the land and game from hunting in the mountains cannot afford the cost of living in the lowlands.[50] With regard to the cultivation of agriculture, several villages, including Changzi baihe, raise concerns about the infertile nature of farmland in the lower foothills, as well as the lack of arable land. In Changzi baihe, the land was once used to grow pineapple, which largely depleted the soil of many nutrients, making it difficult for Rukai people living there now to grow millet and sweet potatoes.[51]

Following Typhoon Morakot in 2009, some Rukai villages innovated to develop new ways of producing food and sustaining themselves. In Labuwan (Dawu), several local villagers collaborated with researchers to open an organic chicken farm, where they raise healthy chickens to provide meat for the local villagers. The farm is completely self-sufficient, and unlike many other chicken farms, the chickens are fed millet, quinoa, wild leaves, and cooked snails, and the farm does not depend on any outside preservatives or antibiotics.[52] This farm has also helped to serve as a form of ecotourism in Labuwan, which has led to the slight expansion of the chicken farm itself. Unfortunately, because of the damage caused by the typhoon, the elderly generation of Labuwan, like many others, became depressed because of their inability to access their traditional lands and sustain themselves in the mountains. In Changzi baihe, depression in the older Rukai generation has been exacerbated by the inability of them to live near their old neighbors or feel a strong connection to the land.[53] Traditional festivals, which were once celebrated to bring good harvests, have lost much of their meaning in this new lowland context. While several disaster relief organizations, including the Tzu Chi Buddhist organization and the World Vision Christian organization, helped in building homes for these displaced communities, because many middle generation Rukai peoples had moved to the cities for work, not enough houses have been built for the number of Rukai people that actually belong to each village.

[49] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[50] Ibid.
[51] Ibid.
[52] Ibid.
[53] Ibid.

On a more positive note, however, because of President Tsai Ying-wen's formal apology to Taiwanese indigenous peoples on August 2016, as well as the recent unveiling of the Indigenous Historical Justice and Transitional Justice Commission, "the Rukai [peoples]… established a tribal assembly April 3 with the goals of preserving their cultural heritage and facilitating eventual autonomous rule of traditional lands" (Taiwan Today 2017). This assembly, or Rukai Community Council, is "comprised of tribal leaders as well as elected representatives, with each Rukai community selecting one or more delegates depending on its population size" (Taiwan Today 2017). Presently, applications for forest resource use must be completed and submitted through the District Council because the Forestry Bureau requires such applications to be done through a legally recognized entity.[54] The Rukai Community Council leader, however, has voiced his hopes that this assembly will soon be a legitimate, legally recognized organization, so that collaboration and negotiations for resource use can be conducted more directly between the Rukai Community Council and the Forestry Bureau.[55] In the coming sections, I will further discuss the steps leading to a potential co-management committee, as well as the intended operations and the current concerns on behalf of both the Rukai communities and the Forestry Bureau.

II. Coming to the Co-Management Committee

Because the concept of a co-management committee between the recently announced Rukai Community Council and the Taiwan Forestry Bureau is the first of its kind, the initiative itself is just in the beginning stages of discussion. As has been established in the earlier section on co-management, however, co-management is an ongoing process, so in beginning dialogues about the viability and functionality of a co-management committee to protect and oversee development in Rukai forested lands, the co-management process has already been launched through the walking workshop (Berkes 2017).

With regard to the method of developing the Rukai peoples-Forestry Bureau co-management committee, Professor Fikret Berkes pointed out that the process was begun by collaborating in a five-day walking workshop through nine different Rukai villages. This

[54] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[55] Ibid.

workshop was a collaborative effort between the Taiwan Forestry Bureau, the Council of Indigenous Peoples, the recently unveiled Rukai Community Council, and the individual Rukai communities and villages along the way. The workshop participants included representatives from the Forestry Bureau, Rukai community leaders and scholars, university professors and researchers, graduate students, and a visiting scholar and expert on co-management, Professor Fikret Berkes.

Figure 10- Walking Workshop participants in Taromak, Walking Workshop 2017

Throughout the workshop, we visited nine different Rukai communities, including: Kundagavane, Oponoho, Teldreka, Adiri, Wutai Township, Labuwan, Changzi baihe, Rinari, and Taromak. In each of these communities, the local community leaders and villagers participated in conversations with Forestry Bureau representatives, each voicing their concerns regarding access to natural resources, hunting rights, traditional territories, ecotourism, traditional knowledge, afforestation, and other points of interest, which I will discuss further in section IV. The participants also shared their desires with respect to the establishment of a co-management committee and what its role and responsibilities would be. Rukai communities have long voiced their desires to return to traditional territories to hunt, fish, gather materials and resources for subsistence and the continuation of traditional cultural practices, as well as promoting sustainable development and ecotourism. This workshop enabled the communities to communicate their desires to collaborate with the Forestry Bureau in carrying out these activities, while also providing the Forestry Bureau with a chance to respond in kind to these requests.

Professor Berkes, who was invited to participate in the workshop to share his experience in establishing co-management committees around the world, outlined the primary steps taken in

carrying out the co-management problem-solving process (Berkes 2017). The steps are as follows:

1. Define the area to be managed
2. Identify who the involved actors/parties are
3. Define the essential management tasks
4. Make sure that the linkages are such that the decisions reach the decision-makers
5. Establish a capacity for development
6. Prescribe remedies and begin the planning cycle (which for each agenda item will start all over again)

Berkes argued the significance of co-management as problem-solving as engaging in the process can help to determine what to do with resources and who can use what when, where, and under what circumstances (Berkes Forest Bureau Forum 2017). During the workshop itself, Berkes repeatedly asserted that co-management is not a series of projects between the Forestry Bureau and local Rukai communities, but instead is a way of sharing decision-making power through an agency that over time will become a legal platform for the co-management of Rukai forested lands for years to come.[56] The significance of collaborative projects between the Forestry Bureau and local communities, as in Taromak and Adiri, is not to be overlooked. These projects are important in helping to allocate some degree of responsibility and decision-making power to the local Rukai villages. What is most important, however, is not to let the collaboration come to an end when the projects do.[57] It is imperative that the Forestry Bureau and Rukai communities work together to develop a plan for long-term co-management with a committee that may begin as more of an advisory agency with legitimate decision-making power, but eventually leads to a legal platform for the future co-management of Rukai forested territories.

As previously mentioned, while this co-management committee has yet to be formally established, the discussions between the Forestry Bureau and Rukai community leaders indicate that the process of instituting such a committee have commenced. The next step in this process appears to be continuing communication and deciding among the interested parties who will participate on the committee, how the board members will be selected/elected, how terms and the

[56] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[57] Ibid.

chair position will be determined, as well as the frequency of meetings and the items on the agenda.

In the course of establishing the committee, Berkes noted that the Forestry Bureau and Rukai communities would likely face several challenges, including questions of budget, altering the current mode of thinking among Forestry Bureau representatives and Rukai community members, implementing maps of traditional territories due to movement over the years, organization because other government agencies may also be involved, and legal issues resulting from the incompatibility of the existing legal framework with the goals of co-management.[58] While "after nearly two decades of field research and interviews with elders, 96,114 hectares of Rukai lands have been identified, about 77 percent of which are currently controlled by the Forestry Bureau under the Cabinet-level Council of Agriculture," further challenges will arise in asserting Rukai claims to these lands due to centuries of migration and relocation, both forced and self-determined (Taiwan Today 2017). However, as voiced by the Rukai assembly leader, "the assembly's primary goal will be to help facilitate the establishment of a joint management mechanism for these areas," which it seems will best take place through the formation of a co-management committee with the Taiwan Forestry Bureau (Taiwan Today 2017). I will elaborate on the intended operations of this committee in the following section.

III. Intended Operations of the Committee

In continuing the process of co-management between the Forestry Bureau and the Rukai indigenous peoples of Taiwan, it seems that one of the most reasonable, and in other co-management cases effective, ways of sharing power is to do so through a co-management committee. Ideally, this committee would consist of representatives from both the Forestry Bureau and the local Rukai communities. The committee itself, through discussions about establishment, would need to determine the ways in which members would be elected. Additionally, as advocated by Berkes, the committee would benefit from having a chair, whose position would rotate regularly, for instance every three years. It is also imperative, according to Berkes, that the co-management committee meet regularly and establish a working agenda for each meeting. In the earlier stages of the committee, he posits that the committee might meet

[58] Information collected as a result of the author's participation in the *Walking Workshop 2017*.

more frequently due to the number of issues yet to be resolved. Over time, however, as more and more disputes are resolved between the Forestry Bureau and local Rukai communities, the committee might meet less frequently. Also important to remember, states Berkes, is that with regard to the agenda for the committee, representatives from both the Forestry Bureau and the Rukai communities may submit issues of interest. In the early stages, it may be beneficial for the co-management committee to limit its agenda to four to five items, particularly items of a smaller nature to allow a greater likelihood for success in resolving these issues. As the committee becomes more practiced in resolving smaller disputes, it may then be more apt to resolving larger ongoing conflicts among the interested parties.

Figure 11- Rukai Community Council leader speaks at Adiri village, Walking Workshop 2017

In terms of those parties whose interests would be represented by the committee, it seems that the central actors should include the Rukai Community Council, though it may be a while before it is legally recognized, and the Taiwan Forestry Bureau. Should issues arise that concern other agencies, such as the Transportation Department, representatives from that agency could then be called upon to participate in the committee's discussions. In this way, the committee would represent the interests of all interested parties (Berkes 2017).

While the co-management committee would not work to enact legislation, as that is the responsibility of the central government, it would deliberate and develop suggestions and recommendations in response to conflicts and concerns regarding the management and use of forested lands, including those outlined in the following section. The committee would ideally then propose these recommendations and solutions to the central government authorities, who could at that point decide whether or not to implement these suggestions. While the final

decision-making power regarding implementation would ultimately rest with the central government, the Forestry Bureau and Rukai indigenous peoples would also share in very real decision-making power in the outset and drafting of proposals and policies. Additionally, due to the expense and difficulty of monitoring and managing such large expanses of land and forests, the co-management committee would allow for the shared responsibility for these duties between the Forestry Bureau and the local Rukai communities, who could utilize their traditional ecological knowledge and the expertise of former hunters to protect and balance the local ecosystems.[59]

Unlike other currently existing co-management committees in Taiwan, including the Taroko National Park co-management committee, the committee between the Forestry Bureau and Rukai communities would not operate on a consultative basis, but as a functioning agency with real, shared decision-making power. Ultimately, as Berkes describes, co-management of Rukai traditional forested areas should serve the following purposes:

1. Allocation of tasks enabling each partner to do what it does best
2. Exchange of resources allowing partners to complete their tasks
3. Better enforcement to increase efficiency on the ground
4. Conflict resolution by codifying rights and responsibilities
5. Reducing transaction costs through better data collection, monitoring, enforcement, and conflict resolution
6. Risk-sharing in the decision-making process

(Carlsson and Berkes 2005).

Finally, the most important components in a successful co-management regime are mutual trust and mutual respect. While these are things that cannot be established overnight, especially given the long and somewhat tumultuous history of the relationship between the Forestry Bureau and the Rukai peoples, by opening up dialogue between the two parties, this process has already begun.[60] Should this process continue, as is the goal, the committee would over time be able to help resolve the conflicts described in the following section.

IV. Current Concerns and Conflicts

[59] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[60] Ibid.

Both the Taiwan Forestry Bureau and the individual Rukai community share various concerns about the management and use of forested lands in Rukai traditional territories. Across the various communities, the most common of these concerns include hunting rights, the ability to collect and use salvage timber and non-timber forest resources, promotion of ecotourism and sustainable development, recognition of traditional knowledge, afforestation issues, and the aftermath of relocation and resettlement. The Forestry Bureau, which shares the intention of protecting the environment and forest for continued enjoyment by the whole state of Taiwan, has voiced other concerns about the protection of land and animals and the rebuilding of communities in the aftermath of typhoons and natural disasters. One especially important shared concern between the Forestry Bureau and the local Rukai communities is the communication gap between the communities and the Forestry Bureau itself. Both parties have expressed frustration at the poor communication at present, which has made discussions about resource use and management difficult as the wishes of either party are often misrepresented or misinterpreted. In this chapter, I will expand upon the concerns of both parties, as well as ongoing conflicts in Rukai forested lands.

Rukai Community Concerns

Because many of the Rukai traditional territories are located in forested, mountainous areas, most Rukai villages share similar concerns regarding the use of their traditional lands. The most prominent of these concerns include hunting rights and regulations, which due to the Wildlife Conservation Act and the Controlling Guns, Ammunition and Knives Act, have been severely limited, as well as the ability to collect salvage (fallen) timber. Many Rukai communities are also concerned with their ability to promote sustainable ecotourism in their villages, and hope to gain the support of the Forestry Bureau in doing so. Additionally, Rukai villages are frustrated by the lasting ramifications of their forced relocation, both by colonial governments and natural disasters, namely the 2009 Typhoon Morakot. Following their resettlement, several villages have been prohibited from returning to their traditional lands due to the government's concern about the safety of the land, as well as the Forestry Bureau's controlled afforestation efforts, which oftentimes involve planting the wrong type of tree

(xiangsishu) for the land. This negligence then leads to continued land instability and more land/rockslides, a point of apprehension for numerous Rukai villages.

While many of the Rukai villages visited during the walking workshop voiced shared concerns regarding the use of traditional Rukai lands, several communities have particular concerns affecting those specific villages. In Kundagavane, a community located in Gaoxiong County, the village is especially concerned with illegal logging being carried out by gangsters. At present, because of the lack of cooperation and collaboration between the Rukai village and the Forestry Bureau, it has proven very difficult to monitor this logging and enforce punishment for such. This issue appears to be a shared concern by the community and Forestry Bureau alike, as the logging has a negative impact on the overall ecosystem of the forest.[61] It seems that enforcement of restrictions against illegal logging might be more effective if they involve cooperation from the local community of Kundagavane. In Oponoho, the Rukai village's local artist is frustrated by the limits the Forestry Bureau has placed on the amount of magnetic rock ha can gather from the riverbed. Additionally, community members face difficulty in collecting the salvage timber they are allotted due to lack of equipment to do so.[62]

A third community with unique concerns is that of Teldreka, where the local homestay owners have begun their own initiatives to protect butterfly habitats.[63] In Teldreka, several community members became frustrated with the state government's lack of budget and concern regarding the protection of migratory butterfly habitats. Additionally, approximately 70 percent of the lands to which the butterflies return is privately owned, which has proven particularly problematic in promoting protection of these lands. These concerned community members want to negotiate with the land owners about renting or sharing the land with conservationists, but in order to do so, they need to support of the central government. The butterfly conservationists have voiced their hopes to team up with the Forestry Bureau in order to better protect the butterflies and their habitats, but in the meantime, several community members have collaborated to establish a local homestay and butterfly exhibition as a way of promoting ecotourism to raise money and awareness about this ecological issue.[64]

[61] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[62] Ibid.
[63] Ibid.
[64] Ibid.

In Wutai Township, various Rukai community members have articulated their frustrations with the current application for forest resource use. This application, which appears to be a mystery even to those officials whose job it is to carry out, requires Rukai people to show proof of continued land use in order to claim control over a given forested area. Unfortunately, however, few Rukai people actually have written title to the land, nor do they have a way of proving their historic and continued use of said land because of the difficulty of using satellite imagery to show agroforestry, which occurs beneath the trees in the forest.[65] Additionally, while the Forestry Bureau has allotted this Rukai community access to 50 percent of the claimed traditional lands, there seem to be no standards for the quality of the land or resources therein contained. This community also raised concerns about the need to update the protected animals list, as many villagers have noted an imbalance in the local ecosystem. This imbalance is exemplified by the 35,000 muntjacs (small mountain deer) living in Rukai territories, compared to the approximately 13,000 total Rukai peoples.[66] Like the community of Taromak, Wutai Township was equally concerned with the limitations on water collection.

In Labuwan (Dawu), local community members discussed the potential dangers of the commercialization of local plants and the potential strain that would place on the ecosystem.[67] Similar to other communities, including Changzi Baihe, Labuwan villagers are worried about the psychological depression in elders resulting from the forced relocation and restoration after the 2009 typhoon. Rukai community members in Changzi Baihe are also concerned with the lack of arable land for cultivation and the issues resulting from climate change and decreasing population in the village.

[65] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[66] Ibid.
[67] Ibid.

Figure 12- Rukai women welcome participants to Rinari village, Walking Workshop 2017

Finally, in Rinari, Rukai village members share concerns about rediscovering traditional knowledge and having the ability to visit their traditional village. Meanwhile, community members in Taromak, located in Taidong County, are also concerned with water collection, and strongly desire the ability to self-monitor and self-manage their traditional forested lands.[68] To further illustrate the individual concerns in each village, I have included a table detailing such below:

Community	Primary Issues
1. Kundagavane	• Hunting rights/regulations • Salvage timber (application) • Illegal logging
2. Oponoho	• Hunting rights/regulations • Salvage timber • Non-timber forest resource collection • Ecotourism
3. Teldreka	• Protection of butterfly habitat • Afforestation (wrong trees) • Government conservation budget
4. Adiri (Ali)	• Forced relocation (ability to return)
5. Wutai Township	• Rukai Community Council • Proof of continuous land use • Salvage timber (regulations) • Collection of non-timber forest resources • Agroforestry • Forestry Bureau allotment of land • Hunting rights/regulations • Need to update protected animals list

[68] Information collected as a result of the author's participation in the *Walking Workshop 2017*.

	• Conversion of traditional land to protected land • Water collection
6. Labuwan	• Commercialization of local plants • Hunting rights/regulations • Post-typhoon relocation (depression)
7. Changzi Baihe	• Post-typhoon relocation (depression) • Lack of farmland/land for cultivation • Climate change issues • Decreasing population • Hunting rights/regulations
8. Rinari	• Rediscovering traditional knowledge • Ability to visit old community • Salvage timber (harvesting regulations)
9. Taromak	• Water collection • Use of traditional territory/land (scale) • Ecotourism • Hunting rights/regulations • Self-monitoring/self-management • Traditional knowledge

Table 1- Rukai Villages and Corresponding Concerns 2017

While the Rukai communities and the Forestry Bureau appear to share similar interests in protecting the environment and maintaining a balanced ecosystem, the Forestry Bureau has voiced its own concerns regarding the use and shared management of forested lands, which are detailed in the following sub-section.

Forestry Bureau Concerns

With regard to the environment and the local ecosystems, the Forestry Bureau seems to share similar concerns as those of the various Rukai communities. Forestry Bureau representatives have expressed their interest in protecting the land and forest resources for the continued use and enjoyment by future generations in Taiwan. Thus, while Rukai communities wish to self-monitor in protecting the local environment, the Forestry Bureau is apprehensive, and perhaps dubious, about the dependability of indigenous traditional ecological knowledge in protecting the environment. The Forestry Bureau thus tends to concern itself with the notion of protecting the forests for the entire state of Taiwan as a whole.

In addition to ecological interests, the Forestry Bureau is concerned with the rebuilding and relocation of villages post-typhoon. Because the 2009 Typhoon Morakot caused landslides that destroyed the roads leading to several Rukai indigenous villages, the Forestry Bureau has pursued afforestation policies to replant trees in those areas that have been affected by land degradation, as well as those historically affected by logging and timber collection. There have been questions raised as to the effectiveness of the Forestry Bureau's afforestation practices, however, as the newly planted trees appear to have done little in mitigating land and rockslides.

Perhaps what appears to be one of the Forestry Bureau's greatest concerns is that about sharing power with local Rukai communities. As has appeared in several different discussions between Forestry Bureau representatives and local community leaders, the Forestry Bureau is very apprehensive about delegating real decision-making power to the local Rukai communities. This fear may be rooted in a lack of understanding, as it seems that neither the Forestry Bureau nor local community members really understand what shared decision-making power looks like. However, as Berkes has explained in several forums, the central government would still retain the final say in terms of whether or not to enact policies brought forth by the co-management committee.[69] The committee itself would serve to draft proposals and suggestions for policy implementation and conflict resolution, but if the central government were to find the suggestions out of line or of poor judgement, it could refrain from implementing them. Furthermore, the local Rukai community leaders have repeatedly affirmed their eagerness to accept responsibility for the management of their traditional forested lands and to monitor and protect the resources contained therein. Nonetheless, the delegation of decision-making power to a non-government agency remains a large concern for the Forestry Bureau.

