



ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

www.ijhsd.greenlines-institute.org

International Journal of Heritage and Sustainable Development

Vol. 3, No. 1, 2013, pp. 53-61

A site of tensions: negotiating access and autonomy in the Ifugao rice terraces

Kathrine Ann Cagat

*School of Oriental and African Studies**University of London, London, UK*

k_cagat@soas.ac.uk

Since 2001, the Ifugao Rice Terraces has been listed as a UNESCO World Heritage Site in Danger. Maintaining the heritage site, while not curtailing needed infrastructure, has become a challenge. This research focuses on the link between heritage conservation efforts and development projects. The Ambangal Mini-hydro Plant, which began operation in 2010, is meant to provide alternative energy to Ifugao Province, and profit from selling the plant's generated power is invested in a heritage conservation fund. The hydro plant and ongoing conservation efforts, demonstrate the link between heritage conservation and community development. From ethnographic research done in Ifugao Province, I explore how diverse values are embodied and negotiated in the management of the heritage site and hydro plant. As this paper demonstrates, spatial relations are at the crux of tensions. Issues regarding access to resources, and autonomy over its management are entangled in people's sense of place.

© 2013 Green Lines Instituto para o Desenvolvimento Sustentável. All rights reserved.

Keywords: heritage, development, resource management.

Introduction

In 1995, The Rice Terraces of the Philippine Cordilleras became one of the first agricultural landscapes to be inscribed in the UNESCO World Heritage List. According to UNESCO's World Heritage List Operational Guidelines, the Ifugao Rice Terraces (IRT) were inscribed due to their, "outstanding examples of living cultural landscapes. They illustrate traditional techniques and a remarkable harmony between humankind and the natural environment" (1996). In 2001, the fragility of the structures was highlighted when it was added to the World Heritage in Danger List (UNESCO, 2002). Due to the cultural value institutionally ascribed to the terraces, its deteriorating state became a concern. The concern over the condition of the rice terraces has resulted in local, state, and international interventions, and efforts to manage the IRT has produced tensions. Communities are especially ambivalent of conservation efforts that will clearly come at the expense of economic activities and limit communities' access to resources.

In her study of the Angkor World Heritage Site, Miura observes that the 1972 World Heritage Convention acknowledges the relation of communities to World Heritage Sites. As Miura mentions, part of UNESCO objectives is to ensure that heritage sites contribute to the development of nearby communities, whereby community planning programs and protection of heritage are merged (Miura, 2005). Communities near heritage sites are sometimes underdeveloped, with very little infrastructure and limited education and health services. Eaton suggests that development objectives has become a component of conservation efforts, so that protected areas are not, "perceived as denying people access to their traditional subsistence resources" (Eaton, 2005). An awareness of heritage concerns may actually lead to, "substantive and meaningful activity, which, though beginning with material conservation efforts can...extend into more infrastructure development endeavours" (Giovine, 2009).

In order to bridge the need for the province's economic development and heritage concerns, development projects must now address how it will avoid impacting the landscape, or how it can

contribute to restoration of the IRT. Such was the case with the small-scale Ambangal Mini-Hydro Plant (AMHP) in the municipality of Kiangnan, Ifugao. The AMHP was funded by e8, an organisation that consists of leading, global electric companies from G8 nations. The project was designed and implemented by Tokyo Electric Services Power Company (TEPSCO) a subsidiary of Tokyo Electric Power Company (TEPCO), which was the e8 member who endorsed the project (e8, 2010). The construction and operation of the AMHP in Kiangnan is linked to conservation efforts since profit from the plant's generated energy must be invested in an Ifugao Rice Terraces Fund (IRTF). As such, an annual and more regular fund for conservation projects will be available. The establishment of the fund demonstrate the way heritage conservation objectives are being affixed to development plans, particularly infrastructure projects.

My approach to this research is to highlight how people's sense of place impact decisions and actions. In this case, places produce the very relationships they are an integral part of (Gell, 1992; Ingold, 2007). This approach will better illuminate the indelible link between dynamic subjectivities and environmental conditions. In the process of balancing conservation objectives and community development in Ifugao, values and subjectivities are negotiated amidst shifting socioeconomic conditions that is very much tied to the ever-changing landscape. In his conceptualisation of environments, Ingold notes that, a place "owes its character to the experiences it affords to those who spend time there – to the sights, sounds and indeed smells that constitute specific ambience...these in turn, depend on the kinds of activities in which its inhabitants engage in" (Ingold, 2000). My research documents and analyzes varying actors' responses to the changing environment to illuminate the transformative nature of place, its ability to incite change as it undergoes change, and from which, social and material engagements emerge.

