

SAFEGUARDING INTANGIBLE CULTURAL HERITAGE FROM DISASTERS AND CLIMATE CHANGE

AN ETHNOGRAPHIC STUDY IN IFUGAO, PHILIPPINES

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BACKGROUND

Overview of ICH in the Philippines

The Philippines has about 14-17 million indigenous peoples (IPs) belonging to 110 ethnolinguistic groups mainly concentrated in Northern Luzon (33%) and Mindanao (61%), with few groups in the Visayas area (Camacho et al., 2016; UNDP, 2010). Over the years, the IPs have practiced the intangible cultural heritage (ICH) that includes oral traditions and expressions; performance arts; social practices, rituals, and festive events; knowledge and practices; and traditional craftsmanship, which was passed on from one generation to another. For our humanity and culture to survive, it is inevitable to safeguard our ICH which serves as the living heritage. To carry out such an obligation, the National Commission for Culture and the Arts (NCCA) ratified the 2003 Convention after its formal deposit in August 2006. As part of the Philippine government's commitment to the convention, it must identify and document ICH elements, safeguard and promote ICH; foster scientific, technical, and artistic studies, and provide technical assistance and training in the field of ICH.

Currently, the country has a total of five ICH elements inscribed in the UNESCO Representative List of the Intangible Cultural Heritage of Humanity as follows: *Hudhud* chants of the Ifugao in 2001; *Darangen* epic of the Maranao people of Lake Lanao in 2005; *Punnuk* tugging rituals and games in 2015, also of the Ifugao; *Buklog* of the Subanen people in 2019 and the School of Living Traditions for good safeguarding practices in 2021. In 2013, NCCA in collaboration with the International Information and Networking Centre for Intangible Cultural Heritage in the Asia-Pacific Region published *Pinagmulan: Enumeration from the Philippine Inventory of Intangible Cultural Heritage (PIICH)*, which was edited by Jesus T. Peralta. It contains the initial inventory of 335 ICH elements and elaborate discussions on the 109 elements. The Philippine inventory details the first batch which is currently being updated and results may be released in 5-10 years after the second batch of elements documentation undergoes the scientific process. The *Darangen* epic, *Punnuk*, and kinds of traditional healing practices such as *manghihilot* and *albularyo* healing practices, the belief of *buhay na tubig* (living water), *baglan* and *mandadawak* healing practices, and stone beliefs of Itneg in Abra and *magtatawak* healing practices of Marinduque were featured between 2015 and 2017 in UNESCO's Intangible Cultural Heritage Courier of

1 Mobilizing Futures Interdisciplinary Research and Development

2 Save the Ifugao Terraces Movement

Asia and the Pacific. As of 2016, there are 367 elements enlisted under the PIICH, the official ICH inventory of the Philippines. All elements are listed under the Philippine Registry of Cultural Property, the official cultural property inventory of the country, including both tangible and intangible cultural properties. Presently, an ongoing nomination on the Aklan piña handloom weaving is being worked on by the NCCA.

OBJECTIVES AND METHODOLOGY

The research objectives include the following:

- (1) identify varieties of ICH in the community, including the knowledge and practices that are related to Disaster Risk Reduction (DRR);
- (2) identify the community's disaster risks in general, and assess associated risks on ICH;
- (3) raise awareness among community members and ICH practitioners on:
 - (a) the disaster risks on their own ICH,
 - (b) elements of ICH that are helpful for DRR; and
- (4) Discuss with the community:
 - (a) how to reduce the risk of disaster damaging ICH, and
 - (b) how to utilize ICH for the community's DRR, to develop action plans.

The methodologies and data sets implemented (Table 1) took these objectives into account.