Ongoing Conflicts

As mentioned previously, there are numerous ongoing conflicts between the Taiwan Forestry Bureau and the local Rukai communities. Oftentimes, these conflicts stem from poor communication and misunderstood or misrepresented ideas on behalf of either party. One particularly contentious issue is that of the application system for requesting permission to use forest resources. At present, the Forestry Bureau requires Rukai communities to file an

[69] Information collected as a result of the author's participation in the *Walking Workshop 2017*.

application to use salvage timber and other non-timber forest resources.[70] Many Rukai community leaders have expressed that the application is very long, complicated, and difficult for them and their community members to understand. Additionally, Forestry Bureau representatives themselves have admitted that the application process is complex and the application form is not easy to comprehend without extensive training.[71] Not only is the application process tedious and confusing, but the application must also be submitted indirectly to the Forestry Bureau through the District Council, which is composed of township representatives who are often disconnected from their localities and do not fully comprehend the concerns and wishes of the Rukai people in their respective villages. This lack of understanding further muddles the application process and contributes to the communication gap between the Forestry Bureau and local communities. Community leaders have proposed using the newly established Rukai Community Council as the intermediary agency between the villages and the Forestry Bureau, however central law requires that the agency be officially legally recognized, thus disqualifying the Community Council at this point. There are hopes that the Rukai Community Council will be legally recognized by the central government in the future, but scholars fear that obtaining recognition may be another long process.

Not only is the application for forest resource use difficult in and of itself, but the Rukai peoples and Forestry Bureau often do not see eye to eye when it comes to rights to resources. The Forestry Bureau feels that because the lands are within its jurisdiction, it is responsible for regulating the use of such and the resources within those territories. Rukai peoples, on the other hand, see collection of salvage timber and non-timber forest materials as a living right and cannot grasp the logic behind the regulations of the resources.[72] Thus, in many Rukai communities, as in Oponoho where the artists are unable to easily collect salvage timber and magnetic rocks for their work, and in Wutai township, local Rukai peoples are frustrated by their limited access to resources that they see as a living right.

Wutai Township is also the hub of several other disputes, including those previously mentioned regarding agroforestry and continued land use claims, as well as problems resulting from resettlement and relocation. To begin, the director of the Aboriginal Peoples' Community

[70] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[71] Ibid.
[72] Ibid.

has drawn attention to how the Forestry Bureau seems to be following a similar system of forest management as set out under the Japanese colonial government. While prior to the 1980s, there was no indigenous land ownership, since then, the Forestry Bureau has released 15,000-20,000 hectares of land to indigenous peoples. Initially, indigenous peoples were pleased with the return of some of their traditional territories. Upon realizing that much of the land is unusable, indigenous peoples have grown incredibly frustrated. Additionally, following the 2009 typhoon, the Forestry Bureau forced numerous Rukai peoples to leave their traditional lands. Now, because those families followed orders and left, they are facing great difficulty in reclaiming land that the Forestry Bureau has released because they cannot show proof of continuous land use. While the Forestry Bureau Director has pointed out that there are a couple of occasions in which the Forestry Bureau does not require proof, including forced relocations and natural disasters, the reclamation of Rukai indigenous lands has proven problematic all the same.

Another community with a bone to pick with the Forestry Bureau is the Rukai village of Rinari. Rinari has been relocated due to landslides and typhoon damage not once, but twice. Originally, the village was located in the high mountains. Following the 2009 typhoon, however, it was relocated to a lower altitude in the mountains. In the Forestry Bureau's afforestation efforts in the areas above and surrounding the relocation site, they had been planting trees with far-reaching, shallow roots, in Chinese referred to as xiangsishu. Because these trees were planted on the mountain-side and their roots were too shallow, however, they were easily uprooted in subsequent storms, leading to landslides that then destroyed the first relocation site of Rinari. The village is now located in the lower foothills of the Central Mountain Range in Pingdong County, but the Rukai people of Rinari wish to revisit and reclaim their ancestral lands in the high mountains. The Forestry Bureau claims that the road leading to the original village site is too dangerous and unstable. However, the Rukai people of Rinari claim that if not for the Forestry Bureau's mismanaged afforestation practices, the Rinari people could better manage the natural reforestation of the mountainside, allowing for safe and stable access to their original village.

Perhaps one of the greatest points of contention between indigenous peoples and the central government is that of hunting rights. This issue is not solely limited to the Rukai peoples and the Forestry Bureau, however it does appear in discussions with most Rukai villages. Hunting has long been a part of the Rukai peoples' traditional way of life, providing sustenance

and helping men to define their status in their respective communities. Not only does hunting provide socio-economic benefits to the Rukai peoples, but arguably it helps to maintain balance in the local ecosystems. As mentioned before, the number of muntjacs in Rukai forested territories is nearly triple that of actual humans, yet the animals remain on a protected species list. When this sort of phenomenon occurs and the number of animals in an ecosystem is not kept in check, the plants then suffer, cutting down on the food sources for the animals and leading to an unbalanced system. Thus, the Rukai people, among other indigenous groups, argue that the government should more regularly update its protected animals list and relax some hunting regulations in traditional territories.

While there are most certainly other ongoing conflicts between the Forestry Bureau and local Rukai communities, the aforementioned conflicts, including the resource use application process, lack of usable, arable land available for indigenous cultivation, poorly managed afforestation projects, and hunting rights are some of the largest issues in numerous communities. Ideally, these problems would be placed on the agenda of the forest co-management committee and resolved through collaborative effort on behalf of the Rukai communities, the Forestry Bureau, and other interested central government agencies.

Chapter Four: *Analysis and Discussion*

Through the previous chapters, I have provided the historical contexts of Taiwan and Canada, developed my conceptual framework and elaborated on the cases of co-management in Taiwan's Taroko National Park and between the Taiwan Forestry Bureau and Rukai indigenous peoples. In this chapter, I will apply the six criteria that I have adapted from Ortiga's research on Latin American indigenous land rights regimes to the co-management committees and agreements in both Taiwanse cases. As discussed in chapter one section VI, I will ask the following questions with respect to co-management in Taroko National Park and the emerging co-management regime between the Forestry Bureau and the Rukai peoples:

1. Within the co-management agreement, how is land ownership over the given territory defined?
2. Does the co-management agreement recognize the territory about which the agreement is made in a way that corresponds with the idea of indigenous territory?
3. How does the co-management agreement assign rights to the natural resources found within the specified territory?
4. How is indigenous title over the land within the co-management agreement secured?
5. Within the co-management agreement, to what extent do indigenous peoples retain autonomy over their own affairs (ie. Land rights, legal recognition, ability to use traditional justice system)?
6. What types of legal recourse are available to relevant indigenous peoples to defend their rights to land within the scope of the co-management agreement?

These questions each correspond with a given criteria within my conceptual framework, including: 1) land tenure regime, 2) territorial recognition, 3) natural resource rights, 4) tenure security, 5) autonomy, and 6) legal recourse. In answering these questions, I will elaborate on the degree to which each co-management agreement satisfies or fails to satisfy these points. I will also highlight the primary factors that have enabled or prevented each criterion from being met. Later, I will discuss how this information can be utilized to improve the existing and emerging co-management agreements in both Taroko National Park and between the Taiwan Forestry Bureau and the Rukai indigenous peoples.

I. Taroko National Park Co-Management Committee

1. *Land Tenure Regime:*

In order to identify the land tenure regime within Taroko National Park's co-management agreement, one must answer the first question: within the co-management agreement, how is land ownership over the Taroko National Park lands defined? Because of the nature of this area as a national park, the lands within Taroko National Park are technically public lands. As such, however, they are completely controlled and managed by the National Park Bureau under the authority of the Ministry of the Interior. According to Article 9 of the National Park Law, "within the boundaries of the national park, public land necessary for the execution of the national park plan may be appropriated in accordance with the law" (National Park Law 2010). Essentially, this means that Taroko National Park may utilize and control any public lands necessary for the execution of the national park plan. Because Taroko indigenous peoples had been pushed out of the mountains now contained within the national park lands during the Japanese colonial period, and the KMT Martial Law and democratic government failed to return ownership of these lands to the Taroko peoples, they became public lands. As a result, Taroko National Park may use, manage, and control them as the National Park Bureau deems necessary.

In February of 2017, the Council of Indigenous Peoples (CIP) proposed draft regulations for returning 800,000 hectares of traditional land to indigenous peoples in Taiwan (Wu, Chiu and Chung 2017). Even if these draft regulations are officially rendered legal, however, Taroko indigenous peoples may not regain access and land rights to traditional territories within the Park because the National Park Law gives the National Park Bureau and the MOI authority to seize these lands to carry out the national park plans, as previously explained. "The draft regulations are the first step toward e-establishing Aborigines' right to land," yet they may change very little by way of returning Taroko National Park lands to Taroko peoples (Wu, Chiu and Chung 2017). Thus, despite the public nature of the Taroko National Park lands overseen by the co-management committee, those previously Taroko lands within the Park remain under strict control and management by the National Park Bureau and the MOI. Because of the National Park Law, the recently proposed draft regulations returning ownership of indigenous traditional territories to indigenous peoples would have little effect on the lands contained within Taroko

National Park. For simplicity's sake, one might conclude that the National Park Bureau retains ownership (or management) rights over the lands contained within the Park, and the co-management committee is unable to delegate such rights to local Taroko indigenous communities.

2. *Territorial Recognition:*

While the first criterion corresponds with land ownership, the second is more concerned with the idea of recognizing indigenous territories. In the Taroko National park co-management agreement, which has been realized as a co-management committee, one might identify the degree to which the agreement honors territorial recognition by answering the following question: does the Taroko National Park co-management agreement recognize the territory within the Park about which the agreement has been made in a way that corresponds with the idea of indigenous territory? As defined in chapter one of this thesis, indigenous territory refers to those lands which are occupied or otherwise used by indigenous peoples (ILO C169).

One of the factors that makes answering this question a rather complicated matter is that the Taroko peoples were previously displaced from their mountain lands now contained within the Park by the Japanese colonial government. As for those who were permitted to remain in their traditional territories at that time, all but the community of Datong Dali (previously known as Hohosh in the Taroko language) were relocated to the lowlands and plains to make room for Taroko National Park.[73] As a result, almost all of the lands therein contained that were once considered indigenous territories based on the Taroko indigenous peoples living there may no longer be recognized as indigenous lands by the Taiwan government because they are now located within and managed by Taroko National Park. Despite there being many ancestral sites within Taroko National Park, identifiable by their relics or remnants of past structures, the Taiwanese state government fails to recognize these lands as presently being indigenous territories. The government clearly recognizes the indigenous history on these lands, however, since the 2005 Basic Law requires any national parks therein containing indigenous territories to establish co-management regimes, and Taroko National Park has, at least in name, done so. The co-management agreement for Taroko National Park does not seem to fully recognize these as

[73] Interview conducted by the author with Teyra Yudaw on May 21, 2017.

current indigenous territories, however, because the committee's operations and terms are chiefly dictated by the National Park Bureau and the MOI.

Therefore, one must be cautious in addressing this second criterion and question. Arguably, the National Park Bureau and MOI do appear recognize the past indigenous occupation and use of those Taroko lands inside the National Park. However, I argue that the co-management agreement does not fully recognize the area within Taroko National Park in a way that corresponds with the idea of indigenous territory. The Taroko National Park co-management committee continues to represent the interests of the central government without devolving power to the local indigenous communities.

3. *Natural Resources Rights:*

The third criterion as it applies to the Taroko National Park co-management agreement is that of natural resources rights. This refers to the amount of access that Taroko indigenous peoples are given to natural resources within Taroko National Park and how such access is granted or denied. In assessing the degree to which this criterion is met, I will answer: how does the co-management agreement assign rights to the natural resources found within Taroko National Park? These resources may include timber, plants, rocks and minerals, and other flora and fauna naturally existing within the park.[74] Because Taiwan's National Park Law prohibits "hunting animals or catching fish," "engraving, sketching, or defacing trees, bark, stone or signs," and "picking or removing flowers or any other vegetation," it is clear that Taroko peoples do not have rights to access and use natural resources found within Taroko National Park (National Park Law 2010). The Taroko National Park co-management committee, which ideally would help to mitigate these types of conflict and negotiate for shared access and use of natural resources by both the Park and Taroko indigenous peoples, has yet to do so because the agenda is largely determined by the National Park Bureau and it largely serves as an advisory agency. Thus, the committee is very limited in its functions and can do little to allow for increased access to natural resources, including hunting animals, on behalf of the Taroko indigenous peoples.

[74] The flora and fauna to which I refer are defined in the Taiwan National Park Law and are thereby protected (National Park Law 2010). For more information regarding the Taiwan National Park Law, please refer to Appendix III.

On the other hand, the 2005 Basic Law does require that indigenous peoples be enabled to perform activities that allow them to continue their cultural traditions. Accordingly, hunting is an integral part of Taroko culture, not only serving to provide food and sustenance to Taroko communities, but also clarifying social status and roles among Taroko men and families. As a result, by prohibiting hunting within Taroko National Park, the National Park Law infringes upon the cultural rights of Taroko peoples as defined in the 2005 Basic Law. In order to rectify this inconsistency, the Park allows for Taroko peoples to apply for hunting permits to hunt in their traditional territories, as defined by *gaya*. These permit applications, while they are submitted directly from the Taroko indigenous peoples to the National Park Bureau, are complicated and require applicants to specify the time, number of days, purpose, and number and types of animals they plan to hunt.[75] Additionally, as recent news articles and court cases have shown, these permits are not always granted. This refusal on behalf of the government to enable Taroko peoples to carry out the activities necessary to preserve their traditional cultures is a serious breach of the 2005 Basic Law. It also prevents Taroko peoples from accessing natural resources and animals that are necessary for sustenance.[76] Because the Taroko National Park co-management committee has no rights and no decision-making power, it can do very little to assign natural resource rights to Taroko indigenous peoples. As a result, management and control of the natural resources found within the Park are dictated entirely by the National Park Bureau representing the state government.

4. *Tenure Security:*

The fourth criterion to address is that of tenure security within Taroko National Park. Essentially, this idea refers to indigenous title over the land and can be determined by answering the following question: how is indigenous title over the land within the Taroko National Park co-management agreement secured? In order to answer this question, it is necessary to examine the Taiwan's legal framework, focusing primarily on the 2005 Basic Law and the legal foundation of the Taroko National Park co-management agreement itself.

[75] Interview conducted by the author with Teyra Yudaw on May 21, 2017.
[76] Interview conducted by the author with Yulin Zheng on April 21, 2017.

By first examining the 2005 Basic Law, Article 20 states that "the government recognizes indigenous peoples' rights to land and natural resources" and that "the restoration, acquisition, disposal, plan, management, and utilization of the land and sea area owned or occupied by indigenous peoples or indigenous persons shall be regulated by laws" (Indigenous Peoples Basic Law 2005). Furthermore, Article 21 requires that prior to developing land or utilizing resources in indigenous lands, the government and private parties must "obtain consent by indigenous peoples or tribes, even their participation, and share benefits with indigenous people" (Indigenous Peoples Basic Law 2005). Additionally, Article 22 states that "the government shall obtain consent from the locally affected indigenous peoples and formulate a common management mechanism before establishing national parks" and that "the regulations shall be made by the central relevant authority jointly with the central indigenous affairs authority" (Indigenous Peoples Basic Law 2005). Considering that the 2005 Basic Law is meant to be applied to the whole of Taiwan, one might argue that these three articles should be reflected in the Taroko National Park co-management committee. On the contrary, because the Basic Law was developed at the state level, there are no local enforcement agencies to ensure that these articles are upheld.[77] As a result, while it may appear that the government, by way of the MOI and National Park Bureau, has participated with local Taroko peoples in managing the lands and resources within Taroko National Park, indigenous title to the lands in question is nonexistent.

The 2005 Basic Law, which serves as the legal foundation for the establishment of Taroko National Park's co-management committee, suggests that through collaboratively managing the Park's lands, the committee ensures Taroko indigenous title to said lands. As the lack of local enforcement indicates, however, no such rights exist, nor are they legally enforceable because Article 3 of the National Park Law grants responsibility for national parks to the MOI (National Park Law 2010). Thus, the apparent answer to the question at hand is that indigenous title to the land within the Taroko National Park co-management agreement is not secured whatsoever. Any responsibility and ownership granted to Taroko indigenous peoples regarding their traditional territories seems to exist solely on paper, rather than in practice.

5. *Autonomy:*

[77] Interview conducted by the author with Teyra Yudaw on May 21, 2017.

While the previous sections have more specifically focused on the traditional lands contained within Taroko National Park and the indigenous rights to such, this section examines the degree to which autonomy is guaranteed by the Taroko National Park co-management agreement. In this case, autonomy is understood to mean the amount of control that Taroko indigenous peoples have over their own affairs, including land rights, legal recognition, and their ability to use a traditional justice system. In assessing this criterion, it is necessary to answer the question: within the Taroko National Park co-management agreement, to what extent do indigenous peoples retain autonomy over their own affairs (ie. Land rights, legal recognition, ability to use traditional justice system)? Similar to the question of land tenure security, this point also requires that one discuss the 2005 Indigenous Peoples Basic Law, as well as the legal framework of the Taroko National Park co-management agreement.

As discussed in earlier sections, Articles 19, 20, 21, 22 of the 2005 Basic Law, the state legislature of Taiwan legally and officially "recognizes indigenous peoples' rights to land and natural resources" (Indigenous Peoples Basic Law 2005). They also require the government to engage in a common management mechanism when development or conservation efforts overlap with traditional territories (Indigenous Peoples Basic Law 2005). Article 23 then goes on to articulate that "the government shall respect indigenous peoples' rights to choose their lifestyle, customs, clothing, modes of social and economic institutions, methods of resource utilization, and types of land ownership and management" (Indigenous Peoples Basic Law 2005). Furthermore, Article 30 requires the government to "respect tribal languages, traditional customs, cultures and values of indigenous peoples in dealing with indigenous affairs, making laws, or implementing judicial and administration remedial procedures" (Indigenous Peoples Basic Law 2005). Meanwhile, Article 32 states that "the government may not forcefully evict indigenous persons from their land, except in the case of imminent and obvious danger" and that "indigenous persons shall be properly accommodated and compensated for losses suffered as a result of forced eviction" (Indigenous Peoples Basic Law 2005). Perhaps most importantly, Article 4 articulates that "the government shall guarantee the equal status and development of self-governance of indigenous peoples and implement indigenous peoples' autonomy in accordance with the will of indigenous peoples" (Indigenous Peoples Basic Law 2005). Not only does Article 4 specifically state that the government will guarantee the implementation of indigenous peoples' autonomy, but all of the remaining aforementioned articles explicitly state

the government's official recognition of indigenous land rights and cultural rights to traditional social and economic structures. Therefore, on paper, one might reasonably argue that given that the 2005 Basic Law was the primary, if not only factor leading to the establishment of the Taroko National Park co-management committee, then the same rights ought to be recognized therein.

Given that the area in question is a national park, however, and the institution under examination is the co-management committee of such, the realization of these articles is far more ambiguous. Once more, this seems to be a result of the communication gap between the central government and the local Taroko peoples, as well as the absence of local enforcement measures to ensure that the aforementioned rights are protected. In reality, while the existence of the Taroko National Park co-management committee suggests that the requirements of the Basic Law have been met in incorporating local indigenous peoples into the management of the Park and assigning their traditional land rights, this is far from the truth. One past committee member stated that until last year, is local Taroko peoples wanted to visit their ancestral sites located inside of the Park, they needed to file an application form with the National Park Bureau stating all of the details of the planned trip, including what they would bring, who would be going, how long they would stay, etc.[78] The same former committee member also argued that although the Basic Law is supposed to guarantee cultural rights to the Taroko peoples, especially within Taroko National Park, the co-management agreement fails to do so, and that instead the Park should accept and protect the cultural and land rights of Taroko peoples.[79]

With regard to the actualization of these articles guaranteeing autonomy and self-governance rights to Taroko indigenous peoples, the 2005 Basic Law provides the legal foundation for the co-management agreement, but fails to specify how governance and management should be carried out at the local level.[80] The resulting co-management agreement is thus one that fails to address local issues and actively recognize and support indigenous autonomy over traditional lands within Taroko National Park. All in all, while the state law indicates that the Taroko indigenous peoples ought to retain autonomy over their own affairs,

[78] Interview conducted by the author with Tian Guifang on May 21, 2017.
[79] Ibid.
[80] Interview conducted by the author with Teyra Yudaw on May 21, 2017.

including land rights, legal recognition, and traditional justice, the co-management agreement recognizes the indigeneity of those involved, but fails to support the autonomy of such.