Varied grounds

The IRT is both a cultural legacy and an agricultural field. Its maintenance goes beyond issues of authenticity and tradition. In fact, the management of the terraces concerns access to land and resources, along with people's autonomy over their economic activities. Ifugao values regarding their environment cannot simply be thought of as a particular world view, since such philosophies underpin people's agricultural practices. What is at stake in the management of the terraces are: claims to land, resources, and the right to regulate such claims. For that reason, place is as much about autonomy and access.

For the people whose quotidian occur in this World Heritage Site, the concern is not simply about having control of a place; more importantly, it is about having control over the mode of living in that place. Understanding the saliency of landscapes is particularly significant since, "food and economic security require access to land" (Pottier, 1999). In this case however, I suggest that landscapes are not simply there to provide land, which can be tilled and ordered. Nor are landscapes simply storage for resources. Instead, they are part of the very natural and social systems that allow for humans to dwell in a place.

When proponents of heritage conservation speak of the Ifugao's agricultural practices, sustainability is often linked primarily to the continued existence of rice terraces. However, it must be noted that Ifugaos acknowledge the cyclical nature of agricultural fields. As such, the cyclical change of land use is not necessarily seen as destructive. In Conklin's seminal research on Ifugao agriculture, he notes that transformations in land use may be seasonal, annual or indefinite (Conklin, 1974). When swidden fields are abandoned and left fallow, this does not indicate the farmer's complete detachment from it. Farmers do not automatically have negative responses to abandoned terraces overtaken by vegetation nor do they prohibit conversion of terraces for other agricultural purposes.

As Ifugaos frequently proclaim, land is life, since spatial engagements are not only an integral aspect of social relationships, they also produce them. This is articulated in the way land is classified, managed and transmitted. In fact, the role of rice in kinship is maintained through the distribution of land. Since the division of rice field between siblings is seen as a potential source of conflict, a primogeniture law is upheld. In this case, the oldest child, regardless of gender, is given the lion share of inherited property. The oldest child in return, is obligated to use their inherited land to support younger siblings. Though, this tradition is no longer upheld, its adverse effect created an imbalance of wealth, and consequently generated inequities within families (Barton, 1919; Brosius, 1988; Drucker, 1977).

Actually, issues regarding property were among the tensions that emerged before construction of the hydro plant commenced. The channel needed for the mini-hydro plant was over one kilometre in distance and must pass through private properties. As a result, each property owner must be compensated for the 'right of way'. However, some properties were owned by families or clans, so multiple individuals had claims to the land and its resources. As the provincial engineer explained, due to the compensation scheme stipulated by TEPSCO, only one individual can be deemed the rightful owner and claim payment. Thus, families and relatives had to settle who would be designated as a rightful owner. This person in return, would be responsible for dividing the compensation received. Similarly, issues regarding property occurred when individual trees were claimed by owners. Therefore, besides payment for the land cleared, each tree that was cut for the construction of the channel had to also be compensated.

While the previous practice of primogeniture law resulted in inequities within families, the practice was actually rooted in a philosophy of stewardship. The establishment of primogeniture inheritance laws were for the purpose of keeping properties intact, instead of divided into smaller plots and dispersed.

Owners of properties were meant to act as stewards. In this way, agricultural resources are safeguarded for future generations, and present possession is trivial compared to the family's claim and access to such resources. The practice of stewardship continues to the maintenance of muyongs, the clan or private forests.

For instance, embedded in the maintenance of muyongs are practices that serve as unwritten rules and proper management guidelines. Regulations regarding selective cutting or permission for access serve as protective measures. Even the practice of regular cleaning in the muyong serves two purposes. Regular cleaning rids the forests of reeds and underbrush that may prevent new growth. Additionally, it allows for boundaries to be clearly visible, and thus, prevent boundary disputes, especially after a change of ownership by way of inheritance or sale (Dulawan, 2002).

Just above the muyongs are forest areas. The upper sections of mountains are important watershed areas where human activity is limited and only gathering of fruits and vegetation is permitted. These areas are integral not only to water sources, but also for the prevention of landslides. This area ensures that the trees which capture water are not destroyed and thus, impacting water sources and soil stability (SITMo, 2008). Protection of these areas is supported by a social taboo that prohibits resource exploitation in the upper forests. Anyone who exploits resources in the watershed area risks disapproval from fellow community members, or worse, they may incur bad fortune.

Interestingly, though the heritage cluster of Nagacadan and Julongan are considered primary water sources for Kiangnan, neither village were considered host communities for AMHP. The host communities, as defined by TEPSCO, are only the three communities affected by the construction. Thus, Nagacadan and Julongan were not given their own percentage of funds from the IRTF. However, because they are heritage clusters, they are deemed priority villages to be funded by the LGU's share of the IRTF.

