Effects of Changing Landscapes on Hunting Practices among the Ayta Sambal

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Abstract

The devastation caused by the eruption of Mt. Pinatubo in Zambales and the subsequent evacuation of the Ayta Sambal living in the province became a turning point in their lives. Their traditional lifeway such as hunting and gathering could not be done in the relocation sites. Hence, the dire challenges have affected their means to securing food for their families. While the relocation sites provided them shelter and food during their temporary housing at the "tent cities," relief food no matter how substantial and regular cannot substitute for their main food staples. Some Ayta preferred to stay in the relocation sites in the centers, others chose to return to the "Baytan" (Eastern Mountains) and settle in government designated locations. Still others, like the residents of Patal Anawo decided to return to their place of origin. This study focuses on the Ayta Sambal in Patal Anawo as they grapple with the loss of game and the barrenness of the land that usually provided them wild plants as well. Nonetheless, they persisted in keeping their hunting and gathering practices despite the scarce food sources. What kept these meagre resources sustained was their being a small band of only 15 families left out of the original 50 families. Their inventory of food sources show sufficiency given their small population. The study also looked into how their traditions are transmitted to the young ones. Initial results provided their strong attachment to the land. Hence, their environmental recovery also determined their cultural recovery. They remain undaunted amidst the long term recovery that their lahar- covered areas will be replenished with similar resources that they enjoyed previously.

Keywords

Ayta Sambal, Hunter-Gatherer, Generational Transmission, Knowledge Transmission, Hunting Practices

1. INTRODUCTION

Hunting, in many indigenous cultures, is a culturally-defining trait and a source of pride among hunter-gatherer societies. This serves as an avenue to express and hone their food-procurement and survival skills as well as their knowledge of the environment. Hunters are usually composed of patriarchs and the ablest members (men and women) within the community who set out in groups, pairs or alone to provide meat and other food choices for the community.

Hunting is defined as a primary subsistence based on game; wild animals, fishing and gathering of wild plants to sustain their physiological needs [1]. At present, the Ayta Sambal seems to be identifiable with the first category of hunter-gatherers. They maintained their indigenous heritage while interacting with lowlanders, identified themselves as descendants of the early Ayta settlers of Mt. Pinatubo and have had close interactions with the Sambal lowlanders and other groups. They still possess continuous deep cultural practices but have to adapt in the changed environment due to a number of underlying factors.

According to Robert Fox's study on the diet of Ayta in the 1950s [2], the Ayta initially lived in the lowlands practicing swidden farming, harvesting what he calls "Old-World" crops found in Southeast Asia such as yams, taro, bananas and rice until the expansion of the Sambal which forced them to move to the uplands. This displacement forced the Ayta to rely more on hunting and foraging as there are limited farming opportunities in the mountains compared in the lowlands. However, at the time after Mt. Pinatubo's eruption, half of the Ayta population practiced "mixed foraging-farming" while the rest completely adopted a "full-fledged agricultural economy" [3]. Various elements contributed to this shift in lifestyle, one clear reason is the change in environment and the intermingling with other cultures during the diaspora that occurred. It is not clear when the Ayta assimilated the practice of farming, however, it is generally thought that they acquired the technology through interaction with the native Sambal [3]. Furthermore, study has also proven that resilience was formed significantly by the interaction between local people and their physical environment, such as through sustainable agricultural activities [4].

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The Ayta Sambal greatly depend on their natural environment for their livelihood wherein they acquire extensive knowledge and master it overtime in trial and error experimentation [5] and adopt new practices or alter existing ones as they cope with the changed in the environment. Almost three decades after, it has been identified that hunting and gathering has somehow declined in practice in relation to the other economic activities in the past [6]. Hunting is greatly affected by the decline of the resources and chance of catch due to resource depletion in often visited areas. Many of those are far beyond their reach due to the destruction of the forests and the access of the Sambal and other entities from the nearby provinces to their ancestral domain. Destruction of the environment and their source of living due to extreme natural phenomena deprived the Ayta on their main resources that forced them to rely on the external resources in order for them to recover and survive. The practice of small-scale farming and foraging like pamumuso, where they gain more profit after selling to the middle man or direct to the market to support their basic needs, are preferred over fulltime hunting.