Table 1 Summary of Research Objectives, Data sets, and Methodologies

| No. | Research Objective | Data Sets | Methodologies |
|-----|--|---|--|
| 1 | Identify varieties of ICH in the community, including the knowledge and practices that are related to DRR | Varieties of ICH, DRR-related knowledge, and practices | <ul style="list-style-type: none"> •Secondary data collection regarding ICH •Key Informant Interview with SITMo, NCCA and IHPAS •Focus Group Discussions for the identification of ICH with women, men, farmers, Indigenous Peoples Mandatory Representatives (IPMRs) and elders |
| 2 | Identify the community's disaster risks in general, and assess associated risks on ICH | Disaster risks and its relationship with ICH | <ul style="list-style-type: none"> •Secondary data collection i.e., gathering of hazard histories, DRRM plans, Contingency Plans, LCCAP, and laws and policies on ICH and DRR •Key Informant Interview with MDRRMO, Youth representative, and Women's Association representative •Focus Group Discussion with women, men, farmers, IPMRs and elders •Disaster timeline workshop with the above section •Research Outcome Presentation and Validation workshop with the elders, Kiangon LGU, and NCIP field office |
| 3 | Raise awareness among community members and ICH practitioners on a) the disaster risks on their own ICH, and b) elements of ICH that are helpful for DRR | Compilation of disaster risks associated to ICH and good practices on ICH for DRR | <ul style="list-style-type: none"> •Research Outcome Presentation and Validation workshop with the elders, Kiangon LGU, and NCIP field office |

| No. | Research Objective | Data Sets | Methodologies |
|-----|--|------------------|--|
| 4 | Discuss with the community a) how to reduce the risk of disaster damaging ICH, and b) how to utilize ICH for the community's DRR, to develop action plans. | Research Outcome | <ul style="list-style-type: none"> • Research Outcome Presentation and Validation workshop with the elders, Kiangang LGU, and NCIP field office |

Processing of Free, Prior, and Informed Consent

In the Philippines, the National Commission on Indigenous Peoples (NCIP) requires the processing of Free, Prior, and Informed Consent (FPIC) before performing research with the IPs/indigenous cultural communities. This is specified in the NCIP Administrative Order No. 1, series of 2012 or 'The Indigenous Knowledge Systems and Practices (IKSPs) and Customary Laws (CLs) Research Documentation Guidelines of 2012'. This process is in line with the implementation of the Indigenous Peoples' Rights Act (IPRA) of 1997, also known as Republic Act 8371. With this, the research team has gone through the following process to carry out the data-gathering methodologies in the field:

Submission of FPIC application to NCIP-CAR

This process required the submission to the NCIP-Cordillera Administrative Region (CAR) of the following: filled-up application form, research overview, proposed activities, interview guide, focus group discussion guide, the profile of the researcher, affidavit of undertaking to agree to shoulder the administrative costs incidental to the research and payment of Philippine peso (Php) 500 filling fee at the NCIP Regional Office cashier.

Conduct of pre-IKSP conference with the team leader

Two weeks after the submission, the NCIP-CAR was able to mobilize the members of the IKSP from the Tinoc Field Office and a work order has been issued to conduct the Pre-IKSP Conference with Atty. Cynthia L. Dogwe, the IKSP team leader. At this conference, she explained the process of acquiring a certification precondition to facilitate the process of research data-gathering. She also noted that a work plan will be prepared detailing the process and logistical needs to be budgeted. Initial scheduling of activities was also done, including Conference and Disclosure, Resolution Making, Negotiation, and Memorandum of Agreement (MOA) signing.

Conference and disclosure

Two and a half weeks after the Pre-IKSP Conference, the Conference and Disclosure was held in Kiangang, Ifugao, the field site of the research. This conference was held to orient the ancestral domain (AD) representatives about the provisions of the IPRA and the FPIC process in relation to the proposed research. The research team also presented the process and activities to be done to accomplish the desired research output.

Community decision-making, resolution-making, negotiation, and MOA signing

On the same day, the AD representatives came up with their decisions on whether to allow the proposed research to proceed. In this process, they asked questions to the research team and negotiated the terms and conditions to be stipulated in the resolution and MOA. An ICC Resolution and Memorandum of Agreement were signed among the research team and the community members to obtain the Certification Precondition. The data-gathering process can only take place once these documents are released by NCIP-CAR.

Awarding of certification precondition

After the completion of the IKSP report prepared by the IKSP team and submitted to NCIP-CAR, a certification precondition was awarded to the research team to be able to facilitate the research field data-gathering.

Field Data Gathering

The field data-gathering took place for four days after the certification precondition was issued. The team employed the following processes:

Key informant interviews (KIIs)

Key informant interviews were done with the Save the Ifugao Terraces Movement (SITMo), NCCA, Tourism officer, and the Ifugao Intangible Heritage Performing Arts Society (IIHPAS) to identify the varieties of ICH in the community, including the knowledge and practices that are related to disaster risk reduction. The Provincial Disaster Risk Reduction and Management Office, Municipal Disaster Risk Reduction and Management Office, and Youth and Women's representatives were also interviewed to identify the community's disaster risks in general and assess associated risks on ICH.