6. *Legal Recourse:*

The last criterion that I will apply to the Taroko National Park co-management committee is that of legal recourse. As it has been defined earlier, legal recourse refers to "the legal actions to which [indigenous peoples] have recourse in order to defend their lands" (Oritga 2004). Essentially, this point addresses what types of legal actions are available to indigenous peoples in Taiwan should their land rights be violated. In order to assess the situation within Taroko National Park, one must answer the following question: what types of legal recourse are available to Taroko indigenous peoples to defend their rights to land within the scope of the Taroko National Park co-management agreement?

As one can see from the application of the previous criteria to this case, Taroko indigenous peoples do not presently have official rights to lands located within Taroko National Park. While the recently proposed draft legislation on returning public lands to indigenous peoples argues that those territories that can historically be identified as indigenous lands must be returned to their respective indigenous groups, this has yet to come to fruition. There are also questions about the feasibility of returning the lands within Taroko National Park to local Taroko indigenous peoples because of the government's apprehension about sharing decision-making power. At the moment, the MOI and National Park Bureau retain total control over the lands within Taroko National Park, meaning that Taroko indigenous peoples do not have enforceable rights to such. Because Taroko indigenous peoples' rights to the land within the park are not recognized, and the co-management committee lacks the power and rights to alter this, their land rights cannot be infringed upon because they simply do not exist.[81] Thus, realistically, there are no legal actions available to Taroko peoples to defend their land rights within the scope of the Taroko National Park co-management agreement.

[81] Interview conducted by the author with Teyra Yudaw on May 21, 2017.

This is not to say, however, that the Taroko peoples must sit back and simply accept that they cannot manage or access their traditional lands. A former co-management committee member believes that Taroko peoples should continue to fight to change their rights within the co-management agreement and the Park itself.[82] He stated that they must continue to protest to take back their hunting rights and their traditional lands, but he did not seem to feel that co-management committee would be effective in doing either of these paramount tasks.[83] Relatedly, a present committee member argues that engaging younger generations in the fight for Taroko rights may be an effective way to make their voices heard.[84] He promotes the involvement of young Taroko peoples and other organizations in collaborating to represent the needs of Taroko peoples and put pressure on the government to devolve decision-making power and rights to Taroko peoples over their traditional territories, including those contained within Taroko National Park.[85] Therefore, while the Taiwanese legal system does not seem to offer many means by which Taroko peoples can contest the infringement on their traditional land rights, social activism and community collaboration seem to offer some alternatives.

In sum, there appear to be large gaps between the state level governance and local enforcement in the case of Taroko National Park's co-management committee. Additionally, the committee seems to have very little power or rights by which it can effectively represent the needs and concerns of Taroko indigenous peoples. In the following section, I will apply the same criteria as before to the case of the Taiwan Forestry Bureau and the Rukai indigenous peoples in their emerging co-management initiative.

II. Taiwan Forestry Bureau-Rukai Indigenous Peoples Co-Management Initiative

1. *Land Tenure Regime:*

When discussing the issue of land tenure regime with regard to the Forestry Bureau and Rukai indigenous peoples case, the concept is somewhat more ambiguous than in the case of Taroko National Park. This is primarily because in the case of Taroko National Park, the lands

[82] Interview conducted by the author with Tian Guifang on May 21, 2017.
[83] Ibid.
[84] Interview conducted by the author with Teyra Yudaw on May 21, 2017.
[85] Ibid.

in question were entirely contained within the Park's boundaries and currently controlled by the National Park Bureau and MOI. In the case of the Taiwan Forestry Bureau and the Rukai peoples, however, discussions about establishing a co-management agreement have taken place across nine different communities, many of which have been displaced from their traditional territories, as introduced in chapter four. Regardless, it is pertinent to address the question: within the emerging co-management agreement (namely the discussions about such), how has land ownership over the Rukai traditional territory been defined?

At present, because any formal or official co-management agreement has yet to be established between the Taiwan Forestry Bureau and the Rukai indigenous peoples, those forested lands that were once Rukai territories are still controlled and managed by the Forestry Bureau. As previously mentioned, in forming the Rukai tribal assembly, representatives conducted "nearly two decades of field research and interviews with elders" that resulted in the identifications of "96,114 hectares of Rukai lands… about 77 percent of which are currently controlled by the Forestry Bureau under the Cabinet-level Council of Agriculture" (Taiwan Today Rukai assembly 2017). Thus, those lands within the proposed co-management agreement would include the 77 percent of identified Rukai lands that are presently controlled by the Forestry Bureau. In terms of ownership of these lands, the Rukai assembly aims to collaborate with the Forestry Bureau to "facilitate the establishment of a joint management mechanism for these areas" (Taiwan Today Rukai 2017).

Another pivotal factor in determining ownership of the lands in question within this emerging co-management regime is the publication on the draft regulations returning public lands to their respective indigenous tribes. As discussed during the previous section I.1., the Council of Indigenous Peoples proposed draft regulations for returning 800,000 hectares of public land to indigenous peoples (Taipei Times land 2017). Should these regulations be passed and the articles of the 2005 Basic Law stipulating indigenous ownership and control of traditional territories be upheld, then the Rukai people would gain ownership of the 77 percent of identified lands to be managed under the co-management mechanism. Therefore, while the lands are currently recognized as public lands under the jurisdiction of the Forestry Bureau, they would then be owned by the Rukai indigenous peoples to be jointly managed between the Rukai peoples (likely by way of the Rukai assembly) and the Forestry Bureau.

2. *Territorial Recognition:*

Also discussed in section I.2. of this chapter is the idea of indigenous territory as defined in the ILO Covenant 169. Once more, indigenous territory refers to those lands which are occupied or otherwise used by indigenous peoples (International Labor Organization C169 1989). This concept has proven to be a particularly contentious issue in discussions of forging a co-management agreement for Rukai lands because at present, the Forestry Bureau requires Rukai peoples to show proof of continuous land ownership, use, or occupation, elsewise the Forestry Bureau claims ownership of said lands. Therefore, in assessing the potential for territorial recognition through a co-management agreement between the Forestry Bureau and Rukai indigenous peoples, one must answer: will the co-management agreement recognize the Rukai territories about which the agreement is being made in a way that corresponds with the idea of indigenous territory?

Should the co-management agreement discussed between the Forestry Bureau and the Rukai peoples be carried out in such a way that the Forestry Bureau recognizes the historic and present ownership of the land by the Rukai peoples, then the criterion for territorial recognition would be satisfied. However, this type of recognition would require that the Forestry Bureau no longer necessitate Rukai peoples to provide proof of continuous land use in these territories. Instead, the Forestry Bureau must recognize the historical occupation and continued cultural significance of these lands to the Rukai peoples. In identifying their traditional territories, the Rukai assembly has already claimed these lands as being indigenous territories.[86] Additionally, Article 2 of the 2005 Basic Law defines "indigenous lands" as being "the traditional territories and reserved land/lands, that is, land/lands reserved for indigenous peoples and generally deemed as well as officially recognized as belonging to indigenous peoples" (Indigenous Peoples Basic Law 2005). Furthermore, Article 20 also "recognizes indigenous peoples' rights to land and natural resources" (Indigenous Peoples Basic Law 2005). Therefore, should the proposed co-management be carried out as discussed and the stipulations of the 2005 Basic Law be followed, using the ILO 169 as a form of guidance, then the co-management agreement would recognize Rukai territories in a way that corresponds with the idea of indigenous territory.

[86] Information collected as a result of the author's participation in the *Walking Workshop 2017*.

3. *Natural Resources Rights:*

The question of natural resources rights is another pertinent matter in discussing the potential co-management agreement between the Taiwan Forestry Bureau and the Rukai indigenous peoples. As can be clearly seen in chapter three section IV of this thesis, one of the greatest concerns of Rukai communities is access to natural resources. Hence, in determining the foundation for a co-management agreement, access and rights to natural resources within the co-management agreement area must be a top priority. In order to determine how such rights would be assigned in an agreement between the two aforementioned entities, one must answer the question: how would the co-management agreement assign rights to the natural resources found within the specified territories?

On the one hand, Rukai peoples tend to view the resources contained within their traditional territories as a living right, as they have long depended on these resources for physical and cultural survival.[87] Somewhat contrarily, under the Taiwan Forestry Act, Article 3 state that "forests principally belong to the nation" while Article 5 maintains that "the administrative management of the forestry industry shall be predicated on the primary goal of preserving the long-term integrity of national lands" (Forestry Act 2015). At present, it appears that while both the Rukai indigenous peoples and the Forestry Bureau are interested in maintain the integrity and ecological health of the forested lands in question, each party has differing long term goals. The Rukai peoples wish to conserve the forest and the resources therein contained so that they must be sustainably utilized over the coming years to continue Rukai practices. On the other hand, the Forestry Bureau has made the whole of Taiwan its top priority in conserving the integrity of the forest. Thus, for years, the Forestry Bureau and the Rukai peoples have been at odds with regard to the use of natural resources within these lands.

In addition, chapter three section four of this thesis also identifies the ongoing concerns and conflicts surrounding the application process for use of natural resources, both timber and non-timber. Currently, Rukai peoples are required to submit an application for resource use through the District Council, an intermediary agency, to then be sent to the Forestry Bureau for consideration.[88] While some Forestry Bureau representatives argue that they do not care how

[87] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[88] Ibid.

many resources are used so long as the numbers are reported to the bureau, this application process has proven to be a huge hindrance in Rukai peoples' ability to access those natural resources that they so require. Therefore, in developing a co-management agreement, the Forestry Bureau and Rukai peoples would need to clarify how the timber and non-timber forest resources contained within these lands are to be managed and utilized. Should the co-management agreement result in the creation of a committee whereby Rukai peoples and the Forestry Bureau have equal representation and decision-making power, it seems likely that the committee could then negotiate natural resources rights that would satisfy the needs of the Rukai peoples while still maintaining the integrity of the forest. However, this criterion will only be satisfied if Rukai peoples are given rights to the resources contained within the co-management agreement lands without having to jump through the long series of bureaucratic hoops to obtain access.

4. *Tenure Security:*

The fourth criterion, that of tenure security, once again bears a striking resemblance to criteria 1 and 2, regarding land tenure and territorial recognition. In this sub-section, however, the question is: how would Rukai indigenous title over the land within the co-management agreement be secured? Essentially, as deliberated in the analysis of the Taroko co-management committee case, this requires looking at how indigenous title over the forested lands in question is assigned. While this point once more requires us to examine Taiwan's legal framework, in particular the 2005 Basic Law and the Forestry Act, the ability to respect indigenous title over the relevant lands may be less restricted as these lands are not contained within a national park.

Because I have already introduced the relevant articles of the 2005 Basic Law in section I.4. of this chapter, I will not repeat my analysis of them here. However, to reiterate, Article 20 discusses the government's recognition of indigenous rights to land and resources and mandates the regulation and management of the land by laws (Indigenous Peoples Basic Law 2005). Additionally, Article 21 requires that the government or other private parties obtain free and prior informed consent (FPIC) from the local indigenous peoples prior to developing the land or utilizing the resources therein contained (Indigenous Peoples Basic Law 2005). Essentially, should the emerging co-management agreement between the Forestry Bureau and the Rukai

peoples come to fruition, these articles should serve as the legal foundation upon which the agreement is built, requiring outside parties to obtain consent from Rukai peoples before developing their traditional territories or utilizing the resources contained within such. By implementing these stipulations on a local level through the co-management agreement, the Forestry Bureau and Rukai peoples would jointly reiterate the Rukai peoples' indigenous title to the lands defined within the co-management agreement.

One piece of legislation that may prove somewhat problematic in securing indigenous title in the relevant forested lands, however, is the Taiwan Forestry Act. Within this act, Article 3 states that "forests principally belong to the nation" and Article 7 allows for the appropriation of public and private forests to national ownership[89] (Forestry Act 2015). Additionally, Article 13 requires that "forest management shall comply with the protection and management regulations for water collection areas; these regulations shall be mandated by the Executive Yuan" and Article 14 states "national forest management plans shall be regulated by the relevant administrative agency, and shall be submitted to the central government agency for approval" (Forestry Act 2015). Article 13 is particularly relevant due to the concerns voiced by several concerns about water collection, which is currently regulation by the central government. Furthermore, Article 14 assigns all management powers to the central government as well. Contrary to the 2005 Basic Law previously discussed, these articles do not recognize indigenous title to the land within the potential co-management area. In order for Rukai land tenure in these forested lands to be secured, the co-management agreement would need to work around these articles to identify the relevant lands as being indigenous lands and by assigning equal management rights to the Rukai indigenous peoples.

5. *Autonomy:*

As was previously applied to the Taroko National Park case, this criterion assesses the degree of autonomy that Rukai indigenous peoples have with respect to their traditional forested lands. In discussing autonomy, once more this entails looking at land rights, legal recognition,

[89] Accordingly, appropriation requires the central government to demonstrate that the forest provides important resources to the public, and that the previous owners are compensated appropriately (Forestry Act 2015). However, when the forested lands have not yet been recognized as Rukai indigenous lands, then the Rukai do not received proper compensation. For additional contents of the Forestry Act, please refer to Appendix II.

and the ability to utilize their traditional justice system, among other factors. The case of the emerging co-management agreement between the Forestry Bureau and the Rukai indigenous peoples differs from the case of Taroko indigenous peoples on this point, largely owing to the fact that the lands that are in question in Taroko National Park are completely under the control of the National Park Bureau, thus leaving the Taroko peoples with no land rights and no ability to use their traditional justice system in these territories because they have very limited access to such as it is. The Rukai case, however, is not concerned with national park lands, and thus may leave more room for indigenous autonomy. In order to analyze the probability of realizing such, one must answer: within the co-management agreement, to what extent do Rukai indigenous peoples retain autonomy over their own affairs (ie. Land rights legal recognition, ability to use traditional justice system)?

As has been previously stated numerous times, the Forestry Bureau has only released 15,000 to 20,000 hectares of land to indigenous peoples (not solely limited to Rukai peoples), and much of this land is unusable.[90] In the remaining forested Rukai traditional territories, the Forestry Bureau retains sole control over the decisions being made therein, as guaranteed by the Forestry Act. While the 2005 Basic Law is intended to guarantee Rukai land rights within their traditional territories, these rights are seldom enforced at the local level. Additionally, although the Basic Law and the central government recognize the Rukai indigenous peoples as one of Taiwan's sixteen officially recognized tribes, the government has yet to officially recognize the Rukai tribal assembly as a legal entity.[91] As a result, the assembly is limited in its powers to dictate Rukai affairs, especially land rights and traditional justice issues. Though strides have been made in identifying traditional Rukai lands, the government and Forestry Bureau have yet to return these lands to Rukai control (Taiwan Today 2017).

In the coming years, however, it seems that Rukai autonomy and decision-making power may be apt to change through the establishment of a co-management committee with the Forestry Bureau. In the case that the two parties should come to an agreement about co-managing forested Rukai lands, this would mean that decision-making power and responsibility would be shared between the two.[92] Although a co-management agreement such as this would

[90] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[91] Ibid.
[92] Ibid.

not return full ownership of these lands to the Rukai peoples, it would open a space for them to better enforce their land rights and to attain more autonomy and decision-making rights over their own affairs. As the 2005 Basic Law states in Article 4, the central "government shall guarantee the equal status and development of self-governance of indigenous peoples and implement indigenous peoples' autonomy in accordance with the will of indigenous peoples" (Indigenous Peoples Basic Law 2005). The emerging co-management committee would help to realize this law on a local level by serving as a bridging mechanism between the central government agency, the Forestry Bureau, and the Rukai indigenous peoples. As Fikret Berkes argues, "bridging platforms are necessary to provide the basis of partnership," and in this case, the committee would also serve as the basis for the realization of a degree of Rukai autonomy in determining their own affairs (Berkes 2017).

6. *Legal Recourse:*

The final criterion of my conceptual framework is that of legal recourse. As discussed in the case of Taroko National Park, this refers to the types of legal actions that are available to Rukai indigenous peoples should their rights to land or resources be violated by another party. Because the Forestry Bureau and Rukai peoples have yet to formalize a co-management agreement for the 77 percent of Rukai lands that are forested, this sub-section analyzes the legal recourse that is available to Rukai peoples at present, as well as what types of legal actions might be made available through an official co-management agreement. In discussing these points, the primary question to be answered is: what types of legal recourse are available to the Rukai indigenous peoples to defend their rights to land within the scope of the emerging co-management agreement with the Forestry Bureau?

At the moment, almost all of the forested lands located within Rukai traditional territories are controlled by the Forestry Bureau. This means that when making decisions about the development and conservation of the land and resources, all decision-making power lies with the Forestry Bureau. According to the Director of the Aboriginal Peoples' Community, the Forestry Bureau is still following a similar system of forest management as laid out by the Japanese colonial government, and furthermore indigenous rights have never been considered a core issue

by the Bureau.[93] After the 1980s, the Forestry Bureau released 15,000 to 20,000 hectares of forested lands to indigenous peoples, however indigenous peoples remain frustrated because much of this land has actually turned out to be unusable.[94] All in all, this power dynamic serves to demonstrate the absence of land rights that Rukai peoples have to their forested traditional territories. Because the Rukai peoples lack enforceable rights, similar to the Taroko peoples of Hualien, as of right now they have very limited legal activities available to them to protect what miniscule rights they may have. These activities tend to include protesting the central government bureau, appealing for change through the Council of Indigenous Peoples, and as in the case of the Forestry Bureau-Rukai Walking Workshop that took place in April 2017, inviting Forestry Bureau representatives to visit their traditional and modern village sites to learn firsthand about some of the challenges that Rukai communities face.

Legally, the 2005 Basic Law recognizes "indigenous peoples' rights to land and natural resources" in Article 20, and Article 21 stipulates that any government or private development of indigenous lands requires the party to first consult with and obtain consent from the indigenous peoples whose land is affected (Indigenous Peoples Basic Law 2005). Furthermore, as previously discussed, Article 22 requires the government to "obtain consent from the locally affected indigenous peoples and formulate a common management mechanism before establishing… forest districts" (Indigenous Peoples Basic Law 2005). By observing these articles of the 2005 Basic Law, it would appear that Rukai peoples should have legally enforceable rights to their traditional lands. Unfortunately, however, the truth of the matter is that these laws exist more so on paper than in practice, and not many institutions are available for Rukai or other indigenous peoples to fight their land rights infringements.

Should the Forestry Bureau and Rukai peoples continue to formulate a co-management agreement, however, the resulting co-management committee would, over time, become a legal and officially recognized entity through which either affected party may voice concerns about land and resource rights and other related issues.[95] As was voiced by a local representative in the Changzi Baihe community, the Rukai peoples are willing to work with the government and take responsibility is the government is willing to share power.[96] The potential co-management

[93] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[94] Ibid.
[95] Ibid.
[96] Ibid.

committee, which would represent the interests of both the Rukai communities and the Forestry Bureau, would be a legal platform whereby decision-making power and legal and ethical responsibility would be shared among the parties involved.[97] According to co-management expert Fikret Berkes, "rights and responsibilities always go together" (Berkes 2017). By creating a co-management committee, the Forestry Bureau and Rukai peoples would thereby create a legal forum through which to petition and appeal for change and protection of land rights when necessary. This committee would then convey these concerns and represent the interested parties to the central government. In sum, if the co-management discussions are continued and an agreement is made, then the resulting co-management committee would become the legal platform by which indigenous peoples could defend their rights to land and resources.

III. Discussion

As is evident in chapters 2 and 3 of this thesis, as well as sections I and II of this chapter, the cases of Taroko National Park's co-management committee and the emerging Forestry Bureau and Rukai peoples co-management agreement have very different origins, timelines, and operations. The co-management committee in Taroko National Park was created solely because the 2005 Basic Law required it to be so (Indigenous Peoples Basic Law 2005). According to several past and present committee members and scholars, there were no other significant factors that led to the establishment of the Taroko National Park co-management committee, excepting the fact that the Park's boundaries would encompass Taroko indigenous territories.[98] The enactment of the committee was entirely carried out by the National Park Bureau, and while it consists of National Park Bureau representatives, indigenous and ecological scholars and experts, and local indigenous representatives, over the past decade the committee has served a consultative purpose. Meanwhile, the conversations between the Forestry Bureau and the Rukai peoples regarding the establishment of a co-management agreement and committee have surfaced for a variety of reasons. On the side of the Forestry Bureau, the government is

[97] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[98] Interview conducted by the author with Teyra Yudaw on May 21, 2017.

concerned about maintaining the integrity of the land and the forest and is hesitant to relinquish control to the Rukai peoples.[99] The Rukai indigenous peoples not only argue that the ways in which the Forestry Bureau is "protecting" the forest are not the best methods, but also that they wish to regain control and access to their traditional territories and the ability to use the resources and hunt within.[100] As of right now, both parties seem open to establishing a co-management agreement as a sort of compromise, not fully turning over control of the lands to the Rukai peoples, but also allowing for more access and ability to use those resources that they see as a "living right."[101] Because the original foundations and intentions of co-management agreements tends to determine (at least partially) the likelihood of their success in protecting indigenous rights and the environment, from the start the Forestry Bureau-Rukai peoples emerging agreement seems more likely to succeed than the National Park Bureau-initiated Taroko co-management committee.