Land use below the forest areas and the muyong slightly vary between ethnolinguistic groups and therefore, municipalities, since ethnolinguistic groups are often related to geographical location. In the case of Hungduan and Kiangnan, residential areas populate the area below the muyong. These residential areas are often surrounded by planted trees and gardens and are located above the rice fields. In Kiangnan, building houses within rice fields is often a taboo, unless no other alternative land is available. Residential areas were traditionally built to accommodate access to rice fields, so houses were in close proximity, but not within, the rice fields.

However, Mayoyao is an exception due to the municipality's topography. Mayoyao is surrounded by steep mountains, and building within the surrounding mountains proved laborious and ineffective (Lambrecht, 1929). Mayoyao cultural values adapted to this feature by not setting cultural taboos regarding construction within the terraces. In Mayoyao, houses are dispersed within the terraces. From UNESCO's concern regarding infrastructure, they noted, "major threats to the rice terraces is extensive new housing construction along the access roads, and in some barangays, within the terraces themselves" (UNESCO, 2011). This gives the impression that building within the terraces is a modern practice. However, house settlement patterns within terraces are well documented as a traditional practice for certain ethnolinguistic groups of Ifugao. Any heritage conservation efforts concerning the terraces must take these cultural variances into account, because house settlements are not just about placement and location of houses, they are also about cultural mentality regarding what is allowable behavior.

Land zoning in fact, is guided by Ifugao spiritual values. The *huuwan' di nabugbugan di page*, the rice myth recited during the Ani, or harvest (Dulawan, 2005), serves as a way to transmit knowledge, to explain the logic behind cultural practices (Castro, 1983; Dulawan, 2005; Scott, 1975). In the myth, the protagonists are guided by deities instructing them on how to: till sloped-lands, smooth out terraced walls, make sacrifices, and invoke chants to keep pests away, or ensure bountiful harvest (Dulawan, 2005; Scott, 1975). Agricultural practices are done in a certain way not simply because it is ecologically sound but also, to serve the deities, in order to pacify the forces that may impact crops. In this way, people and places are deeply connected, since world views are manifested in the way people interact with their environment. Although agricultural rituals and oral traditions are no longer widely practiced, the principles featured in such cultural traditions, are implicated in how communities currently engage with their environment. As Ifugao religious values transform, the Ifugao community makes an attempt to find new meanings and motivations for continuing land management practices.

Particularly, pressures to provide tourist facilities or lack of available land have caused some residents to build in areas where they would not otherwise. In cases where it is a traditional practice to build within the terraces, an ongoing issue is the size of the house being constructed. As new economic opportunities emerge, sizes of homes become larger, sometimes in ways that impact what the surrounding environment can tolerate without being negatively affected. However, these global pressures have caused farmers to also consciously ponder and discuss motivations for the continuation of long established land use practices. Currently, farmers often talk about land management practices as paying respect to their ancestors, who taught them how to farm or who tilled the land that they now derive benefits from. Such agricultural traditions are also seen as a means to secure a dignified future for subsequent generations. Agricultural communities have also begun to strategize on how to better manage and regulate touristic activities with minimal impact and disturbances not just to the environment, but also to the lives of residents in heritage clusters.

In a conversation with Ms. Rachel Guimbatan, a technical advisor for Save the Ifugao Terraces Movement (SITMo), she stated that Ifugao culture is a culture of conservation. However, the environmental values of Ifugaos cannot be taken for granted. In the instance of Ambuwayya Lake in Kiangnan, some community members have noted that barangay boundaries have resulted in the neglect of the lake. As one community member noted, there was conflict between two barangays over the position of the lake, whether it belonged to Ambabag or Pindongan. During this time, residents disregarded maintenance of the lake for fear that if they invest on its maintenance, but the other barangay is named the rightful location, then they would have invested a great deal of effort on a resource they cannot claim. Since the lake also provides easy access to water for home consumption, some residents have siphoned water from the lake, thus furthering the decline of its condition. Therefore, though traditional values may be based on conservation, we cannot ignore the way lack of infrastructure, such as water utilities, can force communities to adapt practices against established values.

Interestingly however, inadequate electric utilities in Ifugao have resulted in the community's willingness to experiment with alternative-energy technologies. The topography of Ifugao, along with house settlement patterns, has made rural electrification a constant battle for the Ifugao Electric Cooperative (IFELCO). According to the director of IFELCO, because of the province's terrain, low-energy consumption and sparse population, some neighbourhoods cannot be cost-effectively electrified. As a result, some isolated sitios have taken advantage of abundant water sources by establishing pico and micro-hydro plants for electrification. The provincial government, facing challenges regarding the development of Ifugao Province and management of the terraces, saw the potential of hydropower technology to address both issues.