Focus group discussion

Focus Group Discussions were conducted with women, men, farmers, Indigenous Peoples' Mandatory Representatives (IPMRs), and elders for the identification of ICH and community's disaster risks in general and assess associated risks on ICH.

Research Validation

After a month, a data validation session with the IPs/ICCs was conducted by the research team in collaboration with NCIP-CAR and the Field Office to check the result of the research as required by the MOA. This was completed through the presentation of the research outcomes and the certificate of validation was signed by the community members to ensure that they were duly consulted by the research team.

Once the research is published, the research team has to submit copies of the publication to the ICCs/IPs of the Tawali in Banaue Ancestral Domain represented by their elders/leaders, Sangguniang Bayan ng Kiangan, Office of the Municipal Mayor, NCIP-Tinoc Service Center, NCIP-Ifugao Provincial Office and NCIP- CAR.

ABOUT THE FIELDSITE

The province of Ifugao (Figure 1) is one of the six provinces situated in the CAR (Figure 2). It is the only locality in the Philippines that has two ICHs inscribed in the UNESCO intangible heritage element – the *Hudhud* chants and the *Punnuk* traditional tugging ritual. It has an area of 251,778 ha., and lies around a latitude of 16° 35' north and a longitude of 120° 50' east. The highest elevation is 2,523 meters above sea level with the rice terraces lying above 500 meters above sea level. It is bounded by the Magat River along the southeastern side and many of the upland areas are abode to gigantic dipterocarp and pine trees. The province is composed of 11 municipalities.

The Ifugao rice terraces of the Philippines found in the province were listed as one of the UNESCO World Heritage sites in 1995 and are one of the only two (the other being Hani Rice Terraces in China) world-renowned terraced paddy rice fields with a long history listed in the Globally Important Agricultural Heritage System (GIAHS) in 2001 by the Food and Agriculture Organization (FAO) for their wonderful landscape, farming systems and rich functions (Aguilar et al., 2020; Camacho et al., 2016; Herath et al., 2015). One of the five rice terraces listed is in Kiangan, the Nagacadan terrace, which was selected as the field site of this ethnographic research. The said terrace is also included in the GIAHS because of its reported continuous cultivation of traditional rice varieties using indigenous farming methods (Aguilar et al., 2020; Fao-Gef, 2014; FAO, 2017). However, these terraces were reclassified to the World Heritage in Danger List in 2001 because of the ‘human-induced threats to the site and the need to concentrate national and international energies on short-term and long-term remedial and protective actions’ (Camacho et al., 2016; UNESCO, 2008). Dizon et al. (2012)

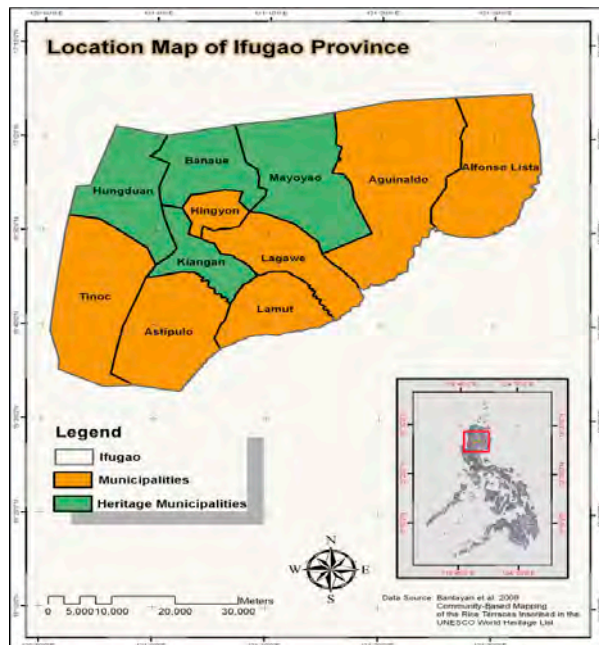


Figure 1 Location Map of Ifugao Province (Source: Dizon et al., 2012)



Figure 2 Location Map of Cordillera Administrative Region (CAR) (Source: Manuta, 1993)

noted that the terraces' deterioration is due to the loss of biodiversity because of bio-piracy, unregulated hunting, indiscriminate use of new technologies, introduction to new species, accelerated erosion and siltation of the watershed, and reduced farm labor due to out-migration. More importantly, the ICH related to traditional rituals and agricultural practices of the Tawali Ifugao (Table 2) must adapt to the shifting climatological norms.