With respect to the operations of the co-management committees in each case, it is difficult to compare the two, seeing as the Forestry Bureau-Rukai agreement has yet to fully come to fruition. However, over the past decade of the Taroko National Park co-management committee's existence, it has primarily served as an advisory and consultative agency.[102] The committee convenes when the National Park Bureau determines it to be necessary, and provides suggestions regarding the management of the Park. The Park authorities can then decide whether or not to take this advice.[103] As Fikret Berkes stresses, however, "consultation is not co-management" (Berkes 2017). Thus, it seems that calling the Taroko National Park co-management committee a form of co-management may be something of a misnomer. On the other hand, while it may be too soon to say what the Rukai co-management committee's operations will be, it should contain representatives from both the Forestry Bureau and local Rukai communities. The committee members can then discuss and negotiate amongst themselves to determine the best ways to protect the forest ecosystems, but more importantly the rights of the Rukai peoples, as co-management is more so about managing people than it is about managing resources (Berkes 2017). The committee could then propose solutions and

[99] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[100] Ibid.
[101] Ibid.
[102] Interview conducted by the author with Teyra Yudaw on May 21, 2017.
[103] Ibid.

suggestions to the Forestry Bureau, which would have the ultimate decision-making power in whether or not to implement such. However, unlike the Taroko co-management committee, the Rukai one would meet regularly and have a set agenda for each meeting.[104]

In carrying out both case studies, I have interviewed local indigenous leaders and community members and observed forums during which village concerns were voiced. Through these exchanges and forums, I have noted that the primary concerns of the Taroko indigenous peoples and the Rukai peoples are quite similar. Almost all of the aforementioned communities identified hunting, resource use, and access to traditional lands as being some of their topmost concerns. These are conflicts that have, in other co-management studies, been mitigated by the implementation of a co-management regime. However, the committee in Taroko National Park has thus far been unable to provide solutions to these conflicts due to its lack of rights and decision-making power.[105] Should the Forestry Bureau engage in a co-management agreement with the Rukai peoples as discussed, these topics would become the points on the committee's agenda (Berkes 2017). Ideally, this would allow for more successful moderation of these conflicts.

In sections I and II of this chapter, I applied the criteria for indigenous land rights that I adapted from Ortiga's work and applied them to the co-management agreements in both my Taroko National Park case and my Forestry Bureau-Rukai indigenous peoples case. In asking six criteria-based questions about each case, I was further able to identify the strong and weak points of each agreement (or emerging agreement as in the Rukai case). Overall, it seemed that with regard to the existing co-management committee in Taroko National Park, there were far more weak points than there were strong ones. The case of the Forestry Bureau and Rukai peoples was slightly more varied, but this is largely owing to the fact that the conversation about establishing a co-management regime has only just begun. Much of my analysis has been based on the existing conditions, as well as the likely direction that the committee might take given what has already been discussed between Forestry Bureau representatives and Rukai community leaders.

Regarding the first criterion, that of land tenure regime, the Taroko National Park co-management agreement has what Ortiga would deem to be a "deficient framework" (Ortiga

[104] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[105] Interview conducted by the author with Teyra Yudaw on May 21, 2017.

2004). This is largely owing to the fact that the Taroko peoples do not have any rights to their traditional lands within the Park. While the current co-management committee consists of National Park Representatives, scholars, and local indigenous representatives, the lands themselves are controlled and managed by the National Park authorities under the MOI, and no decision-making power or rights to land are devolved to the Taroko peoples through the committee. The potential co-management agreement between the Forestry Bureau and the Rukai peoples, however, aims to recognize Rukai ownership of their traditional territories, while stipulating management of such through the collaboration of both parties. At present, however, the Forestry Bureau does retain control over most of the 77 percent of forested lands that the Rukai have identified as their traditional territories, thus making it imperative that the emerging co-management committee recognize Rukai rights to these lands.

The second criterion is that of territorial recognition. Both the Taroko National Park co-management committee and the emerging Forestry Bureau-Rukai peoples co-management initiative seem to recognize, at least to a degree, the territories being co-managed as indigenous territories. The 2005 Basic Law states that any national park containing indigenous lands must establish a co-management mechanism (Indigenous Peoples Basic Law 2005). Therefore, one might arguably conclude that if the National Park Bureau had not recognized the Taroko indigenous territories contained within the Park's boundaries, it would not have been compelled to establish a co-management committee. Thus, it is apparent that the Park recognizes the historical significance of the Taroko peoples' indigenous lands, however, it has not delegated any real decision-making power to the committee itself. This indicates that the co-management committee's recognition of traditional territories is limited. With regard to Rukai traditional territories, the Forestry Bureau currently requires Rukai peoples to show proof of continuous use to gain access to the land and resources.[106] Through the co-management initiative, however, the parties aim to smooth this process of recognition. At present, Taiwan's Basic Law on Indigenous Peoples provides the legal framework for recognizing indigenous territories, it is just a matter of implementing such through these co-management agreements.

The third criterion is that of natural resources rights, which, in both the Taroko National Park case and the Rukai-Forestry Bureau case has been very poorly reflected. Because of the National Park Law, which prohibits hunting and the removal of any flora and fauna from within

[106] Information collected as a result of the author's participation in the *Walking Workshop 2017*.

Taiwan's national parks, the Taroko peoples have no rights to natural resources located within their traditional territories. Additionally, the co-management committee has and can do little to change this at this point in time because of the committee's consultative nature. Thus, once more, the Taroko National Park co-management committee fails to satisfy this criterion. In the Rukai case, the Forestry Bureau currently also prohibits hunting in many traditional Rukai lands. Additionally, Rukai peoples must file a very complicated and confusing application through the District Council to gain access to non-timber forest resources and salvage timber.[107] Upon implementing a co-management regime for these lands, the committee should be able to better negotiate access to these resources for the Rukai peoples as they truly view this as their "living right" (Berkes 2017). This is especially pertinent because access to these resources is also vital in continuing Rukai and Taroko cultures, a point that the government claims to make a priority.

The fourth criterion, tenure security, calls into question the ways in which indigenous title to the lands relevant to the co-management agreements is secured. In the case of Taroko National Park, despite the appearance of a co-management regime, indigenous title to the lands within the Park is non-existent. On the other hand, should the Forestry Bureau and Rukai peoples engage in the co-management agreement as discussed, they would jointly reiterate the Rukai peoples' indigenous title to the lands defined within such. Therefore, at least in the case of the emerging co-management agreement between the Forestry Bureau and the Rukai peoples, this criterion could be satisfied.

Another of Ortiga's characteristics that is completely absent in the case of Taroko National Park's co-management committee is autonomy. While the committee itself exists and provides advice to the National Park Bureau, as one of the committee's current members pointed out, the committee has no actual decision-making rights or powers.[108] Thus, the Taroko peoples do not have any autonomy through this co-management committee. In the emerging co-management agreement concerning Rukai lands, the co-management committee could serve as the bridging platform upon which Rukai peoples could exercise more autonomy over their traditional lands (Berkes 2017). While this would not grant Rukai peoples complete self-governance, it would provide a space for their voices to be heard and rights to be recognized.

[107] Information collected as a result of the author's participation in the *Walking Workshop 2017*.
[108] Interview conducted by the author with Teyra Yudaw on May 21, 2017.

Finally, the last criterion is legal recourse, referring to the legal actions available to the Taroko and Rukai indigenous peoples if their land and resource rights are violated within the co-management agreement. Once more, in the case of Taroko National Park's co-management committee, Taroko peoples' rights to their traditional territories are not locally recognized, and thus there are not legal activities available to report said violations. As of now, the best way to fight against land rights violations is to protest and petition the central government for change. Contrarily, in the Rukai case, the co-management committee over time would become recognized as an official, legal entity. As a result, the Rukai peoples would then be able to appeal and report any rights violations to the Forestry Bureau and central government through such. Once more, the Taroko National Park co-management committee appears to be deficient in providing legal recourse to the Taroko peoples. Meanwhile the Forestry Bureau-Rukai peoples emerging co-management initiative has the potential to become a channel through which Rukai peoples can defend their rights to land and resources.

In sum, this discussion has elucidated some of the potential benefits of establishing co-management agreements in Taiwan, butthe has also highlighted some of the major shortcomings of those in existence. As I discussed in chapter 1, section III.b., Canada has faced similar challenges in forming co-management agreements between the central government and indigenous peoples. In the following section, I will discuss the potential application of the Canadian model for co-management to present and future cases in Taiwan.

IV. Application of Canadian Co-Management Model to Taiwan

Although some may argue that Canada's history of treaty federalism prevents it from serving as a reasonable model for Taiwan's own indigenous-state relations, this is far from accurate. While it is true that Canadian indigenous peoples have a history of signing treaties with the Crown and the Canadian government, the similar basis of Taiwan and Canada as both being settler states with long histories of colonization and indigenous oppression serves as the foundation upon which to compare the two. Furthermore, approximately 2 percent of the total populations of Canada and Taiwan is indigenous, thus making it a pertinent matter to discuss how indigenous peoples are factored into the modern geopolitical landscape. Because Taiwan has only become a democracy over the past 30 years, it is still in the earlier stages of its

development. Canada, in the meantime, has had much more time to finetune its indigenous-state relations. Although these relations are far from perfect, the co-management efforts between Canadian government agencies, like Parks Canada, and Canadian indigenous peoples, including First Nations, Inuit, and Métis, can serve as a progressive model for Taiwanese co-management.

Applying the Canadian model to Taiwanese co-management, at least in theory, is a complicated but worthwhile process. As discussed in the chapter 1, section III.d., successful Canadian co-management cases tend to incorporate the following elements: equal participation of Aboriginal and government representatives, dispute resolution mechanisms built into the co-management agreements, legally defined management rights, formalization of shared power, bridging organizations, and provisions for self-governance. While some of these elements might be more difficult to incorporate into Taiwanese co-management than others, all are possible over time. Many scholars, like Berkes and Pinkerton, highlight the importance of co-management as learning processes. In fact, Berkes even noted that "learning-as-participation [can lead] to broadening the scope of collaborative problem solving" (Berkes 2009). Thus, while the immediate results may not be perfect, over time, as mutual trust and mutual respect between the government and indigenous peoples involved grows, the co-management process will become increasingly effective.

One of the key elements that has contributed to the success of co-management regimes in Canada is the concept of bridging organizations. These organizations, as discussed earlier, serve to narrow the communication gap between the government and indigenous peoples while also providing a channel through which concerns can be voiced and resolved. As the Taroko National Park co-management case indicates, one of the biggest problems in instituting successful co-management agreements in Taiwan thus far has been the large communication gap between the government and local indigenous peoples. In the beginning discussions of a co-management agreement between the Taiwan Forestry Bureau and the Rukai indigenous peoples, one of the points that has repeatedly been stressed is the need for a co-management committee that will facilitate communication between the Bureau and the affected Rukai communities.[109] Thus, given the extensive discussions thus far, this seems to indicate both parties' awareness of the need for a bridging organization, as well as their willingness to participate in such. Applying this element in Taiwanese co-management is not nearly as far-fetched as some like to believe.

[109] Information collected as a result of the author's participation in the *Walking Workshop 2017*.

While Taroko National Park already has a bridging organization by way of the co-management committee, as the case study in chapter two shows, this organization is clearly lacking some key elements. These elements are also what has enabled Canadian national parks and other government entities to participate in effective co-management regimes with Canadian indigenous peoples. One of these components is equal participation of Aboriginal and government representatives. In the case of the Taroko National Park co-management committee, there are currently eleven indigenous representatives, three representatives from the Taroko Gorge National Park Bureau, three representatives from the county government, four scholars who specialize in the National Park.[110] It appears as though more than half of the committee members are indigenous; however, they are oftentimes chosen by their respective township governments, and may not always directly represent the interests of their communities. Additionally, when it comes to actual participation in the co-management committee, the government and National Park Bureau representatives tend to have more leverage as the MOI is the entity with real decision-making power. Thus, the participation of indigenous and government committee members is not equal after all. In implementing the Canadian model of co-management in Taiwan, the interested parties need to correct this issue by ensuring equal participation both in numbers and in power. Should the Forestry Bureau and the Rukai peoples collaborate to establish a co-management committee for forested Rukai lands, the two should ensure that the representatives of each party are equal in number and influence. Additionally, many effective committees have one member who serves as the chair for approximately a three-year period. This chair position rotates on a regular basis, and the committee member carrying out the role as chair is responsible for keeping the committee on track and following the agenda. Carrying out these steps provides a far greater chance for the co-management agreement to be successful and protects the interests of all affected agencies.

In observing and participating in conversations about the emerging co-management initiative between the Forestry Bureau and Rukai peoples, one concern was the inability of Rukai peoples to directly resolve conflicts with the Bureau without having to go through another agency. This concern is precisely why the Canadian co-management model could be very useful in Taiwanese co-management cases because it builds dispute resolution mechanisms directly into the bridging organization. As a result, indigenous peoples do not have to worry about their needs

[110] Telephone interview conducted by the author with Apay Ai-yu Tang on May 01, 2017.

or concerns being misconstrued in the communication process, and the government can work directly with the affected communities to manage territories and resources in ways that protect both the environment and the rights of those involved. By incorporating such a resolution mechanism into the actual framework of the co-management agreement, this also reduces the amount of time necessary to resolve these conflicts. Given the high volume of concerns about land and resource management from both the Taiwanese central government and indigenous peoples, as is evident in the Rukai case, implementing a conflict resolution mechanism such as this would only increase the likelihood of having a successful co-management process.

Another crucial component to the success of the Canadian co-management model is the formalization of shared power. In successful Canadian co-management cases, this has often been realized through the signing of treaties or other contractual agreements between the government and Canadian indigenous peoples. These shared powers are then carried out through the resulting co-management committee or bridging organization, which over time evolves to become a legal entity of its own. Those who are skeptical about the feasibility of adopting the Canadian co-management model in Taiwan often argue that "in Canada… the different ethnic groups live in different areas so it is possible to have autonomous regions… [but in Taiwan] people of different ethnic groups live together and seek harmony rather than separation" (Simon 2006). They then reason that because Canada has so much more land than Taiwan, the government is more willing to assign management power and rights to indigenous peoples over portions of the land.[111] This rationale, however, does not negate the necessity for formalizing shared power within a co-management agreement. Another point of apprehension is the government's willingness to share power with local indigenous communities. However, as the conversations between the Forestry Bureau and Rukai community members have shown, there appears to be enthusiasm on both sides for sharing and accepting management responsibility and power. Thus, the main missing component is the actual formalization of such. Because formalizing shared power has proven quite successful in Canadian co-management agreements, the same method ought to be adopted in Taiwan through the signing of contractual agreements specifying the management powers and responsibilities of the affected indigenous and government agencies. Considering that Taiwan already has a legally recognized Council of Indigenous Peoples, and an increasing number of indigenous tribes are forming indigenous tribal

[111] Interview conducted by the author with Teyra Yudaw on May 21, 2017.

assemblies, the Rukai Community Council being the most recent, the notion of using these agencies as intermediaries to help formalize shared powers is not far-fetched.

The concept of formalized shared power carries over into another key element of the Canadian co-management model, which is legally defined management rights. As Berkes pointed out in a speech given at the Taiwan Forestry Bureau in April 2017, "Taiwan doesn't need any more laws" about co-management and enforcing indigenous rights to land and resources (Berkes 2017). What it does need are local institutions to carry out and enforce those laws that are already in place, namely those specified in the 2005 Basic Law on Indigenous Peoples. These institutions, which in the Canadian context are bridging institutions or co-management committees, become legal entities over time that help to reinforce indigenous management rights. The 2005 Basic Law already stipulates the need for co-management in national parks containing indigenous lands, as well as indigenous rights to resources and lands. What the Taiwanese central government needs to do in order to adopt the Canadian co-management model is to engage with local indigenous peoples in these committees and bridging organizations so that they can become legal agencies that legally define management rights. Within each co-management agreement, indigenous and state representatives can present those management rights that their communities feel to be most important. The parties can then negotiate so that said rights might become legally defined within the scope of the co-management agreement and enforceable through the co-management committee. Once more, Taiwanese legislation already has the necessary laws in place for indigenous management rights to be realized, it is now just a matter of institutionalizing them. It is also imperative that this agreement be signed in writing, as Berkes points out, because indigenous peoples in both Taiwan and Canada have a long history of having been betrayed by colonial governments in verbal contracts. Thus, by formalizing the agreement and the management rights on paper, the Taiwanese government can provide some assurance to the involved indigenous peoples that their rights are enforceable and protected.

The final element, and perhaps the most difficult to attain, is that requiring provisions for self-governance. Though the Canadian model for co-management is not perfect, and there are cases that have been somewhat unsuccessful in protecting the rights of indigenous peoples, those cases that have been successful have included provisions that allow for indigenous self-governance. Historically in Canada and currently in Taiwan, there has been a stigma about self-

governance—a sort of fear that the concept might be the first step toward secession. In both states, this is far from true. Wanting self-governance is not at all the same as wanting independence from the state, for as one Taroko community member stated, indigenous peoples need state funding and educational and economic resources.[112] Rather, self-governance simply allows for the indigenous peoples that have historical claims to certain lands and territories to have the highest rights when it comes to deciding how the land is managed or developed. Many indigenous peoples in Taiwan feel that this is their living right, as their ancestors inhabited and cultivated those lands in question long before the current government arrived.[113] The current Taiwanese administration, led by President Tsai Ying-wen, has taken steps toward recognizing indigenous land rights and potential self-governance through returning public lands to indigenous peoples. This movement is a step in the direction of self-governance, which would allow for indigenous groups to govern their traditional territories. While some argue that such policies would be impossible on an island as small as Taiwan, the government's changing dynamics indicate that the idea might not be as impossible as previously imagined. The fact that some Canadian co-management cases have been able to effectively provide for indigenous self-government lends hope to the thought that the Taiwanese co-management model might be able to do the same.

All in all, the groundwork for the six key elements to successful co-management as exemplified through the Canadian model has already been laid in Taiwan. By incorporating bridging organizations with equal participation from Aboriginal and government representatives, dispute resolution mechanisms, legally defined management rights, formalizing shared power, and granting provisions for self-governance, Taiwan could adopt the Canadian model for co-management in a way that serves the interests of all involved. As various scholars have emphasized time and time again, co-management is about managing people and relationships, not just resources (Natcher, Davis and Hickey 2005). The Canadian co-management model provides an example of how to do just that.

[112] Interview conducted by the author with Tian Guifang on May 21, 2017.
[113] Interview conducted by the author with Yulin Zheng on April 21, 2017.

Chapter Five: ***Conclusion***

As has been discussed through the course of this thesis, co-management entails the "sharing of power and responsibility between the government and local resource users" (Berkes et al. 1991). In other words, co-management is "a situation in which two or more social actors negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources" (Borrini-Feyerabend et al. 2000). Considering that populations are facing significant environmental threats and degradation resulting from climate change, more and more states are turning to co-management as a way of incorporating traditional ecological knowledge into the process of protecting ecosystems. Simultaneously, these co-management regimes are sharing decision-making power and responsibility amongst multiple actors. The cases I have analyzed in this thesis focus on indigenous-state co-management. It was necessary for me to first fully understand the foundation of indigenous-state relations in Taiwan and Canada, my two settler states of study. I thus delved into the colonial histories of each, paying careful attention to the emergence of pivotal legislation and policies that created the basis for indigenous rights and national park and forest management as they exist today. It also became quite apparent that international human rights and indigenous rights regimes have played a vital role in shaping indigenous rights movements in Taiwan and Canada.