Location matters

UNESCO reports on the IRT acknowledge that the "most critical issue facing the IRT is its battle with conservation and development" (SITMo, 2008). These reports show a concern for the need to provide the marginalised communities of Ifugao Province with better infrastructure and health and education services. However, there is also fear that such developments may "adversely affect the local culture" (ibid) and compromise the heritage value of the landscape. The differentiation of core and buffer zones has led to inconsistencies on the development of municipalities in Ifugao. Core zones refer to the heritage clusters, the areas in most need of safeguarding. Buffer zones are areas of compromise, where regulated development may occur. Since Kiangnan's heritage cluster comprises of a distinct area, they are fortunate enough to have established residential and industrial areas outside the heritage cluster of Nagacadan and Julongan. On the other hand, the entire municipality of Hungduan is a heritage site. Thus, the entire municipality is a core zone, and development will be restricted in all areas of the municipalities. Fears on how improvements in the province's infrastructure may transform local practices, illustrate the reciprocal relationship between people and places.

Interestingly, the development of the mini-hydro plant emerged during a forum in Banaue, Ifugao, when the provincial government hosted potential NGOs and foreign agencies who could invest in conservation efforts. Initially, interest for the potential of a mini-hydropower technology was directed towards Hungduan, the neighbouring municipality of Kiangnan. However, the project was later denied. The comparison between Kiangnan and Hungduan reveal how the diverse landscape of the Ifugao province incited particular and inconsistent categorisation of heritage sites. Since the entire municipality of Hungduan is a heritage cluster, infrastructure projects in that municipality are much more restricted and monitored than ones in Kiangnan. In this case, the landscape inspires a conservation strategy, and this conservation strategy is then translated into a municipal development plan.

In 2003, Japan Consulting Institute produced a feasibility study report indicating Hapao, Hungduan to be an ideal site for a mini-hydro plant. However, the project was later denied, and no further study was conducted. In Hungduan, electrification remains a major development concern. According to Hungduan's Ancestral Domain Sustainable Development and Protection Plan (NCIP, 2006), only the village of Ba-ang is fully energized, and its energy supply is supplemented by micro-hydro plants. All other villages are only partly energized, with one village, Maggok, not energized at all. Even with such circumstances, Hungduan was denied as a mini-hydro plant site.

In 2004, members of the Sangguniang Bayan, the municipal council, discussed the 2003 feasibility study conducted in Hapao, Hungduan. Excerpts from the meeting minutes demonstrate that community members were not oppose to further studies regarding the construction of a mini-hydro plant. The following is stated in the minutes: "The purpose is development of our natural resources for the rice terraces and the mechanics were explained on how they will make it... ..not only the barangays, but also the municipality and the province as a whole to (sic) benefit from this" (2004). However, negative reactions from the community regarding the proposed mini-hydro plant cannot go unmentioned. From recent interviews with Hapao and Ba-ang community members, they expressed that many of them did not approve of the mini-hydro plant's design. The design would have required excavation through fields for the construction of the headrace. According to the feasibility study report, the design called for a tunnel to, "be excavated in one direction from the intake point to the water tank" (2003).

What must also be highlighted in the meeting's documentation is the presence of UNESCO regarding the project. The meeting minutes and my current conversations with community members

reveal that people have frustrations over certain agencies having significant influence on decisions for the municipality. As stated in the minutes of a municipal council meeting, "After the workshop, negative comments came out from JBIC, Manila and UNESCO but as direct stakeholders, we should be the one to give our comments regarding this" (2004). In the 29th session of the World Heritage Committee, the issue of hydropower plants in World Heritage Sites surfaced. In response to interests on hydropower development, the committee requested a monitoring mission to, "assess the impact of a proposed hydropower plant project on the heritage values of the property" (2005).

Hapao and Ba-ang community members have expressed their confusion and disappointment over the fact that since the community consultation meeting held in 2003, no other communication or information regarding the plant has been presented. The disappointment comes from the fact that while many of the community members opposed the tunnelling, they were nevertheless interested in alternative design schemes. Most importantly, they were willing to give mini-hydro technology a chance, in light of their electrification issues. For community members, the sudden discontinuation of hydropower study in Hapao gave the impression that the heritage concerns of external agencies were being prioritised over the interests of residents.

The need to reconcile development projects with heritage concerns has led to compulsory Environmental Impact Assessment (EIA) for all development initiatives (UNESCO, 2009). Such projects must also undergo a Heritage Impact assessment (HIA) and a Free Prior and Informed Consent (FPIC) from the National Commission for Indigenous Peoples (NCIP). Prior to the undertaking of the AMHP, Ambassador Preciosa S. Soliven, the Secretary General Of UNESCO National Commission of Philippines, recommended that a Cultural Impact Assessment be conducted (TEPCO, 2008). The reason the AMHP was supported by UNESCO is due to the fact that the hydro plant is constructed outside the World Heritage Property. The project also provides funding for conservation efforts, while providing the community with sustainable energy and employment opportunities (2009).