Table 2 Tawali Rice Production and Consumption Rituals and Activities (Source: Tawali Women, Men, Farmers, IPMRs and Elders)

| Ritual and Activity | Purpose |
|---------------------|--|
| <i>Lukya</i> | A rite performed in the granary or <i>alang</i> by the <i>mumbaki</i> for the family just before the working period starts in the agricultural calendar. This also marks for the first time that the bundled palay in the granary may be taken out for the family's consumption. |
| <i>Ubaya</i> | A ritual that is sometimes performed to support the <i>lukya</i> . It is performed in the village, preferably in the house of the family in whose granary the <i>lukya</i> was first performed. <i>Tungo</i> or a day of idleness is observed the following day. People may stay home and no visitor is allowed to enter the village. After the <i>tungo</i> , other families in the village may also perform <i>lukya</i> . |
| <i>Langiang</i> | This rite is only performed when a long-abandoned ricefield is operated. Ten chicken are offered to the gods. |
| <i>Hipngat</i> | This is performed in the granary, offering four chickens and done after the general cleaning of the ricefield or the <i>ahugabut</i> , when the fields are robust with vegetables planted on the <i>pingkol</i> . The purpose of the practice is to invoke the gods to bless the palay in the granary so that it will not be easily consumed and it will give strength to the owner/eater. |
| <i>Ahiballin</i> | This is done by turning the rice stalks and grasses that emerged from the mud. |
| <i>Panal</i> | A rite performed in the granary with four chickens for offering. <i>Panal</i> means laying the seeds. The rite is done to ask the gods to bless the rice seeds so that all sprout will become robust seedlings. The following day is <i>tungo</i> . |
| <i>Ahihopnak</i> | After the observation of <i>tungo</i> , the following day, the <i>binong-o</i> or the bundles of rice seeds are carefully laid panicle. |
| <i>Hagophop</i> | A rite performed in the granary about a month after the <i>kulpi</i> . This marks the beginning of the <i>ahikagoko</i> . |
| <i>Ahikagoko</i> | This is the wedding period of the ricefield and replacing the dead or stunted rice plants taken from the <i>inhuj-in</i> or reserve seedlings. |
| <i>Bodad</i> | This rite is performed prior to <i>ahiloba</i> and <i>ahidalu</i> . Three chickens are offered to the gods, petitioning them to make the plants bear abundant grains and prevent rats from eating the palay. |
| <i>Ahidolya</i> | The practice to prevent rats from infesting the rice plants or <i>palay</i> , the surroundings of the ricefield has to be cleaned. The grasses are used as <i>dolnat</i> (to cover the rat passages). |
| <i>Ahi-adug</i> | The process wherein the fields are decorated with scarecrows, cloth hangings, four or five run reeds with leaves, bundle of <i>runo</i> to the other, connecting the end of the vine to the post of the <i>allung</i> (a small hut for shade). When there are rice birds, the vine is pulled and all the bundled <i>runo</i> will move, scaring the birds away. |
| <i>Paad</i> | This is the rite performed in the granary when the rice grains are about to mature. Three chickens are sacrificed to the gods petitioning them to cause the rice plants to yield plenty of grains. This is also performed to make a promise to the gods to refrain from eating aquatic foods and certain vegetables until after the harvest. |