In addition, regional indigenous rights movements, including those in Latin America, contributed to the development of theoretical frameworks by which scholars could evaluate indigenous rights regimes in different states. One such framework was that by Roque Roldán Ortiga, in which he identified six different characteristics of indigenous land rights regimes in Latin American states (Oritga 2004). In my own evaluation of indigenous-state co-management in Taiwan, I adopted Ortiga's characteristics and turned them into six criteria by which the co-management agreements in my two cases could be appraised. These criteria, which include land tenure regime, territorial recognition, natural resources right, tenure security, autonomy, and legal recourse, have helped me to identify the shortcomings in Taiwan's existing co-management regimes, as well as points for potential success.

The two cases of co-management in Taiwan that I analyzed in this thesis were that of the Taroko National Park co-management committee and the emerging Forestry Bureau-Rukai

indigenous peoples' co-management regime. By applying the six criteria that I adopted in my conceptual framework to the co-management committee in Taroko National Park, I deduced that the agreement was one that existed almost solely on paper, rather than in practice. While the Park does have a co-management committee with 21 members, 11 of whom are indigenous, the National Park Bureau and MOI do not devolve any degree of real land rights or decision-making power to the co-management committee nor the Taroko indigenous peoples whom it is meant to represent. Furthermore, while the 2005 Basic Law provides the legal framework for ensuring Taroko indigenous rights within the Park, the National Park Law limits Taroko peoples' ability to hunt and gather natural resources from within the Park's boundaries, thus inhibiting their access to traditional territories. Because of the skewed power dynamics within the committee itself, as well as its primary role as a consultative agency, the Taroko National Park co-management committee is severely limited in its ability to facilitate communication between local Taroko peoples and the central government, and in mitigating conflict between the two.

The second case I analyzed was that of the emerging co-management agreement between the Taiwan Forestry Bureau and Rukai indigenous peoples. Because conversations about potential co-management between the two have only just begun, it is too soon to say whether this agreement will satisfy all of the criteria in my conceptual framework. However, given the success of some Forestry Bureau-Rukai projects thus far, as well as the openness of the dialogue and willingness of both sides to share responsibility and power in managing the land, it seems very likely that this co-management agreement will satisfy the criteria in the future. At this point, both the Forestry Bureau and Rukai peoples seem to recognize the importance of establishing a bridging organization or co-management committee to foster communication between the affected indigenous communities and the central government agencies.

Furthermore, because of the similar colonial histories of Canada and Taiwan, as well as Canada's relative success in pursuing co-management agreements among government agencies and Canadian indigenous peoples, it is worth applying the Canadian model for co-management to Taiwan. Successful cases of co-management in Canada highlight some of the key elements of effective co-management agreements, including: bridging organizations, equal participation of Aboriginal and government representatives, dispute resolution mechanisms built into the co-management agreements, legally defined management rights, formalization of shared power, and provisions for self-governance. By applying the Canadian model of co-management to Taiwan

and pushing to implement these principal elements, we can minimize the shortcomings of existing Taiwanese co-management agreements and bridge the communication gaps between the central government agencies and indigenous peoples. Remedying this faulty communication is the first step to establishing outstanding co-management agreements in Taiwan in the coming years. In terms of tangible steps that the parties involved in these co-management efforts can take, local indigenous communities can begin by organizing self-governing assemblies to accept decision-making power and responsibilities, and the government can respond by sharing such management powers. Furthermore, the government and the academic community and NGOs can fund and organize workshops and forums to bring together indigenous communities and government representatives, while indigenous communities can invite government representatives to visit and witness firsthand the issues of interest. In continuing to build mutual trust and mutual respect, the government can allow indigenous communities to continue cultural subsistence practices, such as hunting and agriculture, and indigenous communities can work with government bureaus to enforce local management policies. Ideally, by taking these steps, Taiwanese indigenous communities, the central government, and the academic community and NGOs could work toward creating a more effective co-management paradigm.

At this point in time, research on Taiwanese co-management is far from complete. In conducting future research on the topic, it would be pertinent to continue following the case of the emerging co-management process between the Forestry Bureau and the Rukai indigenous peoples. While these discussions have only just begun, the potential for co-management between the two parties seems rather promising, as both appear to be willing to share responsibility and management power. Furthermore, it would be beneficial to conduct research on other co-management cases in Taiwan's national parks and forested areas, including such cases as the Shei-pa National Park and Kenting National Park. This research could also be furthered by analyzing cases of Taiwanese co-management with other indigenous tribes, perhaps including the Atayal tribe in the northern central mountain range and the Amis peoples in Hualien and Taidong, among others. Investigating such cases as these would allow researchers to develop a fuller image of co-management as it exists in Taiwan, thus enabling said scholars to suggest additional improvements. In continuing this research in the future, I would also conduct several case studies of indigenous-state co-management in Canada's national parks and forested areas. Doing so would empower me to develop a more complete model of Canadian co-

management. Once I had done so, I would then draw from the most successful aspects of the Canadian model and Taiwanese model to create a more universal model for co-management in settler states. While I recognize that each case of co-management is unique and requires a different approach to ensure its success, there are underlying key elements to co-management, some of which have already been made apparent through the Canadian model. Once these critical elements have been identified, state governments and indigenous peoples can apply them to develop new co-management agreements. Despite the limitations of some co-management models, it is necessary that we continue researching and exploring different methods.

In the end, it is crucial that we remember that indigenous rights are human rights, whether they be to land and resources or a place in the legislature. The process of co-management, therefore, "has more to do with managing human relationships" than anything else (Natcher, Davis and Hickey 2005). Not only can co-management be used as a method to share responsibility for protecting the environment, it can also help to bridge the gap between central governments and indigenous peoples. By more effectively communicating the needs of indigenous peoples to the central government and opening a safe space for dialogue, co-management furthers the protection of indigenous rights. In Taiwan especially, considering the socially active nature of the island's citizens and the seemingly receptive policies of the current President Tsai Ying-wen, co-management may very well be the key to realizing indigenous land and resource rights. The most important task in the coming years is to continue building mutual trust and mutual respect between the central government and indigenous peoples, for these are the elements that will allow for successful co-management.

References:

"A History of Indian and Northern Affairs Canada." Government of Canada; Indigenous and Northern Affairs Canada. September 02, 2011. Accessed January 02, 2017. https://www.aadnc-aandc.gc.ca/eng/1314977281262/1314977321448.

Allio, Fiorella. "The Austronesian Peoples of Taiwan: Building a Political Platform for Themselves." China Perspectives 18 (1998): 52-60. 1998. Accessed May 30, 2016. http://www.jstor.org/stable/24050679.

Armitage, Derek R., Ryan Plummer, Fikret Berkes, Robert I. Arthur, Anthony T. Charles, Iain J. Davidson-Hunt, Alan P. Diduck, Nancy C. Doubleday, Derek S. Johnson, Melissa Marschke, Patrick McConney, Evelyn W. Pinkerton, and Eva K. Wollenberg. "Adaptive co-management for social-ecological complexity." Frontiers in Ecology and the Environment 7, no. 2 (January 24, 2008): 95-102. Accessed December 16, 2016. doi:10.1890/070089.

Barelli, Mauro. "The Interplay Between Global and Regional Human Rights Systems in the Construction of the Indigenous Rights Regime." Human Rights Quarterly 32, no. 4 (November 2010): 951-79. November 2010. Accessed September 12, 2016. doi:10.1353/hrq.2010.0018.

Bellwood, Peter. "Formosan Prehistory and Austronesian Dispersal." In Austronesian Taiwan: Linguistics, History, Ethnology, Prehistory, edited by David Blundell, 336-64. 2nd ed. Taipei, TW, 2009.

Berkes, Fikret. "Being in Place Together." Forestry Bureau Forum. Taiwan Forestry Bureau, Taipei. 04 May 2017. Speech.

Berkes, Fikret. "Evolution of co-management: Role of knowledge generation, bridging organizations and social learning." Journal of Environmental Management 90, no. 5 (December 01, 2009): 1692-1702. Accessed December 16, 2016. doi:10.1016/j.jenvman.2008.12.001.

Berkes, Fikret, Peter James George, and Richard J. Preston. Co-management: the evolution of the theory and practice of joint administration of living resources. Program for Technology Assessment in Subarctic Ontario, McMaster University, 1991.

Borrini, Grazia. Co-management of natural resources: Organising, negotiating and learning-by-doing. Kasparek Verlag, 2000.

Bray, David Barton. "Capitalism Meets Common Property." Americas Quarterly, 2010, 30-35. 2010. Accessed December 16, 2016. file:///C:/Users/User/Downloads/Bray-10.pdf.

Brown, Melissa. "Where Did the Aboriginals Go? Reinstating Plains Aborigines in Taiwan's History." In Is Taiwan Chinese?: The Impact of Culture, Power, and Migration on Changing Identities, 35-65. University of California Press, 2004.

Campbell, Tracy. "Co-management of Aboriginal Resources." Information North 22.1 (1996): n. pag. Print.

Carlsson, Lars, and Fikret Berkes. "Co-management: concepts and methodological implications." Journal of Environmental Management 75, no. 1 (November 08, 2005): 65-76. Accessed December 16, 2016. doi:10.1016/j.jenvman.2004.11.008.

Charnley, Susan, and Melissa R. Poe. "Community Forestry in Theory and Practice: Where Are We Now?" Annual Review of Anthropology 36, no. 1 (2007): 301-36. Accessed December 15, 2016. doi:10.1146/annurev.anthro.35.081705.123143.

Chi, Chun-Chieh, and Hsang-Te Chin. "Knowledge, power, and tribal mapping: a critical analysis of the “return of the Truku people”." GeoJournal 77, no. 6 (2012): 733-740.

Chern, Jenn-Chuan, and Ching-Tsung Liu. "Morakot post-disaster reconstruction management using public and private resources for disaster prevention and relief efforts." Journal of the Chinese Institute of Engineers 37, no. 5 (2014): 621-634.

Construction and Planning Agency, Ministry of Interior. "CPAMI." CPAMI Divisions. 2006. Accessed May 02, 2017. http://www.cpami.gov.tw/english/filesys/tmpl/flow_3.html.

Construction and Planning Agency. "National Parks of Taiwan." August 12, 2009. Accessed March 03, 2017. http://np.cpami.gov.tw/about-the-parks/national-parks-of-taiwan.html.

Corntassel, Jeff. "Partnership in Action? Indigenous Political Mobilization and Co-optation During the First UN Indigenous Decade (1995-2004)." Human Rights Quarterly 29, no. 1 (February 2007): 137-66. Accessed October 19, 2016. doi:10.1353/hrq.2007.0005.

Council of Agriculture. "The Forestry Act." 行政院農業委員會-英譯法規內容(外部版). May 06, 2015. Accessed February 27, 2017. http://law.coa.gov.tw/GLRSnewsout/EngLawContent.aspx?Type=E&id=205.

Council of Indigenous Peoples. "原住民族委員會全球資訊網 Rukai." The Tribes in Taiwan. 2010. Accessed May 01, 2017. from http://www.apc.gov.tw/portal/docList.html?CID=0FA431F535DA870F.

Edmonds, Richard Louis. "Taiwan's environment today." The China Quarterly 148 (1996): 1224-1259.

Faure, David. "Recreating the Indigenous Identity in Taiwan: Cultural Aspirations in Their Social and Economic Environment." In Austronesian Taiwan: Linguistics, History, Ethnology, Prehistory, edited by David Blundell, 101-33. 2nd ed. Taipei, TW: SMC Publishing, 2009.

Finkelstein, Maxwell W., and Kevin Mcnamee. "National Parks of Canada." The Canadian Encyclopedia. January 17, 2012. Accessed January 03, 2017. http://www.thecanadianencyclopedia.ca/en/article/national-parks-of-canada/.

Folke, Carl, Steve Carpenter, Thomas Elmqvist, Lance Gunderson, Crawford S. Holling, and Brian Walker. "Resilience and sustainable development: building adaptive capacity in a world of transformations." AMBIO: A journal of the human environment 31, no. 5 (2002): 437-440.

Forestry Bureau. "Historical Background." June 08, 2016. Accessed February 20, 2017. https://www.forest.gov.tw/EN/history.

"Full text of President Tsai Ing-wen's apology to indigenous people." Politics | FOCUS TAIWAN - CNA ENGLISH NEWS. August 01, 2016. Accessed December 09, 2016. http://focustaiwan.tw/news/aipl/201608010026.aspx.

Henderson, William B. "Indian Act." Historica Canada. February 07, 2006. Accessed January 03, 2017. http://www.thecanadianencyclopedia.ca/en/article/indian-act/.

Hua, Meng-ching, Pang-ping Huang, Hsin-tien Wu, and Jonathan. "Truku Protest Arrest of Hunters in National Park." Taipei Times, November 21, 2015. Accessed April 20, 2017. http://www.taipeitimes.com/News/taiwan/archives/2015/11/21/2003633002.

International Labor Organization. United Nations. C169 - Indigenous and Tribal Peoples Convention. 169th ed. 1989.

Jaenen, Cornelius J. "Indigenous-French Relations." Historica Canada. October 03, 2007. Accessed January 08, 2017. http://www.thecanadianencyclopedia.ca/en/article/aboriginal-french-relations/.

Klooster, Daniel James. "Toward Adaptive Community Forest Management: Integrating Local Forest Knowledge with Scientific Forestry." Economic Geography 78, no. 1 (January 2002): 43. January 2002. Accessed December 08, 2016. doi:10.2307/4140823.

Ku, Kun-Hui. "Rights to Recognition: Minority/Indigenous Politics in the Emerging Taiwanese Nationalism." Social Analysis 49, no. 2 (2005). Accessed January 03, 2017. doi:10.3167/015597705780886248.

Langdon, Steve, Rob Prosper, and Nathalie Gagnon. "Two Paths One Direction: Parks Canada and Aboriginal Peoples Working Together1." In The George Wright Forum, vol. 27, no. 2, p. 222. George Wright Society, 2010.

LeBlanc, Julie M-A., and Vivianne LeBlanc. "National Parks and Indigenous Land Management. Reshaping Tourism in Africa, Australia and Canada." Ethnologies 32, no. 2 (2010): 23-57.

Lo, Yung-Ching. Accessing indigenous land rights through claims in Taroko Area, Eastern Taiwan. Master's thesis, Academia Sinica, 2013. Taipei: Institute of Cultural Anthropology and Developmental Sociology, Leiden University, 2013. Accessed March 18, 2017. http://hdl.handle.net/1887/20772.

Map of Taroko National Park [Map]. (2006, December 20). Retrieved March 5, 2017, from http://journal.pristine.net/2006/felmans/maps/taroko.gif

Miller, James R. "Indigenous-British Relations Pre-Confederation." Historica Canada. February 07, 2006. Accessed January 03, 2017. http://www.thecanadianencyclopedia.ca/en/article/aboriginal-european-relations/.

Mona, Awi. International Perspectives on the Constitutionality of Indigenous Peoples' Rights." Taiwan International Studies Quarterly 3, no. 2 (June & July 2007): 85-139. Accessed September 12, 2016.

Natcher, David C., Susan Davis, and Clifford G. Hickey. "Co-Management: Managing Relationships, Not Resources." Human Organization 64, no. 3 (2005): 240-50. 2005. Accessed December 16, 2016. file:///C:/Users/User/Downloads/Natcher-et-al.co-m-Human-Org-2005.pdf.

Ortiga, Roque Roldán. Models for Recognizing Indigenous Land Rights in Latin America. Washington, D.C.: World Bank, Environment Dept., 2004.

Parks Canada. "A History of Canada's National Parks (Volume I)." Parks Canada. March 11, 2013. Accessed February 27, 2017. http://parkscanadahistory.com/publications/history/lothian/eng/vol2/chap4.htm.

Canada. Parks Canada. Section D: Aboriginal Peoples and National Parks. Accessed February 23, 2017. http://publications.gc.ca/collections/Collection/R62-323-2000-2-7E.pdf.

Canada. Parks Canada. Parks Canada- Aboriginal Affairs Secretariat (AAS)- Introduction. April 22, 2016. Accessed January 20, 2017. http://www.pc.gc.ca/eng/agen/aa/te-wt/introduction.aspx.

Canada. Parks Canada. Parks Canada- Aboriginal Affairs Secretariat (AAS)- Chapter 1- Connecting with Indigenous Partners. April 27, 2016. Accessed January 20, 2017. http://www.pc.gc.ca/eng/agen/aa/te-wt/chap01.aspx.

Pomeroy, Robert S., and Fikret Berkes. "Two to tango: the role of government in fisheries co-management." Marine policy 21, no. 5 (1997): 465-480.

Routledge, Karen, and Lyle Dick. "Parks Canada." The Canadian Encyclopedia. September 12, 2017. Accessed February 27, 2017. http://www.thecanadianencyclopedia.com/en/article/parks-canada/.

"Rukai." Digital Museum of Taiwan Indigenous Peoples. 2008. Accessed May 12, 2017. http://www.dmtip.gov.tw/Eng/Rukai.htm.

"Rukai Distribution Map." Map. Digital Museum of Taiwan Indigenous Peoples. 2008. Accessed May 01, 2017. http://www.dmtip.gov.tw/Eng/pic/53.jpg.

"Rukai indigenous group sets up tribal assembly." Taiwan Today, April 05, 2017. Accessed May 10, 2017. http://taiwantoday.tw/news.php?unit=2&post=113474.

"Rukai people." Rukai people - WOW.com. December 19, 2016. Accessed May 12, 2017. http://www.wow.com/wiki/Rukai_people.

Simon, Scott. "All Our Relations: Indigenous Rights Movements and the Bureaucratization of Indigeneity in Contemporary Taiwan." Speech, Stanford University, Stanford. October 03, 2014. Accessed January 15, 2017. https://fsi.stanford.edu/sites/default/files/simon_stanford_talk_2014.pdf.

Simon, Scott. "Entrepreneurship and Indigenous Life-Worlds: Experiences from Taiwan." Revue Internationale sur I'Autochitonie, no. 4 (2012): 27-36. 2012. Accessed December 20, 2016. www.reseaudialog.ca.

Simon, Scott. "Making Natives: Japanese Colonial Policy and the Creation of Formosan Indigeneity." Japanese Studies Association of Canada, October 14, 2006, 1-12.

Simon, Scott. "The hunter's spirit: Autonomy and development in indigenous Taiwan." In Regional Minorities and Development in Asia, edited by Huhua Cao and Elizabeth Morell, 59-76. New York, NY: Routledge, 2010.

Simon, Scott. "Real People, Real Dogs, and Pigs for the Ancestors: The Moral Universe of "Domestication" in Indigenous Taiwan." Speech, National Chengchi University, Taipei, December 21, 2016.

Simon, Scott. "Remembrance as Resistance: Social Memory and Social Movement on Indigenous Formosa." March 30, 2006, 1-17.

Simon, Scott. "The Underside of a Miracle: Industrialization, Land, and Taiwan's Indigenous Peoples." Cultural Survival. 2002. Accessed December 16, 2016. https://www.culturalsurvival.org/publications/cultural-survival-quarterly/underside-miracle-industrialization-land-and-taiwans.

Simon, Scott, and Awi Mona. "Indigenous Rights and Wildlife Conservation: The Vernacularization of International Law on Taiwan." 台灣人權學刊 3, no. 1 (June 2015): 3-31.

Stevenson, Marc G. "De-Colonizing Co-Management in Northern Canada." March 2004.

Taiwan. Forestry Bureau. Council of Agriculture. Forestry Act. 2015. Accessed January 22, 2017. http://conservation.forest.gov.tw/EN/0001647.

Taiwan. Forestry Bureau. Council of Agriculture. Wildlife Conservation Act. By Council of Agriculture. 2013.

Taiwan Indigenous Peoples Basic Law, Http://www.apc.gov.tw/portal/docDetail.html?CID=74DD1F415708044A&DID=3E651750B4006467D4B40DD3AC1D7378 (2005).

Taiwan. Ministry of Interior. National Park Law. 2010.

Taiwan. Ministry of Interior. Urban Planning. By Ministry of Interior. Taipei, 2014. 2014. Accessed April 22, 2017. www.moi.gov.tw/download/m_38743_4708912037.doc.

Taiwan. UN Working Group on Indigenous Populations. Our Experience of the Incursion of Cement Companies onto the Land of the Taroko People, Hwalien, Taiwan. By Igung Shiban. 1997.

"Taroko National Park." National Parks in Taiwan. Accessed May 02, 2017. http://home.utah.edu/~u0355217/Taiwan_NP/website/taroko.htm.