It must be noted that the initiative received support only after an extensive feasibility study was undertaken, in which members of UNESCO confirmed that the project will be able to avoid or alleviate any social and natural adverse effects (e8, 2010). From their evaluation report on the current state of the IRT, UNESCO stated, "mini-hydro plants should be permitted as long as they are mini-hydro plants and position...with minimal visual impact on the terraces and outside of the World Heritage designated areas, themselves" (2011). Before the plan was carried out, several potential sites were considered for the location of the power plant. In this way, the chosen site for the Ifugao-Ambangal Mini-hydro Project had to reconcile the tension between a development objective, such as electrification, and efforts on heritage conservation.

The matter of location for the site of the mini-hydro plant reveals a tension between concern for the state of the IRT and the need for much needed utilities. On one hand, requiring development projects to undergo EIA, CIA and FPIC is underpinned in commendable ethical and environmental concerns that endeavour to regulate potential exploitive and destructive projects. However, the root of the community's frustrations is not primarily directed at these regulatory practices. Instead, frustrations come about when restrictions occur without alternative plans or even the discussion of alternatives. This has resulted in community members feeling disconnected from decisions directed at the management and utilization of their resources.

Changes in place

While policies are ever-changing, they are still the outcomes of a particular time and place, and they are crafted by people who are under the same spatiotemporal restrictions. It is difficult to anticipate what issues may arise from policies, and even more difficult to craft policies that address future challenges. As a consequence, what result are policies which, "take as given what at the moment of their inception appears unproblematic, what appears eternally fixed and natural, but which subsequently becomes variable and problematic" (Burawoy, 1985). The same challenges exist for development projects. No matter how many impact studies or community consultations are involved, there will be some concerns left unaddressed, because they are unforeseen.

The construction of the mini-hydro plant created 180 hourly jobs, and its maintenance generated six full-time positions (e8, 2010). When possible, as the host municipality, Kiangnan residents were prioritised during the recruitment of labourers. Similarly, for the six full-time positions, residents from the three host villages, Amababag, Pindongan and Mungayang were also given priority over other candidates, provided they passed the required exam. Priority access to these job opportunities was a stipulation established by the host communities. In this case, connection to a place resulted in a direct link to opportunities. However, since an exam was required for the operators, claims to employment opportunities still had to be negotiated. Actually, out of the six operators, Mungayang is the only host community not represented, since no resident of Mungayang met the exam requirement.

As a result of the hydro-plant's construction and operation, the host villages also received improvements on their civil structures. Particularly, concrete lining of community irrigation systems (CIS) canals and maintenance and repair of stonewalls has occurred. Likewise, canals being used for the hydro plant also allow water to reach fields where destroyed CIS canals cannot reach. Cemented pathways were also created during construction. Isolated power has also become available for parts of Mungayang, lower

Ibulao and Baguinge, Kiangan. As such, the aforementioned villages can get electricity during power outages. Of course, there is now also available annual funding for terrace conservation efforts.

However, these positives results come with concerns. The three host communities are disappointed that they have not received any benefits in terms of electrification. The Provincial Planning and Development Office (PPDO) has mentioned that the plant is meant to generate power for sale to IFELCO and then invested in the IRTF. PPDO cannot control how this power is distributed. This is in fact a precise description of how the plant operates. The archived minutes does show that electrification of communities was going to be addressed. Excerpts from minutes of community consultation meetings show that members of Mungayang had as a condition, "Electrification of Barangay Mungayang" (NCIP, 2008). Consultation meeting minutes from 2007, also show that, "total electrification of the province is one of the priorities...The Provincial Government is to looking at micro-hydro systems to energize said areas" (TEPCO, 2008).

The design of the whole system called for electrical lines to be placed in very specific locations. Unfortunately, the locations of the erected electric lines and its coordination with the mini-hydro plant can only serve very specific villages during a power outage. As a result, due to the communities' disappointment regarding electrification, the plant operators must now have to field complaints from their fellow community members. However, these plant operators have no jurisdiction over how the power is distributed. In this way, the plant has had some unexpected impact in the social relations of community members. In understanding the unforeseen outcomes of the AMHP, I take note of Mosse and Lewis's observation regarding the implementation of policy into practice. As Mosse and Lewis suggests, policies, and perhaps in these case plans, cannot be taken as "an instrumental or scripted translation of ideas into reality, but as a messy free-for-all in which processes are often uncontrollable and results uncertain" (2006)

In the process of latching development projects onto conservation efforts, the risk is that socio-political concerns are framed to suit technical solutions (Li, 2007). What is implied in UNESCO reports and e8's energy initiative is that the maintenance of a World Heritage Site can contribute to solutions regarding the national government's neglect of the Ifugao Province. With the Ifugao-Ambangal Mini-hydro Project, e8 proposes that the facility will, "improve the lives of the terrace rice farmers," by providing the Ifugao Province with a much needed sustainable energy source, while implementing this particular technology as a means to fund conservation programs (2010). Buried under the heavy focus on sustainability and conservation, are issues of access and autonomy that are not being properly addressed.