Hunter-gatherer systems of knowing and explaining things are a collective wisdom and experiences in trial and error basis of generations occupying specific location or settings. Indigenous knowledge systems are the accumulated, validated and practiced knowledge through all time experiences and these knowledge and practices are generally adapted and passed over generation after generation among the members of the community [7]. Battiste [8], define indigenous knowledge, systems, [and practices] (IKSPs) as "...adaptable dynamic system, based on skills, abilities and problem solving, techniques that changed over time depending on environmental conditions...", this knowledge system has been primarily and significantly applied in hunting and gathering practices of the Ayta Sambal.

Ulukhaktok [9], the Cree women of Western James Bay [10] both in Canada, and of the Agta of Northern Sierra Madre [11] in the Philippines, this work seeks to contribute in the growing body of scholarship on the learning and transmission of traditional knowledge on subsistence activities with the revitalization and preservation of the Ayta Sambal's hunting knowledge as a primary objective. Indigenous knowledge plays an important role in the identification of one's identity over other indigenous communities or individuals, which contributes to the self-determination and empowerment of the community.

Today, with the changing dynamics between the Ayta Sambal, the environment and the increasing presence and influence of external factors, the hunting practice and knowledge of the Ayta Sambal might be at risk of being forgotten.

This study aims to explore the remaining resources found in their environment to sustain their daily food requirements; describe what indigenous knowledge, systems and practices (IKSP) relevant to hunting that are still practiced by them; establish how Ayta Sambal hunting knowledge is learned, shared and transferred amidst the changed landscapes; discuss the impact of this disaster and other factors on the survival or loss of Ayta Sambal hunting knowledge; establish the relationship between environment recovery and cultural recovery of the Ayta Sambal.

2. METHODOLOGY

Descriptive research method and Ethnographic Participatory Research was employed in the conduct of this study and in interacting with the participants. Semi-structured interviews were used to establish a baseline profile of Ayta Sambal hunters, create an inventory of hunting IKSPs based on their personal knowledge, and to determine how they acquire, transmit and share these in the community. Participant observation in the form of joining hunting trips and exploring the forest and nearby hunting spots played an important data-gathering approach to observe the actual hunting skills and practices of the hunters. This was also conducted to gather data for community-based activities relevant to hunting such as: game processing/preparation, craftwork, etc. Furthermore, Focus Group Discussion with the respondents, most importantly in the presence of the elders, provided the avenue of sharing to probe and obtain additional data regarding the community's traditional hunting knowledge and at the same time validate the responses and observations gathered.

This study sought out community members who are actively involved in hunting: elders, adults and the youth. Focus was given to each generation's memory and lived experiences before, during and after the Mt. Pinatubo eruption and how it affected their way of life as hunters.

This study was conducted in one of the settlements closest to Mt. Pinatubo, Sitio Patal Anawo of Brgy. Maguisguis, Botolan, Zambales. Patal, a Sambal word means "flat land" or plateau, while Anawo means "Anahaw" (Saribus rotundifolius) or footstool palm. Patal Anawo is one of the remaining Ayta Sambal communities which may be considered as isolated with minimal to zero influence from the lowlanders in contrast with acculturated Ayta Sambal settlements. Additionally, it is an ideal place to gather data on hunting as it is one of the communities nearest to Mt. Pinatubo where most of the game are supposedly found.

As of June 2018, The National Commission on Indigenous Peoples (NCIP) provincial office records show that the Ayta Sambal population in the Province of Zambales number 37,469. The same record indicates there were 200 Ayta families or 1,150 individuals from Brgy. Maguisguis, 16 families or 94 individuals of whom were from Patal Anawo.