"太魯閣國家公園 Taroko National Park." 太魯閣國家公園 Taroko National Park. 2016. Accessed May 02, 2017. http://www.taroko.gov.tw/.

Teitelbaum, Sara, Tom Beckley, and Solange Nadeau. "A national portrait of community forestry on public land in Canada." The Forestry Chronicle 82, no. 3 (2006): 416-28. Accessed April 12, 2017. doi:10.5558/tfc82416-3.

Turner, Nancy J., Fikret Berkes, Janet Stephenson, and Jonathan Dick. "Blundering Intruders: Extraneous Impacts on Two Indigenous Food Systems." Human Ecology 41, no. 4 (2013): 563-74.

United Nations. General Assembly. United Nations Declaration on the Rights of Indigenous Peoples: adopted on 13 September 2007. Geneva: OHCHR, 2008.

United Nations. General Assembly. Universal Declaration of Human Rights: 60th anniversary special edition, 1948-2008. New York, NY: United Nations Dept. of Public Information, 2007.

Wang, Chun-chi, and Jonathan Chin. "Truku Hunt Bid Rejected." Taipei Times, September 10, 2015. Accessed April 20, 2017. http://www.taipeitimes.com/News/taiwan/archives/2015/09/10/2003627384.

Wu, Po-wei, Yen-ling Chiu, and Jake Chung. "Aboriginal land boundary draft rules meet criticism." Taipei Times, February 16, 2017. Accessed May 15, 2017. http://www.taipeitimes.com/News/taiwan/archives/2017/02/16/2003665090.

Appendices

Appendix I: *The Indigenous Peoples Basic Law (2005)*

Article 1

This Law is enacted for the purposes of protecting the fundamental rights of indigenous peoples, promoting their subsistence and development and building inter-ethnic relations based on co-existence and prosperity.

Article 2

Definitions:

1. Indigenous peoples: refer to the traditional peoples who have inhibited in Taiwan and are subject to the state's jurisdiction, including Amis tribe, Atayal tribe, Paiwan tribe, Bunun tribe, Puyuma tribe, Rukai tribe, Tsou tribe, Saisiyat tribe, Yami tribe, Tsao tribe, Kavalan tribe, Taroko tribe and any other tribes who regard themselves as indigenous peoples and obtain the approval of the central indigenous authority upon application.
2. Indigenous person: refers to any individual who is a member of any of indigenous peoples.
3. Indigenous peoples' regions: refer to areas approved by the Executive Yuan upon application made by the central indigenous authority where indigenous peoples have traditionally inhabited, featuring indigenous history and cultural characteristics.
4. Tribe: refers to a group of indigenous persons who form a community by living together in specific areas of the indigenous peoples' regions and following the traditional norms with the approval of the central indigenous authority.
5. Indigenous land: refers to the traditional territories and reservation land of indigenous peoples.

Article 2-1

In order to promote independent development of indigenous tribe at its will, the tribe should establish Tribal Council. The tribe which ratified by the central authority in charge of indigenous affairs shall be considered as public juristic person.

The central authority in charge of indigenous affairs shall issue regulations for tribe-ratifying procedure, terms of organization, meeting procedure, the way of reaching a resolution and related matters of the Tribal Council.

Article 3

For the purpose of reviewing and coordinating matters related to this Law, the Executive Yuan shall establish a promotion committee which shall be called by the Premier.

Two thirds of the afore-mentioned promotion committee members shall comprise members of indigenous tribes in accordance with their respective proportions. The organization bylaws of the committee shall be made by the Executive Yuan.

Article 4

The government shall guarantee the equal status and development of self-governance of indigenous peoples and implement indigenous peoples' autonomy in accordance with the will of indigenous peoples. The relevant issues shall be stipulated by laws.

Article 5

The state shall provide sufficient resources and allocate abundant annual budget to assist indigenous peoples in developing autonomy.

Unless otherwise provided under this Law or other laws related to autonomy, the power of autonomy and finance in regions of autonomy shall be subject to the Local Institution Law, the Act Governing the Allocation of Government Revenues and Expenditures and other statutes governing county (city).

Article 6

In the event that any dispute concerning the power of autonomy arises between the government and indigenous peoples, the Office of the President shall call a consultation meeting to resolve such dispute.

Article 7

The government shall protect indigenous peoples' rights to education by upholding the principles of versatility, equality, and reverence in accordance with the will of indigenous peoples. The relevant issues shall be stipulated by laws.

Article 8

Governments of municipal cities and counties where indigenous peoples' regions are located shall establish specialized units in charge of indigenous affairs. Other county (city) governments may establish specialized units or have specialized personnel in charge of indigenous affairs.

Heads of agencies in charge of indigenous affairs in the preceding paragraph shall be indigenous persons.

Article 9

The government shall establish special unit responsible for indigenous language researches and indigenous language proficiency evaluation system in order to actively engage in the promotion of indigenous language development.

The government shall provide preferential measures for indigenous peoples or hold special civil service examinations designed for indigenous peoples where under the relevant laws and regulations may require beneficiaries or candidates to pass the afore-mentioned evaluation or have proficiency in indigenous language.

The development of indigenous language shall be stipulated by law.

Article 10

The government shall keep and maintain indigenous cultures, give guidance to the cultural industry and incubate professional talent.

Article 11

The government shall restore the traditional names of indigenous tribes, rivers and mountains in indigenous peoples' regions in accordance with the will of indigenous peoples.

Article 12

The government shall protect indigenous peoples' rights and access to broadcast and media, establish indigenous peoples' cultural affairs foundation and formulate plans to establish indigenous-language broadcast media and institutions exclusively for indigenous peoples.
Issues related to the establishment of the afore-mentioned foundation shall be stipulated by laws.

Article 13
The government shall protect indigenous peoples' traditional biological diversity knowledge and intellectual creations, and promote the development thereof. The related issues shall be provided for by the laws.

Article 14
The government shall formulate economic policies for indigenous peoples and give guidance on conservation and utilization of natural resources for the purpose of developing indigenous economy in accordance with the will of indigenous peoples and characteristics of environmental resources.

Article 15
The government shall generously allocate budget for indigenous peoples and supervise utilities providers to actively improve transportation, post, telecommunication, irrigation works, tourism and other public construction in indigenous peoples' region.
For the purpose of implementing the affairs as set out in the preceding paragraph, the government may establish construction funds of indigenous peoples' regions. The fund's utilization procedure shall be stipulated by laws.

Article 16
The government shall formulate indigenous housing policies, give guidance to indigenous persons to construct, purchase or lease dwellings, and actively promote the tribal renewal project.

Article 17
The government shall protect indigenous peoples' employment rights, provide vocational trainings which are suitable for the conditions and characteristics of indigenous society, give guidance to indigenous persons to obtain professional qualifications and technician certificates, build complete indigenous employment service network to protect their employment opportunities and fair remuneration and promotion.
The protection of indigenous peoples' employment rights shall be provided for bylaws.

Article 18
The government shall establish indigenous peoples' development fund for developing indigenous peoples' economy and assisting indigenous businesses. The sources of the fund shall include budget allocated by the central government in accordance with the budget procedure, compensations made to indigenous peoples' land, reparation, revenues, funds distributed in accordance with other relevant laws and regulations as well as other revenues.

Article 19

Indigenous persons may undertake the following non-profit seeking activities in indigenous peoples' regions:
1. Hunting wild animals.
2. Collecting wild plants and fungus.
3. Collecting minerals, rocks and soils.
4. Utilizing water resources.

The above activities can only be conducted for traditional culture, ritual or self-consumption.

Article 20

The government recognizes indigenous peoples' rights to land and natural resources.

The government shall establish an indigenous peoples' land investigation and management committee to investigate and manage indigenous peoples' land. The organization and other related matters of the committee shall be stipulated by law.

The restoration, acquisition, disposal, plan, management and utilization of the land and sea area owned or occupied by indigenous peoples or indigenous persons shall be regulated by laws.

Article 21

When governments or private parties engage in land development, resource utilization, ecology conservation and academic research in indigenous land, tribe and their adjoin-land which owned by governments, they shall consult and obtain consent by indigenous peoples or tribes, even their participation, and share benefits with indigenous people.

In the event that the governments, laws or regulations impose restrictions on indigenous peoples' utilization of the land in preceding paragraph and natural resources, the government shall consult with indigenous peoples, tribes or indigenous people and obtain their consent; the competent authority shall allocate ample funding in their budget to compensate their damage by restrictions.

A fixed proportion of revenues generated in accordance with the preceding two paragraphs shall be allocated to the indigenous peoples' development fund to serve as returns or compensations.

The central indigenous competent authority shall stipulate the regulations for delimiting the area of indigenous land, tribe and their adjoin-land which owned by governments, procedures to consult, to obtain consent by indigenous peoples or tribes and to participate and compensation to their damage by restrictions in preceding three paragraphs.

Article 22

The government shall obtain consent from the locally affected indigenous peoples and formulate a common management mechanism before establishing national parks, national scenery, forest district, ecological protection zone, recreation zone and other resource management institutions. The regulations shall be made by the central relevant authority jointly with the central indigenous affairs authority.

Article 23

The government shall respect indigenous peoples' rights to choose their life style, customs, clothing, modes of social and economic institutions, methods of resource utilization and types of land ownership and management.

Article 24

The government shall formulate public health and medical policies for indigenous peoples in accordance with the characteristics of indigenous peoples, incorporate indigenous peoples' regions into the national medical network, implement indigenous peoples' health care, establish comprehensive and long-term health care, emergency care and evacuation system, and protect indigenous peoples' health and physical safety.

The government shall respect the traditional medicine and health methods of indigenous peoples and undertake researches and promotions.

The government shall allocate ample funding in their budget to subsidize indigenous people who need medical care, emergency care and evacuation to the nearest hospital or social welfare institutions; the regulations for subsidy the traffic-cost for long-term health care, medical care or social welfare resource utilization shall be stipulated by the central competent authority.

Article 25

The government shall establish a natural disaster prevention and relief system in indigenous peoples' regions and natural disaster prevention priority zones to protect physical and property safety of indigenous peoples.

Article 26

The government shall actively implement social welfare for indigenous peoples, undertake planning to establish indigenous peoples' social security system and give special protection to the rights of indigenous children as well as women and mentally or physically disabled indigenous persons.

The government may provide subsidies for those indigenous persons who lack resources to participate in the social insurance scheme or use medical and welfare resources.

Article 27 The government shall actively promote savings and cooperative businesses by indigenous peoples, give guidance to the management thereof, and grant them with preferential tax measures.

Article 28 The government shall provide protection and assistance for indigenous persons living outside indigenous peoples' regions in respect of their health, accommodation, finance, education, caring, employment, medical care and adaptation to the society.

Article 29 In order to protect the dignity and fundamental human rights of indigenous peoples, the government shall provide for a separate chapter devoted to indigenous peoples' human rights in the national human rights legislations.

Article 30

The government shall respect tribal languages, traditional customs, cultures and values of indigenous peoples in dealing with indigenous affairs, making laws or implementing judicial and administration remedial procedures, notarization, mediation, arbitration or any other similar procedure for the purpose of protecting the lawful rights of indigenous peoples. In the event that an indigenous person does not understand the Chinese language, an interpreter who speaks the tribal language shall be provided.

For the purpose of protecting indigenous peoples' rights and access to the judiciary, indigenous peoples' court or tribunal may be established.

Article 31

The government may not store toxic materials in indigenous peoples' regions in contrary to the will of indigenous peoples.

Article 32

The government may not forcefully evict indigenous persons from their land, except in the case of imminent and obvious danger.

Indigenous persons shall be properly accommodated and compensated for losses suffered as a result of forced eviction as set out in the preceding paragraph.

Article 33

The government shall actively promote exchanges and cooperation between indigenous peoples and international indigenous peoples and ethnic minorities in economical, social, political, cultural, religious, academic and ecological issues.

Article 34

The relevant authority shall amend, make or repeal relevant regulations in accordance with the principles of this law within three years from its effectiveness.

The central indigenous competent authority shall interpret and implement the relevant laws and regulations, which do not be amend, made or repealed in the preceding paragraph with the competent authority by the principle of this law.

Article 35

This law takes effect upon promulgation.

(Council of Indigenous Peoples 2015)

Appendix II: ***Taiwan Forestry Act***

Chapter I General Provisions

Article 1
This Act is established to preserve forest resources, the natural functions of forests and their economic viability, and to protect trees that have conservation value and their growth habitats.

Article 2
The term 'government agency' as used in this Act means the Council of Agriculture, Executive Yuan of the central government; the relevant direct municipal government at the municipal level; the county (city) government at the county (city) level.

Article 3
The term 'forest(s)' means the land(s) and its collateral trees and bamboo, collectively. According to the delineation of ownership, forest(s) shall be distinguished as national forest(s), public forest(s), and private forest(s); forests principally belong to the nation.

Article 3-1
For matters regarding the protection of trees outside of forests, the rules in Chapter 5-1 apply.

Article 4
Whereas whoever owns bamboo or trees on the land of others, constituting a claim of land-surface rights, lease rights or for other applications, or revenues, shall be deemed forest owner where this Act applies.

Chapter II Forestry Administration

Article 5
The administrative management of the forestry industry shall be predicated on the primary goal of preserving the long-term integrity of national lands.

Article 6
Whereof undeveloped mountains and lands suitable for forestry, the central government agency shall request that the central land administrative authority classify them as forestland, and promulgate accordingly.
Whereas land designated as forestland cannot be changed to other designations. However, forestland can be redesignated if approval is obtained from the direct municipal and county (city) governments, and this is then reported to the central government and central land management agency. If the land belongs to aboriginal people, it is also necessary to obtain approval from the aboriginal peoples' central government.
Forestland designated as such by other acts cannot be redesignated, except as provided in the preceding paragraph.

Article 7

Should a public or private forest have any of the following, the central government agency may appropriate it to national ownership, and shall compensate the owner accordingly:
1. It is needed for reasons of national security or operation of national forest;
2. It includes a river, lake or other water source that provides important resources to the public.

Any and all acts relevant to land appropriation may be applied when appropriating land to national ownership. The procedure for appropriating public forest may follow the relevant rules of public property management.

Article 8

Should a national or public forest have any of the following, it may be leased, transferred or appropriated:
1. It is required for establishing a school, hospital, park or other public facilities;
2. It is required for national defense, transportation or water conservation
3. It is required for establishing public works;
4. It is required for establishing a duly approved national park, designated scenic area or forest recreation park.

Should the applications stipulated above be violated, or not used for the said purposes during the assigned period, the leased, sublet or appropriated forestland shall be seized.

Article 9

To carry out any of the following actions in a forest, an application shall be filed with the government agency who shall, together with the relevant local agency, examine the specified area for its suitability for the proposed action. After the application is approved, the action may be undertaken within the designated boundaries.
1. To build or repair a reservoir, roadway, power transmission system or to develop a source of electricity;
2. To mine or quarry;
3. To build or repair other engineering works.

These undertakings are limited to those not impairing geological stability, national security and forestry.

For number 1, above, if there are concerns the forest will be damaged, the government agency shall oversee that the party in question shall perform due water conservation measures or other necessary measures, and the party may not refuse.

Article 10

Should a forest have any of the following, the government agency shall bar logging:
1. The land is so steep or the soil so shallow that re-forestation is difficult;
2. After logging, the soil is likely to be eroded or affect public benefits;
3. The land is located in a water reservoir collection area, headwaters of a river, on an eroded riverbank, windward coastal area or sand dune area;
4. The forest is in other areas where logging prohibition is essential.

Article 11

The government agency may, according to where a forest is located, limit or prohibit the harvest or excavation of grass cover, tree roots and grass roots to a specific location and time period.

Chapter III Forestry Management and Utilization

Article 12

Whereas national forests shall be classified and managed by the central government agency; public forests shall be managed by the owner authority or consigned to some other legal entity; private forests shall be managed by private individuals.

The central government agency may, according to the state of the forestry industry, regulate and implement the forest management plan.

Article 13

To reinforce the water retaining ability of the forest, forest management shall comply with the protection and management regulations for water collection areas; these regulations shall be mandated by the Executive Yuan.

Article 14

National forest management plans shall be regulated by the relevant administrative agency, and shall be submitted to the central government agency for approval.

Article 15

The annual plan for the yields of national forest products shall be based on the management plan for the relevant business area.

Harvesting of national forest yields shall be carried out according to the annual logging plan and national forest yields management code.

The category and handling of, and criteria pertaining to, national forest yields, and the harvest, transport, transfer, fee payment and other issues relevant to forest yields shall be regulated by the central government agency.

If the forest is located in the traditional territory of aboriginal people, the aboriginal people may take forest products for their traditional living needs. The harvesting area, variety, time, paid/unpaid, and other rules should be decided by the central government agency along with the central government of the aboriginal people.

After a natural disaster, the local government has one month to finish the cleanup and tally up all bamboo or trees carried outside the boundary of the National Forest by natural forces. After one month, local people may collect freely the remaining displaced wood and bamboo.

Article 16

Should a national park or scenic area be designated in a forest area, the responsible party shall meet with the government agency to conduct a field survey. The forest area within the demarcated boundaries shall be managed by the government agency according to this Act in conjunction with the relevant national park or scenic area development plan.

The regulations for the above shall be mandated by the Executive Yuan.

Article 17

Wherein a forest region, subject to approval of a relevant environment impact assessment, may be designated a forest recreation area; the establishment and regulation of this area shall be mandated by the central government agency.

A forest recreation area may collect fees for environmental improvement, and maintenance and cleaning; amusement facilities may collect a usage fee; such fees shall be regulated by the central government agency.

Article 17-1

To maintain forest ecology and preserve biodiversity, a Nature Reserve may be designated within a forest area. The number of people and the amount of traffic allowed into a Nature Reserve shall be regulated in accordance with the unique characteristics of the resources within the Reserve. The central government agency shall set the criteria for establishing and abolishing a Nature Reserve, its management plan, and relevant regulatory rules.

Article 18

Whereas public and private forests with a commercial forest area of more than five hundred (500) hectares shall have a licensed forestry technician.

Forest planters and loggers shall be assisted by forestry technicians or forestry technical staff.

Article 19

Should business collaboration among forestry practitioners become necessary, the said practitioners may organize a forestry cooperative association in accordance with the Cooperative Association Act; the association shall be counseled by the local government agency.

Article 20

Should a forest owner need to use another's land to transport forest equipment and products, or use, alter or remove implements in a water course, which must be done without endangering the water supply or peoples' lives, the owner shall negotiate with the landowner or other interest-holders. Where negotiation is discordant or impossible, the parties shall file with the government agency and the relevant local government agency for mediation; where mediation fails, the government agency shall resolve the issue.

Article 21

On the following forestlands the government agency may order the forest owner or stakeholder to undertake and complete reforestation and necessary water and soil conservation measures within an assigned period:

1. Eroded gorge, steep exposed land, collapsed land, landslide area, fragmented belt, severely eroded land and scattered sand dune;
2. Water source area, reservoir collection area, coastal area and riverbanks;
3. Old fire site, flood eroded land;
4. Logged site;
5. Other areas where conservation is essential.

Chapter IV Conservation Forestry

Article 22

Whereas forests held by the state, or a public or private entity, which meet any of the following requirements shall be classified as conservation forests by the central government agency:

1. Essential for preventing damage from floods, wind, tides, salt, and smoke;
2. Essential for the conservation of a water source or protection of a reservoir;
3. Essential for preventing damage from sand, soil erosion and blowing sand, falling rock, ice, or avalanches;
4. Essential to national defense;
5. Essential to public health;
6. Essential for navigation;
7. Essential for the fishing industry;
8. Essential to the preservation of landmarks, historic relics, and scenery;
9. Essential to nature conservation.

Article 23

Whereas hills or other lands conforming to any of the criteria in Article 22, Sections 1-5, shall be classified as conservation forest by the central government agency, and the conservation thereof shall be augmented.

Article 24

The management of conservation forests shall be predicated, regardless of ownership, on serving the public interest. All conservation forests shall be reasonably managed, cultivated, renewed and logged according to their individual characteristics.

Conservation forest management standards shall be decreed by the central government agency in conjunction with the local government agency.

Article 25

Should the subsistence of a conservation forest become unnecessary, subject to approval from the central government agency, it may be partially or wholly declassified.

The review standard for declassifying conservation forest will be decided by the central government agency.

Article 26

The classification or declassification of a conservation forest may be effected by submitting an application to the direct municipality or county (city) government agency by a legal entity or organization located in the vicinity of the forest or other parties having direct interests. The application then must be presented to the central government agency for approval. If the forest falls under the jurisdiction of the central government agency, the application shall be sent directly to the central government agency.