The construction of the hydro plant and its link to conservation objectives has magnified current issues regarding access to resources (i.e. electricity, water, job opportunities or community funds). Likewise, it has revealed the inequities between heritage cluster communities and non-heritage agricultural communities. The provincial planner of Ifugao has expressed concern over the focus on the heritage sites. She has expressed dissatisfaction that funding is most often directed towards villages within the heritage clusters. As she mentioned, and as so many agricultural communities have highlighted, Ifugao Province, as a whole, consists predominantly of terraced, rice field cultivators, and yet support for farmers flow mainly to cultivators in heritage clusters. The notion of heritage then, must be questioned, since heritage agencies often have criteria for the designation of World Heritage Property that may not be in parallel with the community members own concept of their heritage.

This unequal distribution of resources is perpetuated by the IRTF, in which a bulk of the funds must be utilized to fund projects within the heritage clusters. It must be noted that this was a stipulation of e8 and TEPCO. Historically, previous availability of funding exclusively for heritage cluster has actually caused a breakdown of traditional values regarding community work and self-reliance. A tenet in Ifugao values is the importance of cooperation to assist each other with laborious tasks, especially agricultural tasks. Such a practice is called *ubbu* or *baddang*. Due to available funds, in some cases, communities do not make an effort to restore private stone-walls or CIS canals until they are given the funding.

Unexpectedly, non-heritage terraced communities, to cope with the lack of funding, has been able to better organize their irrigator's association and more regularly practice the tradition of community work. An irrigators association in Mungayang has developed a system of contributing a share of their rice harvest to the association; this share of rice is used as compensation for the labourers who maintain the CIS. In cases of emergencies, farmers in Pindongan also practice *ubbu* to repair damaged stonewalls for fellow farmers, especially if the particular paddy is crucial to the flow of water to other paddies.

Though, it must be noted that in other ways, communities in heritage clusters have been galvanized to actively develop strategies in managing their resources. The community of Nagacadan has institutionalized Ifugao values through a land use ordinance. With the crafting of the ordinance, traditional land use values have been translated as a means to regulate tourism and rapid overdevelopment. The ordinance was crafted by agricultural communities in Nagacadan, in collaboration with SITMo. The ordinance delineates the core, buffer and multi-use zones of the Nagacadan Rice Terraces and the heritage areas in Nagacadan, Kiangan. The ordinance also sets official regulations, which protects the *muyongs* or forests areas. Additionally, indigenous species must be the ones planted for reforestation. The ordinance demonstrates how people are translating their spatial relations into policies.

Similarly, the ordinance establishes an outline for community-based tourism. For instance, treks for tourists must be guided by locals. An environmental fee is also collected from tourists wishing to hike

within the heritage cluster. Just recently, a tourism symposium was held in Kiangán, Ifugao. During the symposium, a discussion on carrying capacity emerged. As such, the community is in the process of indicating how much visitors can the municipality receive, without resulting in disruption and negative environmental impact that the town cannot adequately manage. The barangay ordinance of Nagacadan also addresses infrastructure within their heritage cluster. The ordinance acknowledges that in cases when there are no alternative available land, property owners may build within terraces, but must follow restrictions on the extent and intensity of construction.

Informants from Nagacadan express that their land use ordinance is rooted in their ancestors' traditional practices, but now, these values are made official and legitimized through an ordinance. They however, also express that they are constantly faced with restrictions that limit their freedom to learn and experiment with solutions that address housing, development of roads or global forces such as, climate change. Community members proclaim that people who are prohibiting communities to experiment on solutions limit activities without proposing viable solutions. The benefit with allowing communities to problem solve, is that solutions are internalized. Through community-based problem solving in regards to irrigation or damaged walls, community members are forced to have a dialogue regarding their changing needs and concerns. These dialogues provide an opportunity for people to come up with ways to re-invent social values and practices.