RESULT AND DISCUSSION

2.1 Ayta Sambal Hunting Knowledge, Systems and Practices

Table 1 demonstrates the Ayta Sambal hunters employ several methods in hunting. Pamamana or archery or hunting with the use of bow and arrow is still the most prevalent method used by the Ayta Sambal in catching almost all types of game. Most adults are capable of wielding bows, but a few of the respondents preferred air guns and certain modified guns.

Trapping using silo is a general practice among the men, women and children. Children learn early by observing their parents, most notably their mothers, who set up these traps within the community vicinity as insurance when the men fail to catch any game.

Sap trapping or pag-gaet is another method used in conjunction with pamamana and is a practice enjoyed both by adults and teens. It involves the use of balete tree sap which turns into a tar-like sticky substance when cooked which is then spread in a tree branch, awaiting wild birds and other small animals to settle on it until they are stuck. Part of the process is setting up a cover made of branches and amukaw leaves called pangabong where the hunter and yes even the children, can hide and ambush the stuck animals.

Fishing or pandawo involves the use of goggles, bow and arrow, as well as bare hands. While there are small lakes in Mt. Pinatubo, most bodies of water near the community are wide and shallow but some are deep enough for fishes and other freshwater animals to thrive on. The Ayta Sambal use bow and arrows and sometimes their bare hands to catch fish, crustaceans and frogs.

Trail signs are also employed by the Ayta Sambal as a means of communication between fellow hunters and Amukaw gatherers. Specific formations of tree branches, leaves and stalks inform hunters where the hunting trail is, and where Amukaw is sparse or abundant.

The Ayta Sambal hunters refer to celestial bodies and constellations such as the moon and Orion's belt to determine time. Specifically, they wait for the moon to set before they start hunting as they believe that it is the perfect time when most of the animals are starting to rest and therefore easier to spot. They also refer to the location of Orion's belt, noting that when this constellation is seen farthest west in the night sky, it is time to return to camp for the sun is about to rise.

Table 1. Skills and methods employed by Ayta Sambal hunters

SKILLS/METHODS	USED FOR
Pangaho	All types of game
(Pangangaso)	
Pamamana	
Pangabong	Small-sized game (birds)
(ambushing)	Small to medium-sized game
Pag-silo	(manok-dikot, lamiran, barak
Pag-gaet (sap	(bayawak), etc.)
trapping)	
Pandawo	tilapia, biya, hipon, palos, etc.
(pangingisda)	
Trail signs	Tracking and locating
	destination (using twigs, leaves
	and stalks)
Celestial Navigation	Location and time tracking
	(Orion Constellation,
	particularly Orion's Belt)

Table 2 indicates the most common game caught by the hunters is jungle fowl and manok-dikot through pamamana and silo as they are seen all-year-round. Bats or kaging are usually caught using bow and arrow and are hunted as

they rest in secluded groves during the day. The Ayta Sambal has different names for the kaging, depending on its size: dikirik (small), kulumboy (medium) and panilaw (large). Lamiran, barak and biklat are occasionally caught and are quite prized to the point that whenever a biklat is caught, a feast ensues. Baboy-dikot or wild-pigs are now quite difficult to come by in the mountains, compared to the time before the 1991 eruption.

Table	2.	Animal	s found	in the	forest

GAME	SEASON
Manok-dikot (labuyo)	All year-round
Kaging (paniki)	All year-round
Baboy-dikot (baboy-	June - September
ramo)	
Lamiran (wild cat)	All year-round
Barak (bayawak)	All year-round
	(higher rates when full
	moon)
Biklat (sawa)	All year-round
Oyha (usa)	June – September (very rare
	or non-existent)
Buki (unggoy)	(very rare or non-existent)

Fishing is still as relevant as hunting to the Ayta Sambal as it diversifies their food consumption (Table 3). Hunters would go to nearby streams or rivers with their bows and arrows, tagging their children along to bathe while they fish.

Table 3. Marine animals commonly found around Sitio Patal Anawo

GAME	SEASON
Tilapia	All year-round
Hito	All year-round
Gagang (alimango)	All year-round
Ulang (hipon)	All year-round
Pahinga (palaka)	All year-round

According to the elder hunters, there were a lot of wild birds before the eruption. Most of them came back and repopulated the forests (Table 4). Lawin or hawks can be seen from time to time. The hunters are reportedly fond of buok or owl meat. The Ayta Sambal also name the birds depending on the colour of their feathers e.g. puyawan (redfeathered wild birds) and kulyawan (yellow-feathered wild birds).