Article 27

In accepting the aforesaid application for classifying or declassifying a conservation forest, the government agency shall notify the relevant forest owner, landowner and parties holding other land rights, and promulgate accordingly.

Starting from the day of the said promulgation until the day of promulgation stipulated in Article 29, Section 2, forests classified as conservation forests may not be developed or logged, except with the approval of the government agency.

Article 28

Should any party with direct interests object to the specific classification or declassification of a forest, the party may present a statement of opinion to the local government agency within thirty (30) days of the day of promulgation stipulated in the first paragraph of the preceding article.

Article 29

The relevant direct municipality or county (city) government agency shall present all documents related to the classification or declassification of a conservation forest to the central government agency for approval. Where there are objections filed according to the preceding article, the statement of opinion shall be enclosed. The classification or declassification of a conservation forest, after approval by the central government agency, shall be promulgated by the relevant direct municipal or county (city) government agency, and the forest owner shall be duly notified.

The classification or declassification of a conservation forest, upon approval by the central government agency, shall be promulgated by the central, direct municipal or county (city) government agency, and the forest owner shall be duly notified.

Article 30

No logging, damage to wood or bamboo, development or livestock grazing, harvesting or excavating of earth, rocks, grass cover or tree roots may be carried out in a conservation forest, except with the approval or consent of the government agency.

In addition to the limitation clause herein, the government agency may limit or prohibit the use of revenues therefrom by the conservation forest owner, or dictate the method of operation and protection.

The government agency may order reforestation or other essential restoration procedures if these limitations are violated.

Article 31

Whereof conservation forests are protected against logging, the landowner or crop owner may file for compensation limited to the extent of direct damage.

For the owner of a conservation forest who undertakes reforestation, as stipulated in paragraph three of the preceding article, and thus incurs reforestation expenditures, the said expenditure shall be deemed damages, as defined above.

For the damages specified herein, the landowner shall be compensated by the central government, which may order the legal entity, organization or private individual that benefits from the conservation forest classification to bear part or all of the compensation.

Chapter V Forest Protection

Article 32

To protect the forest, forest police may be instituted; where forest police are not instituted, the local police shall assume the duties of forest police.

The administrations and district heads of villages (towns, cities) are responsible for assisting in forest protection.

Article 33

The forest periphery may be designated a forest protection area. The area shall be delineated by the government agency, presented to the central government agency for approval, and promulgated by the local government agency.

Article 34

Prescribed burns shall not be started in forest areas and forest protection areas. Parties that have a burning permit from a relevant fire prevention institution, and which report to the relevant government agency, are not bound by this limitation. The permitted party must notify the owner or manager of adjacent forests prior to conducting a sanctioned burn.

In carrying out a sanctioned burn, the permitted party must have fire-extinguishing equipment on hand.

Article 35

The government agency shall institute a forest fire squad based on forest conditions and organize a volunteer forest fire squad as needed.

Article 36

Where a railway passes through a forest area or forest protection area, fire and smoke prevention equipment shall be implemented; the same is required of a factory situated near a forest protection area.

Where electrical wires pass through a forest area or forest protection area, equipment that prevents electrical shorts shall be implemented.

Article 37

Where there are biological hazards or disturbances in the forest, the forest owner shall be responsible for their elimination or prevention. Where hazards or disturbances are present, the forest owner, when necessary and subject to permission by the government agency, may enter another's land to eliminate or prevent hazards to forest biology. In the event of damages, the forest owner shall be liable for compensation.

Article 38

Should a forest be threatened or afflicted by biological organisms and their spread or protraction, the government agency may order the forest owner and other parties with interests in the forest to perform actions required for the elimination or prevention of said organisms.

The cost of said elimination or prevention will be based on the area and value of the land, and shall be borne by the forest owner. However, if a prior agreement has been made among those sharing such costs, the terms of the agreement shall preside.

Article 38-1

The central government agency shall determine the methods used to protect and manage forests, prevent disasters and carry out rescues; the equipment used in forest protection; all aspects of forest propagation; and the rewards for forest fire prevention. For National Forest located within the traditional territory of aboriginal peoples, the central government agency shall make it a priority to advise aboriginal peoples community development associations, legal entities or individuals with reforestation and forest protection.

Chapter V-I Protection of Trees

Article 38-2

The local government agency shall conduct general inspections of the trees located in its jurisdiction. Trees, bamboo groves, street trees and individual tree that are important with respect to ecology, biology, geography, landscape, culture, history, education, research, and community, as well as other important meanings recognized by a local government agency as trees subject to protection measures shall be recorded and announced.

For the announced protected trees mentioned in the preceding Paragraph, the local government agency shall make it a priority to increase protection measures, maintain the natural growth of tree crown and trees' quality, provide regular care and health examinations, and protect the growth habitat of the trees. The current status of the trees shall be regularly announced on the website of the local government agency.

The measures of general inspection and standards of tree protection mentioned in Paragraph 1 shall be formulated by the central government agency.

Article 38-3

As a principle, trees that are located within the scope of lands for development but are subject to protection shall remain in an "as-is" condition. The aforesaid trees may not be logged, transplanted, trimmed, or sabotaged by any other means unless permission is granted by the local government agency. Furthermore, the growth habitat of the trees shall be well-maintained.

To transplant the trees promulgated to be protected, the developer mentioned in the preceding Paragraph shall submit a transplantation and restoration plan for review and approval by the local government agency before such transplantation may proceed.

All measures for matters related to the plan mentioned in the preceding Paragraph, including its content, application, review procedures, calculations of tree-crown area, and implementation regulations for trimming and transplantation of trees, digging tree holes, administration of pests control agents, health examination and care, and habitat management, are formulated by the central government agency. The local government agency shall formulate the enforcement rules according to the local environment.

Article 38-4

After receiving an application for transplantation of protected trees by the local government agency, the developer shall hold a public explanation meeting to gather opinions from the public. Relevant organizations, agencies, and local residents may, within 15 days after the public explanation meeting, submit an opinion in writing to the developer and a copy to the local government agency.

The local government agency shall convene a public hearing after the developer's public explanation meeting and publish the date and venue of the said hearing in newspaper(s) and website(s) or publicize the information through another appropriate means. Any member of the public may submit an opinion to the local government agency for reference. In the case of a transplantation of protected trees approved by the local government agency, the local government agency shall docket the trees for future tracking and publish their status on its website on a regular basis.

Article 38-5

For the transplantation of protected trees reviewed and approved by the local government agency, the local government agency shall require the developer to provide land and funds for the local government agency's replacement planting of trees as compensation to the ecological environment.

With regard to the ecological compensation mentioned in the preceding Paragraph, relevant measures for the choice of location of land, species, and quality of replanted trees, evaluation of ecological functions, management of habitats, or compensating funds, shall be formulated by the local government agency.

Article 38-6

For the management and protection of trees that is beyond the scale designated by the central government agency, works of planning, designing, and supervision shall be completed by legally registered technicians who are professionals in the area of forestry, horticulture, and have relevant skills, or the technical consulting institutes which hire said technicians. In the event that a work is handled by government agencies of all levels, public corporations, and public institutions, the works may be completed by persons who are accredited as corresponding technicians in said agencies, corporations, and institutions.

The central government agency shall establish a training, recruiting, and certification system of the professionals for tree protection. The relevant measures shall be formulated by the central government agency in consultation with the Examination Yuan and the Ministry of Labor.

Chapter VI Supervision and Incentives

Article 39

To register with the government agency, a forest owner shall provide the geographic name, area, tree and bamboo species and volume, a map of where the forest is located and the forest plan.

The rules governing forest registration shall be decreed by the central government agency.

Article 40

Should there be an incident of forest neglect, over-development for agriculture or over-logging, the local government agency may assign specific management practices to the owner.

Should there be a breach of the said practices or wanton logging, the government agency may order the termination of logging and order reforestation.

Article 41

Should reforestation be ordered, as stipulated above, but not undertaken accordingly, the government agency may execute the order, but the cost of reforestation shall be borne by the obligated party.

Article 42

Whereas publicly and privately held undeveloped mountains and lands shall be classified as forestry lands, the government agency may order the owner to reforest within an assigned time period.

If reforestation is not completed within the specified time period, the government agency may execute the order, but the cost of reforestation shall be borne by the obligated party.

Article 43
In forest areas, unauthorized disposal of wastes or pollutants is prohibited.

Article 44
A harvester of state or public forests shall keep an account book documenting the yield of each species, the volume, origins and distribution channels.
The said harvester shall choose a mark or seal to identify his forest products. The mark or seal shall be filed with the local government agency, and it shall be used before the forest products are moved out of the forest.
The harvester, as defined in paragraph one herein, may not use a mark or seal that is similar or identical the previously filed mark or seal of other harvesters.

Article 45
All forest products are subject to permitting and inspection by the government agency prior to transport for distribution. The terms of logging and harvesting permits, application procedures, and due compliance requirements and inspection regulations shall be decreed by the central government agency.
The government agency shall set up checkpoints to inspect the harvest at crucial locations along the roadways used to transport forest products.
The said government agency or public official invested with the authority of criminal investigation may, at their discretion, inspect the harvester's permit, account book, equipment and materials.

Article 46
By act, taxation of forestry land and forest products is discounted or they are exempted.

Article 47
A forestry business that meets one of the following criteria may receive an award.
1. Special achievement in reforestation or forestry management;
2. A special forestry business whose forest products have significance to national defense or the nation's economic development;
3. Large scale cultivation of forests as a commodity to supply industry, national defense, ship building, road engineering or other important applications;
4. Nurseries that propagate seedlings in large numbers for local reforestation;
5. Those who invent or improve tree species, or bamboo and wood applications and crafts;
6. Significant contributions to extinguishing forest fires, or mitigating the damage by pests or pathogen and disasters caused by man;
7. Significant contributions to the research improvement of forestry science;
8. Significant contributions to the security of the nation's territory, conservation of water sources.

The award may be a cash prize, plaque, trophy or commendation certificate. The qualifications, procedures and complete incentive measures for such issuance shall be decreed by the central government agency.

Article 47-1

In the case of special achievements in protection or adoption of trees, provision of rewards in Paragraph 2 of the preceding Article shall apply mutatis mutandis.

Article 48

To encourage reforestation by private individuals, aboriginal people and/or organizations, the government agency may, depending upon actual needs, provide free seedlings, rewards, long-term low interest loans, or other assistance and rewards. The methods will be decided by the central government agency and the aboriginal peoples' central government agency.

Article 48-1

To encourage long-term reforestation by private individuals and/or organizations, the Government shall establish a reforestation fund. The sources of funding shall be as follows:

1. Allocations from water-rights fees;
2. A reciprocation fund provided by those who undertake development of hillsides;
3. Penalty fines for violation of this Act;
4. Allocations from the engineering budget for water resource development projects;
5. Allocations from government budgeting procedures;
6. Donations;
7. Other sources of income.

The water-right fee in Section 1 and the proportion of the allocation from the engineering budget for water resource development projects in Section 4 herein shall be regulated by the central water conservation government agency in conjunction with the central government agency. At the time a permit is issued for hill development, the reciprocation fund fee in Section 2 shall be served. The obligated party, calculation format, payment schedule, time period, procedures, and regulations, shall be decreed by the central government agency, and submitted to the Executive Yuan for approval.

Article 49

Undeveloped mountains and lands owned by the state shall be classified for forestry. Lands not reserved for state forestry operation may be designated and classified by the central government agency for reforestation leased to nationals of the Republic of China.

Chapter VII Penalty Provisions

Article 50

Those who steal primary forest products or forest by-products, accept, transport, hoard or buy these stolen properties, and those who abet these actions, shall be liable to at least 6 months but no more than 5 years of imprisonment. This may be commuted to a penalty fine of at least three hundred thousand New Taiwan Dollars (NT$300,000) but no more than three million New Taiwan Dollars (NT $3,000,000).

Anyone who attempts to steal primary forest products or forest by-products as stated above shall be subject to penalty.

Article 51

For unauthorized development or occupation of forest or forestland, the offender shall be liable to from six months to five years of imprisonment. This may be commuted to a penalty fine of up to six hundred thousand New Taiwan Dollars (NT$600,000).

When the offenses listed above lead to disaster, the punitive term shall be increased by one half. Those who commit offenses that result in death shall be liable to imprisonment for at least five years but not more than twelve years, commutable to a penalty fine of up to one million New Taiwan Dollars (NT$1,000,000). Perpetrators of offenses that result in serious injuries shall be liable to at least three years but not more than ten years of imprisonment, commutable to a penalty fine of up to eight hundred thousand New Taiwan Dollars (NT$800,000).

For offenses of paragraph one involving a conservation forest, the penalty may be increased by one half.

Should the offenses in paragraph one result from negligence, and lead to disaster, the responsible party shall be liable to no more than one year of imprisonment, commutable to a penalty fine of no more than six hundred thousand New Taiwan Dollars (NT$600,000).

Those who attempt to commit offenses stipulated in paragraph one shall be liable to penalty by act.

For offenses stipulated herein, the cultivated plants, tools and supplies, construction materials and the machinery used shall be seized.

Article 52

Anyone who violates Paragraph 1 of Article 50 under any one of the circumstances listed below shall be liable to at least one year but no more than seven years of imprisonment. This may be commuted to a penalty fine of five- to ten-fold the value of the stolen property:

1. Offenses committed in a conservation forest.
2. Offenses committed by an individual obligated to protect the forest according to a consignment to an organization or other contract agreement.
3. Offenses committed while exercising the right to harvest forest materials.
4. Offenses by more than two conspirators or the employment of other individuals therefor.
5. Using stolen goods as raw materials for producing charcoal, turpentine or other products, or for cultivating mushrooms.
6. Those guilty of using livestock, vessels, vehicles or other equipment for transporting stolen forest products.
7. Those guilty of excavating, destroying, incinerating or hiding roots to cover up traces of crime.
8. Those guilty of using stolen forest yields as fuel, for mining of minerals, refining lime, or for manufacturing bricks, tiles and/or other articles.

Those who attempt any of the above shall be subjected to penalty.

Those who violate Paragraph 1 by stealing primary forest products shall be liable to a penalty that is 50% higher if the stolen product is precious wood. This may be commuted to a penalty fine of ten- to twenty-fold the value of the stolen property.

The aforementioned precious wood refers to species of trees with high economic or ecological value as defined by central competent authorities.

Those who commit offenses stated in this Article shall have their equipment used for stealing forest products, including livestock, vessels, vehicles or other equipment for transporting stolen forest products mentioned in Section 6 of Paragraph 1 seized regardless of whether they belong to the offender.

Goods produced under Section 5 of Paragraph 1 shall be deemed stolen properties, and seized accordingly.

Violators or suspects of offenses listed in Article 50 and this article may have their penalties reduced or may be exempted from penalties if during the investigation process, they provide statements on probandum highly related to the offense or evidence against other principal offenders or accomplices that enable prosecutors to prosecute the other principal offenders or accomplices involved in the offence, only with the permission of prosecutors.

Article 53

Anyone who sets fire to another's forest shall be liable to from three years to ten years of imprisonment.

Anyone who sets fire to his or her own forest shall be liable to no more than two years of imprisonment or labor in confinement. This sentence may be commuted to a penalty fine of no more than three hundred thousand New Taiwan Dollars (NT$300,000). Should the fire destroy another's forest, the perpetrator shall be liable to from one year to five years of imprisonment.

Anyone whose accidental fire destroys another's forest shall be liable to no more than two years of imprisonment or labor in confinement. This sentence may be commuted to a penalty fine of no more than three hundred thousand New Taiwan Dollars (NT$300,000).

Anyone whose accidental fire destroys his or her own forest and, as a consequence, destroys another's forest, shall be liable to no more than one year of imprisonment or labor in confinement. This sentence may be commuted to a penalty fine of no more than one hundred and eighty thousand New Taiwan Dollars (NT$180,000).

Anyone who attempts any of the above shall be subject to penalty.

Article 54

In case of destruction, or damage to a conservation forest sufficient to entail injury to the public or others, the offender shall be liable to no more than three years of imprisonment or labor in confinement. This sentence may be commuted to a penalty fine of no more than three hundred thousand New Taiwan Dollars (NT$300,000),

Article 55

Anyone who undertakes unauthorized land development or occupation of another's forest or forestland shall be held liable to compensate damages sustained by the injured party.

Article 56

Anyone who violates Articles 9, 34, 36, 38-3, or Paragraph 1 of Article 45 shall be liable to pay a fine of more than one hundred and twenty thousand New Taiwan Dollars (NT$120,000) but less than six hundred thousand New Taiwan Dollars (NT$600,000).

Article 56-1

Anyone committing any of the following shall be liable to a penalty fine of from sixty thousand New Taiwan Dollars (NT$60,000) to three hundred thousand New Taiwan Dollars (NT$300,000).

1. Violation of Article 6, paragraph two; Article 18; Article 30, paragraph one; Articles 40 and 43;

2. Failure of the forest owner or party of interest to comply with the government agency's order to complete reforestation and necessary conservation measures within the assigned period according to Article 21;
3. Failure of the forest owner to take actions necessary for elimination or prevention as stipulated by Article 38;
4. Refusal of a forest product harvester to accept supervision during the harvest period by an adviser assigned by the administrative authority;
5. Moving, destroying or damaging signs placed in the forest by another party.

Article 56-2

The following conduct in a forest recreation area or Nature Reserve, without permission from the government agency, is subject to a penalty fine of at least fifty thousand New Taiwan Dollars (NT$50,000) and no more than two hundred thousand New Taiwan Dollars (NT$200,000):
1. Putting up advertising, signs or other objects with this purpose;
2. Collecting specimens;
3. Incinerating grass or trees;
4. Filling up, diverting or expanding a waterway or water surface;
5. Operating transportation for passengers goods.
6. Driving vehicles that adversely affect the forest environment.

Article 56-3

For any of the following, the offender shall be liable to a penalty fine from one thousand New Taiwan Dollars (NT$1,000) to sixty thousand New Taiwan Dollars (NT$60,000):
1. Failure to register as stipulated in paragraph one, Article 39, and continued failure to do so after notification;
2. Having committed any of the following in a forest recreation area or Nature Reserve:
(1) Pick flowers or snap tree branches, or engrave text or graphics on trees, rocks, signs, display plaques or other objects fixed on the land;
(2) Unauthorized peddling;
(3) Spit, or dispose of fruit, paper or other wastes indiscreetly;
(4) Pollute the ground surface, walls, pillars and beams, water body or air, or produce loud or disturbing sounds.
3. Harass or destroy wildlife, nests or dens in a Nature Reserve.
4. Entering a Nature Reserve without permission.

Owing to their traditional living needs and activities, aboriginal people are not bound by the above regulations.

Article 56-4

The penalty fines regulated by this Act shall be exercised by the government agency. Any and all fines imposed according to this Act that are not paid within the assigned period shall be moved to court for forcible execution.

Chapter VIII Supplementary Provisions

Article 57

The enforcement rules of this Act shall be decreed by the central government agency.

Article 58
This Act shall take effect on the day it is promulgated.

(Forestry Bureau 2015)

Appendix III: ***Taiwan National Park Law***

Article 1

Be it enacted for the purpose of preserving the nation's unique natural scenery, wild fauna and flora and historic sites and providing public recreation and areas for scientific research, that is hereby created the National Park Law.

Article 2

The administration of national parks shall be subjected this law. The provisions of other laws shall be applicable to those issues/ subjects not covered by this law.

Article 3

The Ministry of Interior is the responsible authority for national parks.

Article 4

The Ministry of Interior may establish a National Planning Commission to designate, alter or abolish areas for national parks. The Commission may review national park management plans. The members of the Commission shall not be paid for their duties.

Article 5

Headquarters shall be established at each national park. General rules of administration shall be enacted for all national parks.

Article 6

The criteria for the selection of national parks shall be as follows:

1.Areas having unique landscapes, significant ecological systems, or habitats with 2.biodiversity that are representative of the natural heritage of the nation;

3.Areas with important cultural heritage and historical monuments as well as natural and cultural environments of significant cultural and educational elements to serve as venues for cultivation of national identity and long-term preservation efforts by the government is required;

Areas with natural recreational resources and unusual features to serve as tourist destinations and leisure activity venues for the public.

Areas that comply with the criteria prescribed in the preceding subparagraph but are smaller in resources or surface area may still be selected by the competent authority to be national parks.