The problem of electrification has motivated residents of Hungduan to come up with more efficient ways in getting electricity. This has resulted in community managed micro-hydro plants in the villages of Ba-ang and Maggok. The presence of such micro-hydro plants catapulted a collective, a cooperative of people who volunteer to manage the plant's operation and collect fees to ensure the hydro plant's sustainability. This demonstrates the reimagining of ubbu for the use of managing not just agricultural resources, but also technologies that address the problem of electrification. The micro-hydro plants are also a tangible materialization of the new alliances people have forged. The micro-hydro plant project in Maggok is operated in collaboration with SITMo along with Villanova University, an American institution. The Ba-ang micro-hydro plant was implemented in collaboration with Benguet State University.

In regards to management of the current IRTF, both the provincial and local government units have learned from past mistakes of funding support for heritage terrace farmers. Presently, conservation projects now operate under a counterpart system. In this case, funding will be given to a particular project, but the community receiving funding must also actively contribute to the project. For instance, the current scheme for stonewall repairs is that, if materials are bought with the IRTF, the community members will volunteer as labour for construction work. Alternatively, the community can provide materials, and funds will be available to pay the workers' wages. The aforementioned activities are proofs of the way communities may organically respond to the tension of conservation and development, and the way traditional values can be re-imagined as a means of solution.

Conclusion

Changes in Ifugao values should not be simply perceived as the breakdown of tradition, since tradition is not the preservation of the past, but rather the, "distinctive way of changing" (Sahlins, 1992). In this case, it is the framework that guides how people respond to unforeseen circumstances. In his study of Djenné's masons, Marchand reiterates that 'traditional' should not imply stasis; instead, 'traditional' should be understood as people's, "direct and un-alienated mode of production" (Marchand, 2009). The risk in how organisations address heritage conservation is that it may result in further restrictions on people's autonomy to make adjustments on their practices. Since tradition becomes an issue of livelihood, it is imperative that heritage concerns are discussed within the context of development.

The greatest frustration for community members within heritage clusters is that they are constantly faced with restrictions that limit their freedom to learn and experiment in coming up with solutions to problems impacting their environment, and thus, their livelihood. These restrictions are seen as blocks that prevent communities from accessing resources or opportunities that allow residents to better cope with their changing environment. However, one must acknowledge that conservation efforts have galvanized communities to think about their resources and how such resources are being managed and utilised. This paved the way for communities to be conscious of how their changing practices are reciprocally changing their environment in ways that may be counterproductive.

The fact that municipalities are now consciously pondering their management practices allow for strategies and dialogue that emerge from within the community. Such dialogue is necessary for internal solutions. Through on-going management of CIS, community based tourism and village-level electric cooperatives, people have been forced to discuss their changing values, and this has become a catalyst for the re-invention of traditional practices. Likewise, the aforementioned community endeavours can impact policy making and force politicians to address what is lacking in the communities they serve. The activities of Kiangán and Hungduan residents are evidence of the way communities may organically respond to the tension of conservation and development. Such activities reveal that traditional values can be re-imagined for solutions. Central to this process is that, as people adapt to their changing environment, they transform old material and social engagements or develop new ones. Integral to such engagements are people's sense of place.

The tensions that have emerged in the management of the IRT show the sometimes fraught relationship between conservation and development. This study can be part of the growing anthropological trend which connects conservation issues within wider context of food security, resource management and policy making. Since spatial relations often translate into access and rights, it is necessary to evaluate how the conceptualisation of places affects both spatial and social relations. Thus, with this research, I hope to make a case for the need to situate cultural heritage within the context of development discourse.