Table 4. Wild birds spotted and/or caught by Ayta Sambal hunters

GAME	SEASON
Lawin	All year-round
Kulasisi	All year-round
Kuloklok	All year-round
Puyawan	All year-round
Tikling	All year-round
Bakaw (Tagak)	All year-round
Buok (Kwago)	All year-round
Korsiang (martinez)	All year-round
Tokmon (Bato-bato)	All year-round

Several animals that were quite abundant in the forests and mountains of Mt. Pinatubo before the eruption are no longer seen by hunters in recent memory (Table 5). At present, active hunters expressed that oyha (deer) and buki (monkey) haven't been spotted for quite a while in the hunting grounds around Patal Anawo. The informants and the community believe that their population never recovered. The older hunters shared that back in their day; the oyha and buki were quite abundant in the mountains and easy to spot when it rained. Like the baboy-dikot, these are easier to catch during rainy season. Among the animals that haven't been spotted for a long time now is the gahalaw

or kalaw (hornbill, Buceros hydrocorax) which is an important bird in most IP groups in the Philippines. However, according to other hunters, these animals still exist in different sitios outside of Patal Anawo.

Table 5. Endangered or rarely-seen animals

GAME	SEASON
Gahalaw	Used to exist in hunting grounds near
(Kalaw)	Patal Anawo
Oyha (usa)	June - September (very rare or non-
	existent)
Buki (unggoy)	(very rare or non-existent)

Table 6. Hunting technology and tools used by Ayta Sambal hunters

HUNTING	USED FOR
TECHNOLOGY/TOOL	
Bayi at Yawo (bow and	All types of game
arrow)	Commonly used for large game
• Palho (unbarbed or leaf-	and humans (self-defense)
shaped arrowhead)	
• Pehe (arrowhead with	
3-4 barbs)	
Tilador (rubber slingshot)	Small to medium-sized game
	(Manok-dikot, lamiran)
Utak (bolo)	Small to large-sized game
	(manok-dikot, lamiran, barak
	(bayawak), baboy-dikot); multi-
	purpose
Antoko (goggles) and	Fishing (tilapia, etc.)
asero (paltik)	
Traps	Small to medium-sized (Manok-
• Gaet (cooked Balete	dikot, lamiran)
sap)	Small to medium-sized (Manok-
• Hilo (snare trap or Silo)	dikot, lamiran, barak (bayawak)
Guns	Small to large-sized game
• Dibomba (Air-gun)	(Manok-dikot, lamiran, barak
Diposporo	(bayawak), baboy-dikot)
Aho (dogs)	Small to large-sized game
	(Manok-dikot, lamiran, barak
	(bayawak), baboy-dikot)

The Ayta Sambal employs archery in hunting through the use of bow and arrows or bayi at yawo as they call it. Bayi are made of flexible wood while the string is made out of the vines around a Balete tree. The different materials used in making the arrows are made out of local materials as well: young bamboo for the arrow shaft; manok-dikot or any jungle fowl's feather for the fletching; talo or beeswax for added grip to the nock. Finally, smithing is done with pieces of metal to form arrowheads with varying barb designs intended for different types of targets (Table 6). Almost all hunters in Patal Anawo currently use bow and arrows and the traditional method of hunting except for a few who are more proficient in using air guns. While the use of air guns may be more efficient than using bow and arrows, it's costlier due to the need to purchase ammunition (lead bullets) as compared with arrows which can be retrieved. In Patal Anawo, while most hunters are capable of using and repairing their own bows and arrows, only one elder remains to have the knowledge in creating arrowheads.