In line with the established measures of protection, utilization and control as well as the nature of conservation and types of recreation in concern, the competent authority shall act in accordance with the criteria of the first two preceding subparagraphs and classify the areas selected to be national parks or national nature parks to facilitate administration.

Article 7

All decisions pertaining to the establishment and abolition of national parks and the declaration and alteration of their boundaries shall be submitted by the Ministry of Interior to Executive Yuan for approval. These decisions shall be subject to public notice.

Article 8
Terminology
1.National park: An area demarcated by the competent authority in accordance with the Law to conserve the unique landscapes and ecological systems in the country on a sustainable basis, as well as to preserve the biodiversity and cultural diversity thereof and provide resources for recreation and research activities of the public.
2.National Nature Park: An area demarcated by the competent authority in accordance with the criteria described in the Law despite its smaller resources or surface area.
3.The National Park Plan: the general plan established to facilitate administration of the protection, utilization, and development of the entire area of each national park.
4.The National Nature Park Plan: the general plan established to facilitate administration of the protection, utilization, and development of the entire area of each national nature park.
5.National park enterprise: an enterprise set up in accordance with the National Park Plan to facilitate the recreation and ecological tour activities and protection of national park resources.
6.General controlled area: the land or waters inside a national park not belonging to any other classified area and the original permission of use of the land and waters is sustained, including existing villages.
7.Recreation area: an area suitable for outdoor recreational activities and reasonable numbers of recreational facilities and limited use of the resources are permitted.
8.Historical monument preservation area: an area placed under control to preserve important historical buildings, memorable sites, settlements, historical monuments, ruins, cultural landscapes, relics, as well as recognized ancestral graves, sites of worship, sites of origins, old tribal land, ruins, and historical monuments of the indigenous peoples and preserved in accordance with the indigenous cultures and customs.
9.Special landscape area: an area with unique natural landscapes impossible to recreate artificially and development is strictly restricted.
10.Ecological reservation: an area requiring strict protection of the natural biological societies and their habitats for the sake of preserving biodiversity or providing ecological research.

Article 9
Within the boundaries of the national park, public land necessary for the execution of the national park plan may be appropriated in accordance with the law. Private land within the park may continue in its present use if it is used in accordance with the Nation Park plan. Private land may be appropriated in accordance with the law to achieve the execution of the Nation Park plan.

Article 10
The Ministry of Interior or its designated agency, for the purpose of investigating the national park area or altering the national park plan, may assign qualified individuals to enter private and public land to conduct studies and survey. Prior notification of this entry must be given to the landowner. Damage to crops, trees, bamboo or other structures that belong to the landowner and are caused by this entry shall be compensated. The mount of compensation shall be based on an agreement by both parties or arbitrate by a superior authority.

Article 11

The Ministry of Interior shall regulate the national park concessions in accordance with the National Park plan. The responsible authority of the national park shall regulate concessions. When necessary, the concessions may be invested in and operated by the local government, quasi-public corporation or other public or private group after the approval of the national park authority and under the supervision of the national park headquarters.

Article 12

In accordance with the existing land use and the characteristics of the resources, a national park may be divided into the following zones for management:

1.Existing use area
2.Recreation area
3.Cultural/historic area
4.Scenic area
5.Ecological protected area

Article 13

The following activities shall be prohibited within the national parks:

1.Burning of vegetation or setting fires to clear land;
2.Hunting animals or catching fish;
3.Polluting water or air;
4.Picking or removing flower or any other vegetation;
5.Engraving, sketching or defacing trees, bark, stone or signs;
6.Littering of fruit skins, paper or any other materials;
7.Driving outside of designated areas;
8.Any conduct prohibited by the national park authorities.

Article 14

Within existing use areas or recreation areas, the following activities may be allowed after obtaining permission from the national park headquarters:

1.Building or demolishing public or private structures, roads, or bridges;
2.Filling, draining, altering or expanding the water surface or waterway;
3.Prospecting or exploring for minerals, earth or gravel;
4.Land clearing and farming;
5.Fishing or livestock grazing;
6.Constructing aerial cable systems;
7.Making use of water and hot springs;
8.Advertising or erecting signboards or similar objects;
9.Expanding, increasing or altering equipment in existing factories;
10.Any permission given under the above sections which effects a large area or is of particular importance shall be submitted by the National Park Headquarters to the Ministry of Interior for approval.

The Ministry of Interior shall deliberate and make decisions together with other authorities concerned.

Article 15

Within cultural/historic areas, the following activities shall be subject to prior permission from the Ministry of Interior:
1.Repairing artifacts or historic monument;
2.Repairing or reconstructing buildings;
3.Making artificial alterations to original landscapes or landforms.

Article 16
Within cultural/historic areas, scenic areas, ecological protected areas, the following activities shall be permitted to meet specific needs after approval by the National Park Headquarters.

Article 17
Within scenic areas and ecological protection areas, the following activities shall be permitted to meet specific needs after approval by the National Park Headquarters:
1.Introducing exotic animals or plants;
2.Collecting specimens;
3.Using pesticides and herbicides.

Article 18
Ecological protection areas shall be established preferably on public land. Within these areas, the collection of specimens, the use of pesticides and herbicides or the construction of man-made facilities shall be prohibited. However, exceptions may be granted with the permission of the Ministry of Interior for the special needs of scientific research, public safety and park management.

Article 19
Entrance to ecological protection areas may be allowed only after obtaining a permit from the national park headquarters.

Article 20
The decision to allow the use of water resources or mining with scenic areas or ecological protection areas shall be deliberated by the National Park Planning Commission and the submitted by the Ministry of the Interior to the Executive Yuan for approval.

Article 21
Academic institutes may engage in scientific research in the national parks. They must first send their research proposals to the national park headquarters for approval.

Article 22
To promote the educational value of the national parks, the National Parks Headquarters shall employ professional park interpreters to serve visitors and to provide other necessary and appropriate interpretive services.

Article 23
The operating budget of the national parks shall be borne by the National Treasury upon implementation by a public agency. The cost of park concessions shall be borne by the operator in the case of quasi-corporations or other private or public groups. The national park

operating budget shall be deliberated by the National Park Planning Commission and then submitted by the Ministry of Interior to Executive Yuan for approval. The Ministry of Interior may accept donations of funds or lands from individuals or groups for the purpose of developing the national parks.

Article 24
Any person who violates Section (1) of Article 13 shall be subject to a fine of up to 1000 yuan (US $75), and/or term of imprisonment of up to six months.

Article 25
Any person who violates Section (2) or (3) of Article 13, Section (1) through (4), (6), and (9) of Article 14 and any section of Articles 16, 17, and 18, shall be punished with a fine of not more than 1000 yuan, or if the circumstances of the offense are so intense as to cause serious damage to the environment, he or she shall be punished with imprisonment of not more than one year.

Article 26
Any person who violates Section (4) through (8) of Article 13, Section (5) (5), (7), (8), and (10) of Article 14 or any section of Article 19, shall be punished with a fine of not more than 1000 yuan.

Article 27
Any person who violates any provision of this law and is punished in accordance e\with Article 24 through 26, must restore the damaged area to its original state. If restoration of the area is impossible, or if doing so is extremely difficult, they shall be bound to pay compensatory damages to the national park.
If a person has obligated to restore a damaged area in accordance with the above said but does not do so, the National Park Headquarter may restore the area or instruct a third party to do so, at the cost of the offender.

Article 27-1
The national park regulations shall apply to change and administration of national nature parks as well as punishment for violations.

Article 28
The area in which this law shall be effective shall be determined by the Executive Yuan.

Article 29
The regulations governing the enforcement of this law shall be formulated by the Ministry of Interior and shall be submitted to Executive Yuan for approval.

Article 30
This law shall become effective upon promulgation.

(Ministry of Interior 2010)

Appendix IV: *Table of Figures*

Figure 1- Legal Regime Typologies

Box 2
Typology of Indigenous Legal Regimes

Superior legal framework	*Legal framework in progress*	*Deficient legal framework*
Bolivia	Argentina	El Salvador
Brazil	Guatemala	Guyana
Colombia	Honduras	Suriname
Costa Rica	Mexico	Uruguay
Panama	Nicaragua	
Paraguay	Venezuela	
Peru		

(Ortiga 2004)

Figure 2- Co-Management Agreement Framework

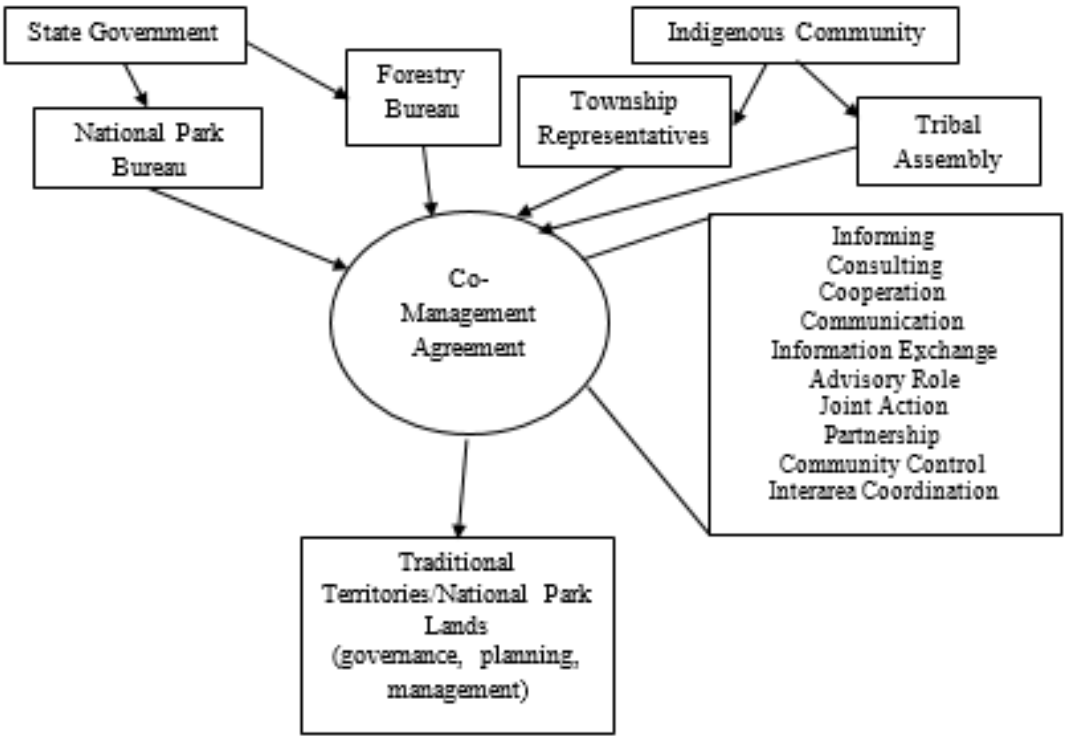

Figure 3- Map of Taroko National Park 2006

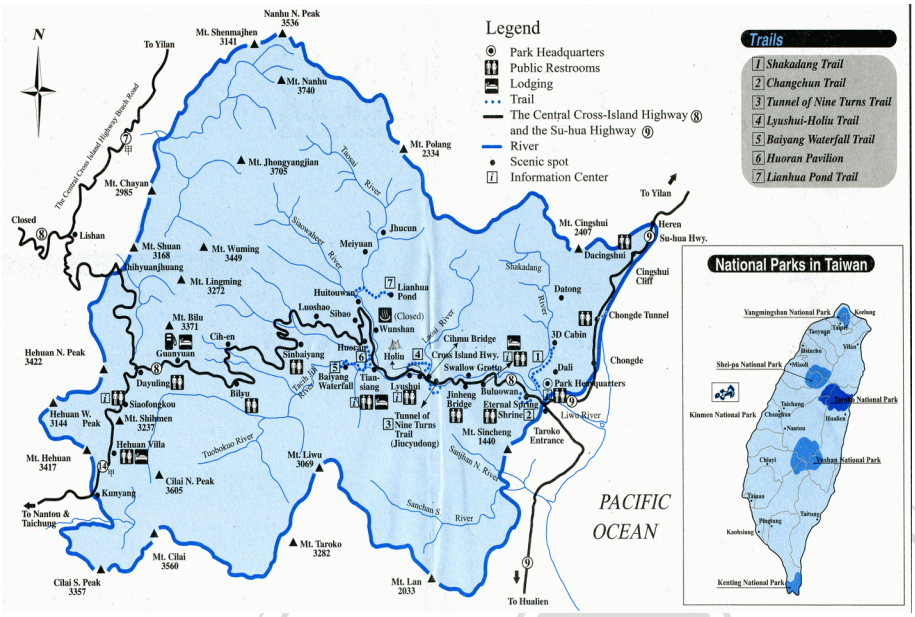

Figure 4- Rukai Distribution Map 2008

Figure 5- Conceptual Framework Applied to Co-Management

Criteria	Question for Application
1. Land Tenure Regime	1. Within the co-management agreement, how is land ownership over the given territory defined?
2. Territorial Recognition	2. Does the co-management agreement recognize the territory about which the agreement is made in a way that corresponds with the idea of indigenous territory?
3. Natural Resources Right	3. How does the co-management agreement assign rights to the natural resources found within the specified territory?
4. Tenure Security	4. How is indigenous title over the land within the co-management agreement secured?
5. Autonomy	5. Within the co-management agreement, to what extent do indigenous peoples retain autonomy over their own affairs (ie. Land rights, legal recognition, ability to use traditional justice system)?
6. Legal Recourse	6. What types of legal recourse are available to relevant indigenous peoples to defend their rights to land within the scope of the co-management agreement?

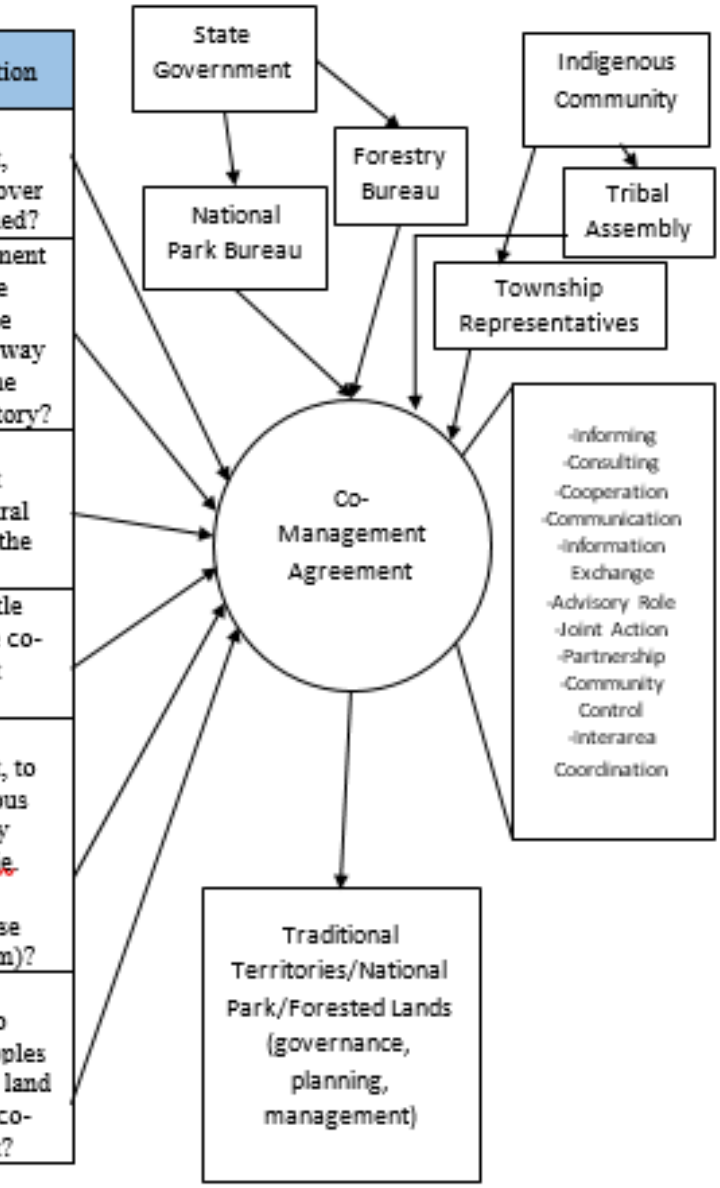

Figure 6- Procedural Flowchart

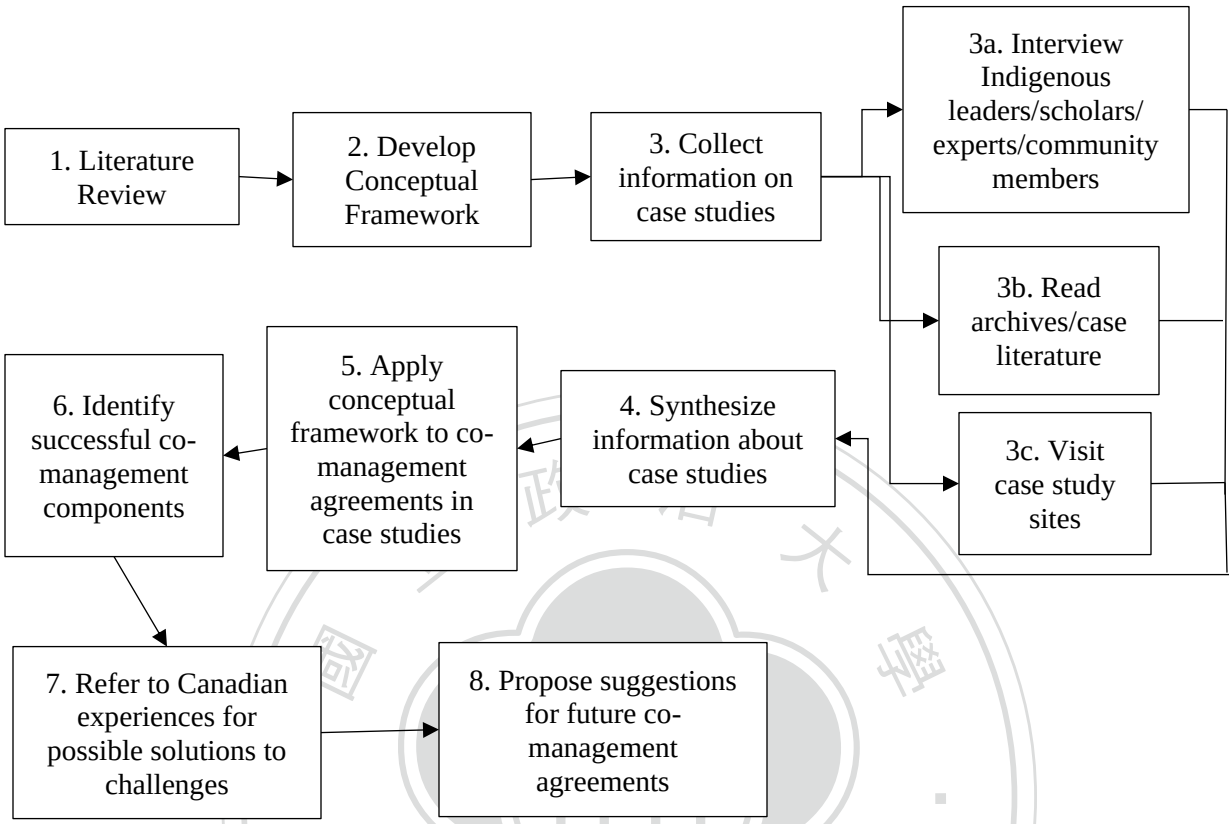

Figure 7- Author's interview with Tian Guifang in Taroko, May 21, 2017

Figure 8- Meeting at Kundagavane, Walking Workshop 2017

Figure 9- Rockslide near village of Adiri (Ali), Walking Workshop 2017

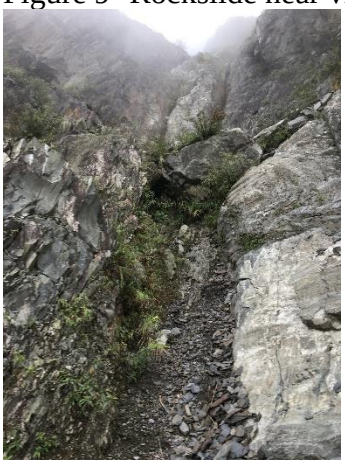

Figure 10- Walking Workshop participants in Taromak, Walking Workshop 2017

Figure 11- Rukai Community Council leader speaks at Adiri village, Walking Workshop 2017

Figure 12- Rukai women welcome participants to Rinari village, Walking Workshop 2017