| Ritual and Activity | Purpose |
|---------------------|---|
| <i>Ahi-ani</i> | Harvest time |
| <i>Ngilin</i> | This rite is performed in the granary before the start of the actual harvest. It starts in the eve of the day of harvest in a rice field. |
| <i>Inawili</i> | <p>This is a continuation of the <i>ngilin</i> which is done in the early morning. A chick is offered to the god of covetousness, the <i>umamo</i>. Half of the carcass of the chick is skewered, fastened on a <i>runo</i> with leaves. The reed is then implanted on the dike of the ricefield where the harvester will start to harvest. The other half is placed at the door of the granary. This is to plead to the god of covetousness not to covet the harvest and to ask the other gods to be bestowed their blessings on the harvest. On the harvest day, the ritual celebration is centered in the granary while women harvest the grains in the ricefield, the menfolk gather in the granary where they drink rice wine, discuss and argue between the various phases of the whole performance. The priest and priestesses perform all the various steps of the rite of <i>ani</i> and narrate the myth about Ballituk and Cabbigat from the start up to the point where the harvested rice crop that was taken from <i>Kabunyan</i> (skyworld) to the earth world or <i>Kiyangan</i>.</p> <p>If the rice owner is affluent, a pig is used and added to the chickens as offering. The general eating is done at mid-afternoon. But reapers are fed earlier.</p> <p>During the harvest, three or four women are assigned for the seed selections (<i>mamang-o</i>).</p> |
| <i>Ahiponpon</i> | This is the time when the palay will be nicely piled in the granary. This is done about a month after harvesting the palay. |
| <i>Tuldag</i> | This is the rite where three chickens are offered to the gods to protect the palay in the granary. It also means that the granary is closed and there will be no getting of palay until <i>lukya</i> is performed. At this time, <i>bakle</i> is set. |
| <i>Ahibakle</i> | This is a festival time for the villagers. The villagers grind the pounded glutinous rice into very fine powder, adding sugar cane juice, making a dough, and wrapping it with <i>littuku</i> leaves or banana leaves. |
| <i>Upin</i> | <p>It is a simple ritual performed in the home after the harvest season. The <i>mumbaki</i> invoke the gods to bless the harvested palay and the granaries of the people away from ailments, famine and to make them prosperous, healthy and peaceful. The following days are <i>tungo</i> and nobody must go to the field. If a person disobeys, the said individual will be cursed that all bad omens shall be upon him/her.</p> <p>This is also the time that women go to the field to remove the big shrubs, make a few <i>pingkol</i>, one of two in each rice paddy, and gathers spiders from the rice field to be <i>makahiw</i> (the material to be used for the next ritual).</p> |
| <i>Kahiw</i> | This is also a rite performed in the home for the purpose of realizing the people from the promise they made to be gods during the <i>paad</i> , that they will refrain from eating aquatic animals and legume vegetables. This rite marks the end of the Ifugao agricultural calendar. |

Kiangan Geophysical and Demographic Profile

Kiangan, a 4th class municipality³ is in northern Luzon, Ifugao province, 16° 47'N, 21° 06'E at 800 m elevation. It is in the southwest direction of the province of Ifugao: bounded on the east by the municipalities of Lagawe and Lamut, west by Tinoc, north by Hingyon, and south by Asipulo. It is identified as the oldest town in the province. Its name is said to be derived from *Kiyyangan*, an ancient village near the Ibulao River across the Lagawe valley. The said village is enshrined in the Ifugao mythology as the dwelling of *Wigan* and *Bugan*, the mythological ancestors of the Ifugao people.

Kiangan has a total land area of 20,419.2071 ha., with 70 ha. allocated for rice farming. Its typical cropping pattern is rice followed by mixed vegetables and legumes in terraced and unterraced fields on gradually sloping hillsides. Other land uses include timber/forest land, grassland, residential, etc. (Camacho, et al., 2016). Figure 3 shows the municipal map. It is politically subdivided into 14 villages, locally known as barangays, the smallest political unit of the Philippines. These barangays (as seen in Table 3) are led by elected officials such as the Barangay Captain (village chieftain) and Barangay Council composed of members referred to as the Barangay Councilors. The people of Ifugao also set categories for their land use as noted in Table 4.



Figure 3 Map of the Municipality of Kiangan (Source: Manuta, 1993)

Table 3 Barangays of Kiangan, Ifugao

| Barangays | |
|-----------|-----------|
| (1) | Ambabag |
| (2) | Baguinge |
| (3) | Bolog |
| (4) | Bokiawan |
| (5) | Dalligan |
| (6) | Duit |
| (7) | Hucab |
| (8) | Julongan |
| (9) | Lingay |
| (10) | Mungayang |
| (11) | Nagacadan |
| (12) | Pindongan |
| (13) | Poblacion |
| (14) | Tuplac |

3 Under Republic Act 11964, municipalities shall be classified into five classes according to their income ranges and based on average annual regular income for three fiscal years preceding a general income reclassification. Local government units (LGUs) will be classified as First Class, or municipalities earning an annual average income of Php 200,000,000; Second Class, municipalities earning an average annual income of Php 160,000,000 or more, but less than Php 200,000,000; Third Class, those earning Php 130,000,000 or more, but less than Php 160,000,000; Fourth Class, those with an annual average regular income of Php 90,000,000 or more, but less than Php 130,000,000; and, Fifth Class, those with an average annual income of less than Php 90,000,000.