Tilador or rubber slingshots are a popular toy among the young Ayta Sambal. Made out of wood carved into a Y-shape and wide rubber bands or long strips of tire interior, most adolescent boys have their own tilador and are usually competing on who hits the Utak or bolo is a common weapon each hunter must have. Its versatility as a bladed weapon is essential in self-defence, in making camp and hunting prey.

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2.2 Game Preparation and Cooking

For the Ayta Sambal the capture of biklat or python, baboy-dikot or wild pig, and oyha or deer are celebrated with a feast where the whole community prepares and partakes of it. The hunters usually set out out at night to hunt for these animals while they rest.

The biklat is easily caught at night. Being cold-blooded, they are usually found in crevices and openings under trees. One cooking method is adobong biklat, prepared in five stages: 1) roasting, 2) skinning, 3) butchering, 4) boiling, 5) seasoning. Roasting cooks the external layers of the biklat's skin making it easier to skin. Some parts of the biklat are kept, like the gall bladder or apdo for preparing medicine to cure common illnesses such as stomachache, fevers, mumps and the like. The rest of the innards are cleaned and the head, stomach, and liver removed. The meat is cut into cubes and is then boiled with ginger to tenderize the meat and counter its gaminess. Lastly, the tender meat is cooked adobo style with garlic, onion, soy sauce, vinegar, pepper and laurel leaves. Another method of preparing biklat is to simmer, adding lemongrass and salt as seasoning.

Similar methods in preparing baboy-dikot and oyha are employed by the Ayta Sambal. Because of the activity of both these animals, their meat is expected to be tough so the Ayta Sambal usually simmer the meat mixed with sweet potato as alternative to rice. The hunters also enjoy some of the meat during hunting by grilling a part of the caught game in the hunting grounds, usually without any seasonings or salt.

2.3 Gender Roles

Before the eruption of Mt. Pinatubo, Ayta Sambal women used to go along hunting trips with men up in Mt. Pinatubo. The elder hunters shared stories where they went with their mothers, aunts and sisters along with their father to hunt for baboy-dikot. Generally, the role of women in hunting was to assist in encircling, leading and cornering game towards an ambush.

Eventually, women stopped joining hunts and focused on farming and gathering food and most importantly, raising the family although they retained the role in food preparation and cooking whatever the men brought back from the hunt. They also employed the use of hilo or silo and set these outside the community perimeter to trap small-sized game such as manok-dikot and lamiran as another food source in case the men came back empty-handed.

2.4 Hunting Knowledge Transmission among the Ayta Sambal

Through Observation and Participation, the young Ayta Sambal learns mainly by imitating observed actions and habits from adults and peers especially when it comes with hunting skills such as archery. This proactive imitation comes off as playing using scaled-down versions of hunting tools which are made for them by the adults. By observing and helping out on gathering the required materials, the child learns the crafting method. Early on, young Ayta Sambal display proficiency in using these tools. This mode of learning is very evident with the miniature-sized bows and tilador that these children use in targeting stationary and even moving targets like small animals. Children as young as four years old join in these kinds of games with their peers.

Apprenticeship in the context of Ayta Sambal society involves joining hunting trips with their father and or other adults and actively learning from them with a student-teacher dynamic. Young Ayta Sambal starts joining hunting trips as assistants or apprentices between 5 to 12 years old. While they are already proficient in using bow and arrows, and have experience in exploring outside to a certain extent, they still need guidance when it comes to tracking and dealing with large-sized game, cooperation, as well as in traversing dangerous and unfamiliar terrain in the mountain.

Independent discovery comes with the maturity of the young hunter. Some hunters started going on solo hunts past the age of 12 to test and gauge their skills and the teachings of their parents and senior hunters. This is also the phase wherein the young hunter learns on their own through trial and error in solo hunts and to exhibit independence by not requiring assistance or protection during group hunting.

Story Telling is one of the most common methods of transmitting knowledge since ancient times. This has been practiced by all civilizations more so by hunter-gathering societies. The oral transfer of their practices and knowledge is traditional methods of transferring knowledge inter- and intra-generationally as shared by many IP groups. This is usually done between hunters to exchange new knowledge, experiences and strategies when hunting. Children are also exposed to storytelling when the adults share their exploits up in the mountains and in sharing how they caught game, detailing the strategies, manoeuvring and cunning that they employed.