References

- Barton, R.F. (1919). Ifugao law. *University of California Publications in American Archaeology and Ethnology*, 15(1), 1-186.
- Brosius, J.P. (1988). Significance and social being in Ifugao agricultural production. *Ethnology*, 27 (1), 97-110.
- Burawoy, M. (1985). *The Politics of Production: Factory Regimes Under Capitalism and Socialism*. London: Verso.
- Castro, J. (1983). General introduction. In J. Castro & D. S. Feria, eds. *Anthology of ASEAN Literatures: Epics of the Philippines*. Quezon City: APO Production Unit Inc., pp.1-5.
- Conklin, H. (1974). Ethnographic research in Ifugao. In J. Kuippers & R. McDermott, eds. *Fine Description: Ethnographic and Linguistic Essays*. New Haven: Yale University Southeast Asia Studies, pp. 435-464.
- Drucker, C.B. (1977). To inherit the land: descent and decision in Northern Luzon. *Ethnology*, 16 (1), 1-20.
- Dulawan, M. (2002). *The Ifugao*. Manila: National Commission for Culture and the Arts.
- Dulawan, M. (2005). *Oral Literature of the Ifugao*. Manila: National Commission for Culture and the Arts.
- e8 (2010). *The Philippine Ifugao-Ambangal Mini-hydro project*. Montreal: e8.
- Eaton, P. (2005). *Land Tenure, Conservation and Development in Southeast Asia*. London: Routledge Curzon.
- Gell, A. (1992). The technology of enchantment and the enchantment of technology. In J. Coote & A. Shelton, eds. *Anthropology, Art and Aesthetics*. Oxford: Oxford University Press, pp. 40-63.
- Giovine, M. A. (2009). *The Heritage-scape: UNESCO, World Heritage, and Tourism*. Lanham: Lexington Books.
- Ingold, T. (2000). *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. London: Routledge.
- Ingold, T. (2007). Earth, sky, wind, and weather. *Journal of the Royal Anthropological Institute*, 13(SI), 19-38.
- Japan Consulting Institute (2003). *Feasibility Study report on Small-scale Hydroelectric Power Development Project at Ibulao Basin in Republic of the Philippines*. Tokyo: Japan Consulting Institute.
- Lambrecht, F. (1929). Ifugaw village and houses. *Catholic Anthropological Conference*. 1(3), 117-141.
- Li, T. (2007). *The Will to Improve: Governmentality, Development, and the Practice of Politics*. Durham: Duke University Press.
- Marchand, T. (2009). *The Masons of Djenné*. Bloomington: Indiana University Press.
- Miura, K. (2005). Conservation of a 'living heritage site' a contradiction in terms? A case study of Angkor World Heritage Site. *Conservation and Management of Archaeological Sites*, 7 (1), 3-18.
- Mosse, D. & D. Lewis (2006). Theoretical approaches to brokerage and translation in development. In D. Mosse & D. Lewis, eds. *Brokers and Translators: The Ethnography of Aid and Agencies*, Kumarian Press, Inc., Bloomfield, pp.1-26
- Nagacadan Barangay Council (2005). *An Ordinance for the core, buffer and multi-use zones of the Nagacadan Rice Terraces and the heritage areas in Nagacadan, Kiangan, Ifugao*. Ifugao: Sangguniang Bayan.
- National Commission of Indigenous Peoples (2006). *Hungduan Ancestral Domain Sustainable Development and Protection Plan*. London: NCIP.
- National Commission of Indigenous Peoples (2008). *Free Prior and Informed Consent Process (Consensus Building) for the Proposed Ambangal Mini-hydro Power Plant located at Ambangal Creek*. Ifugao: National Commission of Indigenous Peoples.
- Pottier, J. (1999). *Anthropology of Food: The Social Dynamics of Food Security*. Cambridge: Polity Press.
- Retsikas, K. (2007). Being and place: movement, ancestors, and personhood in East Java, Indonesia. *Journal of the Royal Anthropological Institute*, 13 (4), 969-986.
- Sahlins, M. (1992). The economics of develop-man in the Pacific. In J. Robbins & H. Wardlow, eds. (2005) *The Making of Global and Local Modernities in Melanesia*. Burlington: Ashgate, pp.23-42.
- Sangguniang Bayan (2004). *The Regular Session of the Sangguniang Bayan*. Ifugao: Hungduan.
- Save the Ifugao Terraces Movement (2008). *IMPACT: Sustainable Tourism and the Preservation of the World Heritage Site of the Ifugao Provinces*. Bangkok: UNESCO.
- Scott, W.H. (1975). *History on the Cordillera: Collected Writings on Mountain Province History*. Baguio: City Baguio Printing & Publishing.

- Tokyo Electric Power Company (2008). *Philippines-Ifugao Mini-hydro Project: Feasibility Study Report, 2008*. Tokyo: Tokyo Electric Power Company.
- UNESCO & ICOMOS (2011). *Report on the Joint World Heritage Centre/ICOMOS Reactive Monitoring Mission to the Rice Terraces of the Philippines Cordilleras*. Ifugao: UNESCO.
- World Heritage Committee - 19th Extraordinary Session (1995). *UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage*. Berlin.
- World Heritage Committee – 25th Session (2001). *UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage*. Helsinki.
- World Heritage Committee – 29th Session (2005). *UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage*. Durban.
- World Heritage Committee – 33rd Session (2009). *UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage*. Seville.

Acknowledgements

The field research presented was made possible with funding from Fulbright, Institute of International Education and Philippine-American Education Foundation. I thank Save the Ifugao Terraces Movement and National Commission of Indigenous Peoples – Ifugao for providing me with organisational support in Philippines. UP Diliman – School of Urban and Regional Planning deserve my gratitude for acting as my affiliate university during the duration of my field research. The following individuals shared with me their insights and comments throughout my research: Dr. Kostas Restikas, Marlon Martin, Dr. Adoracion Guinid, Esther Nalliw-Licnahan, Doreen Pawell, Rachel Guimbatan, Dean Candido Cabrido and Prof David Yap. Lastly, I would like to thank all my informants who kindly gave me their time and shared with me their thoughts.