2.5 Factors Affecting the Survival of Ayta Sambal Hunting Practices

The devastation to the surrounding environment caused by the Mt. Pinatubo eruption abruptly halted the peaceful and normal life of the Ayta Sambal who considered this their ancestral domain. Thousands of Ayta Sambal families along with residents of nearby municipalities were displaced and forced to evacuate. Families were separated and communities were broken up during the different stages of resettlement. Unfortunately, the Ayta Sambal was not spared from this. Being a closely-knit society, the Ayta Sambal was affected by the diaspora that followed scattering families and clans towards different evacuation and settlement areas which made them more vulnerable. According to the hunters, their life in the settlements away from the forests affected their hunting practices. Being forced to stay in evacuation sites, the Ayta Sambal had to depend on relief goods and other assistance from the government and private agencies. Aside from this, the instability of the environment, death and migration of animals and the reformed landscape posed problems in hunting. These factors led most of the men to prefer jobs in exchange for money instead of taking risks in hunting. Thus, the Ayta Sambal were displaced from the mountain and forest, and forced to adapt and survive without it for several months and years. This disconnect between the Ayta Sambal and the environment led to the disruption in cultivating and passing on their hunting knowledge. As the hunters worked in fields and construction, the children had less opportunity to learn from them and to join hunting trips to imitate their practices, while the women focused on homemaking and in finding other means to help provide for the family.

Acculturation posed another significant threat to the continuation not only of the hunting traditions but the Ayta Sambal culture as a whole. During and after the tragedy, many Ayta Sambal who built good relations with the low landers opted to settle near the town, especially when they were given housing and land in settlement sites like Loob Bunga and Baquilan. The rest relocated on around five government resettlement sites and more or less forty offsite settlement areas they themselves identified or organized by an NGO. This proximity to the townsfolk sometimes lead to intermarriages and often result in the Ayta Sambal spouse getting assimilated to the family of the lowlander where their children are often raised as locals and not as Ayta Sambal. The Ayta Sambal also turned to pangangamuhan or 'cash for work' and worked for low lander families who were not spared of the disaster but had the financial means to recover quickly and employed them as house-help, farm workers and laborers. Some Ayta Sambal who were fortunate to meet kind and sympathetic employers were given opportunities to study and become professionals and skilled workers. However, though it can be argued that most if not all of instances of pangangamuhan were due to compassion and out of sympathy, it still had a significant effect on disrupting the transmission of not only the hunting knowledge of the Ayta Sambal, but also their culture and traditions to the younger generation where they were not only physically but also socially uprooted from their communities to work in nearby towns.

As for the Ayta Sambal who opted to come back to the mountains a few years later, they observed that the wildlife took more time to recuperate than the vegetation. Hunting was possible but was regulated to help the animals recover and so they pursued gathering and farming. Some plant species quickly reproduced such as the Amukaw, a type of palm tree which bears bananas with big seeds. They gathered its blossoms which are prized as a cooking ingredient by the low landers, capitalized on its abundance, and made it their main product and most profitable source of income. Even though the Ayta Sambal was able to find a source of livelihood through amukaw blossoms, this caused a noticeable shift on their views on hunting. The men and former hunters were expected to focus on gathering amukaw blossoms to afford rice, coffee, sugar and other town products which were introduced to them when they were in the evacuation areas. Hunting was increasingly relegated as a secondary subsistence procurement activity or sometimes treated as just a past time. Its importance was overshadowed by the introduction of the Ayta Sambal to "money economy" where sacks of gathered amukaw blossom and other farming produce is exchanged for money which they in turn use to buy goods and food in town.

Another practice that the Ayta Sambal brought with them from town was the use of guns in hunting. An Ayta Sambal acquires a gun in exchange of cash, goods, and animals or through rent where the real owner gets a share of the profits that the hunter gets from selling the game he caught. Guns that the Ayta Sambal has reportedly used vary from air guns, to modified guns or paltik up to actual rifles. While the use of guns was never prohibited in Ayta Sambal culture, its introduction and use affected the hunters to the point where there were older hunters who lost mastery on the use of bows. There were also some cases of adults who grew up using air guns and didn't even had the chance to learn how to craft and use their traditional hunting tools. This led to deterioration on the skills of the elders and disruption in teaching the youth how to effectively use their hunting knowledge and apply them traditionally.

One common idea both the Ayta Sambal in the lowlands and uplands were exposed to and now share from their varied encounters with other groups is the idea that 'education is the only means to progress. This idea stemmed

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from the discrimination and exploitation that they experienced when dealing with low landers where they were abused in the trading of their goods. Examples of these unfair treatment are: their products are priced very cheaply as compared with its actual market price because of their limited knowledge of basic numeracy and the dominant language; some were misguided into selling, forfeiting or bartering plots of land in their ancestral domain through deceit or unfair means; they were generally treated as illiterate and in some cases are seen as second-class citizens, and; they were given less priority in public institutions or government agencies, especially in hospitals, among others. These issues led the Ayta Sambal to think that their children need to pursue education in order for history to not repeat itself and for them to avoid other hardships that their ancestors and parents went through. However, their desire to escape "poverty" and discrimination comes at the cost of their own identity as indigenous peoples. Sending their children to schools and other barangays to study what mainstream education wants them to learn uproots them from familial and societal ties with the community and the land and robs them of the opportunity to develop as individuals who are knowledgeable and proud of their own cultural identity. This kind of desire and its subsequent effect is also present in other IP groups throughout the Philippines and the Ayta Sambal of Sitio Patal Anawo is not exempt.

Lastly, the issue of 'prioritizing education' are the lack of interest and/or reluctance of the youth, particularly the teenagers, in joining hunting trips. According to the hunters, the teens would avoid joining hunting trips up in the mountains for fear of the environment. The influence of 'western' idea of progress, the shifting interests towards studying in school coupled with new hobbies and use of gadgets like cell phones now occupy the teenagers' time and attention. These factors affect their willingness to learn, observe and preserve their cultural identity and traditions as Ayta Sambal hunter-gatherers.

2.6 Relation between Environmental Recovery and the Cultural Recovery of the Ayta Sambal

The issues and factors discussed in the previous section represent the obstacles that the Ayta Sambal currently faces in preserving their culture and traditions as hunters. However real and difficult these obstacles may be, it is fortunate to note that in Sitio Patal Anawo, traditional modes of cultural transmission are still in practice. Owing thanks to the steady recovery of the environment and tempered by various environmental and social issues, the Ayta Sambal still strive to value and practice their IKSPs.

Although several animals such as the oyha, buki, and gahalaw have disappeared since the eruption, the hunters have reported that they have had increased success rates hunting common game such as manok-dikot and other wild birds, lamiran and barak in recent years ensuring a steady supply of meat and a balanced diet for the Ayta Sambal.

The aloof baboy-dikot is still spotted from time to time and when caught, brings out Ayta Sambal values such as cooperation, collaboration where the community members help the hunter/s to transport the carcass to the community. The value of communal sharing is practiced when the hunter/s, after getting their own portion, share their catch with the rest of the community, usually celebrated in the form of a feast. These value systems are what strengthen the Ayta Sambal as one family and community.

The observed resurgence of interest from the toddlers and adolescents spark the continued survival of Ayta Sambal hunting practices. As observed during immersion activities and various visits, the children of Sitio Patal Anawo exhibit much promise in using traditional hunting tools which they continually hone as they roam around and play. Their proficiency in hitting moving and non-moving targets using miniature bow and arrows and sling shots, and their substantial understanding of different hunting strategies as they relate it in detail in the form of stories is a testament to the success of hunting knowledge transmission of the Ayta Sambal in Sitio Patal Anawo.

3. RECOMMENDATIONS

Future studies should build on the findings of this research to develop the existing literature on the indigenous knowledge systems and practices of the Ayta Sambal. Future research should validate the data gathered in this study by verifying if the hunting practices in other Ayta Sambal communities are still relevant as it is currently in Patal Anawo.

It is recommended that the data gathered by this study should be used in crafting a localized and/or indigenized lesson plan to scholastically convey the fundamentals, value and importance of hunting knowledge and other IKSPs to the younger generation of Ayta Sambal in a classroom setting. This will in turn allow young Ayta Sambal students to gain understanding of the concepts, methods and skills needed in hunting and survival in the mountains as supplement to the actual hunting trips that they join or will be joining along with the adults which are treated as practical activities.

Designated government agencies should empower the Ayta Sambal and assist them in dealing with issues in regards with encroachment, exploitation and other concerns that infringe on their rights as Indigenous Peoples, more importantly on their ancestral domain.

Community leaders and hunters should influence the youth to join in hunting activities and actively search for apprentices to ensure the continuous survival of their current IKSPs. The hunters should be more steadfast in making teenagers join hunting trips instead of staying at home fearing the environment. The organization of a regular program like 'summer camps' should be considered to provide the hunters and the children an avenue to focus on learning hunting and survival IKSPs and other relevant cultural knowledge.

4. CONCLUSION

Even though the eruption temporarily made hunting difficult for a few years and rendered several practices and knowledge potentially irrecoverable, it is this same disaster which highlighted the Ayta Sambal's incredible resilience and sparked their desire to survive amidst adversity with their innate strengths as hunter-gatherers.

Currently, the Ayta Sambal's hunting knowledge and practices continue to survive. The breadth and depth of the hunter's knowledge in their hunting IKSPS, the methods that facilitate its transmission and the extent to which the children at present can share and demonstrate these IKSPs indicate an active transmission of knowledge, methods and skills from one generation to the next. Unfortunately, a few hunting IKSPs were found to be in danger of being lost due to several factors such as disappearance of animals, lack of interested successors, and/or due to the indifference of knowledgeable elders like in the case of arrowhead crafting.

Despite the changing environmental and societal landscape, hunting still holds a significant importance in how the Ayta Sambal live (balanced diet, preservation of culture, cultural bonding, physical fitness, social status, etc.). This is implied in how the community positively reacts or celebrates when the hunters are successful; how hunters with a collection of animal parts under their roof are respected; the need for Ayta Sambal to stay in shape and in top condition to participate in hunting; and the simple camaraderie and bond that hunters develop while out in the mountains sharing a common goal. These kinds of benefits that result from hunting help maintain the cultural identity of the Ayta Sambal as hunter-gatherers.

The Ayta Sambal's experience during the eruption and their subsequent evacuation and relocation heavily exposed them to unfamiliar ideas, living conditions and situations that both helped and harmed them. Acculturation was a big part of this experience which required a few of them to set aside their traditions and culture in order to survive and adjust to their current situation. Their introduction to the cash economy also influenced their preference in terms of subsistence procurement where they opted to prioritize gathering and selling amukaw blossoms to purchase food in place of hunting and direct consumption. New technology shared by the low landers also left its imprint on the hunting practices of the Ayta Sambal, supplanting their traditional bow and arrow with more powerful and efficient technology such as guns. However, guns never became popular with Patal Anawo hunters due to several disadvantages, primarily due to its incompatibility with their hunting values and practices. Education also played a part in influencing how the Ayta Sambal viewed their culture and traditions. In light of the hardships they faced, they regarded education as a very important factor in order to gain status, recognition and respect from the lowlanders; a means to escape poverty and marginalization to which they are currently being subjected in. This idea transformed their view on how to live their lives as hunter-gatherers, sending their children to faraway barangays to be schooled which left the hunters without apprentices and exposed the children to different influences that might transform and estrange them from their traditions and the land. Examples of this are new ideas, technology and habits that the children develop while attending school like the use of cell phones, watching television, indifference to tradition and customs, and fear of the environment.

5. ACKNOWLEDGMENTS

The authors would like to thanks to the participation of and the unconditional support from Lyceum of the Philippines University.

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