Table 4 Land Use Categories of the Ifugao (Source: Tuwali Women, Men, Farmers, IPMRs and Elders, adapted from Acabado, 2013)

| Local Term | Land Usage | Description |
|--------------------------------------|----------------------------------|--|
| <i>Magulun</i> | Grassland | Exposed ridge and slopeland; untilled soil with low herbaceous grasses; public (in any given region); unmanaged; minimal value; source of roof thatch, game; not cultivated without new irrigation sources; usually far from densely inhabited areas |
| <i>Muyong</i> | Forest | Slopeland; undisturbed soil; naturally woody cover; public (for residents of same watershed region); unmanaged; source of firewood, forest products, game |
| <i>Runo</i> | High grassland or cane grassland | High grassland or cane grassland with secondary growth <i>Miscanthus</i> association; mostly slopeland; unworked soil covered with various stages of second-growth herbaceous and ligneous vegetation dominated by dense clumps of tall cane-grass; some protection and management (canegrass much used for construction, fencing, etc.) |
| <i>Muyung/ Pinugū</i> | Woodlot | Slopeland; unturned soil; covered with high tree growth (timber and fruit trees, climbing rattan, etc.); privately owned and managed (some planting of tree, vine, and bamboo types), with definite boundaries; valued for timber, other products, and protection of lower farmland from runoff and erosion |
| <i>Hābal</i> | Swidden | Slopeland, often contour-ridges; cultivated; heavily planted with sweet potatoes and moderately intercropped (including rice below 600–700 m); discrete temporary boundaries for cultivation period of several years |
| <i>Linta- angan/ Aldatan</i> | Backyard | Leveled terrace land; surface smooth or paved but not tilled; primarily house and granary yards; workspace for grain drying and similar activities; discrete, often fenced or walled |
| <i>Dolya</i> | Slopping area | A slopping area for the planting of vegetables |
| <i>Payo</i> | Rice field | Leveled terrace farmland; bounded to retain water for shallow inundation for cultivation of wet-field rice |
| <i>Pingkol</i> | Mounded field | A mound of compostable materials carefully mounded for the cultivation of vegetables with a short span of life (e.g. pechay, string beans, cabbage, onions, garlic) within the rice field. After that, when the planting season is nearing, it is used as organic fertilizer. |

Population

There are three ethnolinguistic groups in the Ifugao locality: the *Ayangan*, which are common in the northeast and southwestern portion of the province, the *Tuwali* who live in the northwestern part, and the *Kalanguya* who live in the outskirts of the municipality. For this research, the *Tuwali* are the ones involved. About 72% of the people are engaged in farming as a source of subsistence, livelihood, and employment. The poverty incidence of the municipality is 53.9%, where 1,592 out of 3,432 households have an income below the poverty threshold. There are also 973 households with income below the food threshold at a total of 32.9%.

As of the 2020 census, the municipality of Kiangan has a population of 17,691 people.

Ifugao Theism

Before the introduction of the Roman Catholic church, the people of Ifugao people subdivided the universe into five regions: *Kabunyan*, the Skyworld i.e. the place where

deities are or *Angadal* (meaning the region above); *Darom*, the Underworld; *Lagud*; the Downstream Region; *Daya*, the Upstream Region; and, *Pugao*, the Region of the Earth (Lambrecht, 1957). The Ifugao worshipped two important classes of deities among these five regions, whom we may call the rice culture deities and the foetus-maker deities. These deities live in special villages in the four supernatural regions (the Underworld, the Skyworld, the Downstream, and Upstream Regions). However, despite the presence of many gods and deities, the Ifugaos have no supreme being. The notion of the supreme being is embodied by *Maknongan* of the Skyworld, who is the chief of all the others.

But today, one of the risks faced in safeguarding ICH as disclosed by community respondents is the fact that the majority of the people in Ifugao have embraced Christianity. Most of them are already affiliated with the Roman Catholic church, and the children and youth attend catholic schools.

Kiangan Disaster Risk Profile

The climate of Ifugao province where the municipality of Kiangan is located is Type 3, which is characterized by no very pronounced maximum rain period, with a short dry season lasting only from one to three months (with only a short dry season from January to April and a long-wet season from May to December). The Department of Environment and Natural Resources (DENR, 2014) wrote that the average monthly rainfall is between 15 and 18.5 mm in areas with a high elevation and between 27.43 and 30.18 mm in the lowlands. Figure 4 summarizes the tropical cyclones' tracks that passed through CAR from 1960 to 2021, Figure 5 shows the monthly distribution of tropical cyclones in CAR from 1960 to 2021, Figure 6 showcases the breakdown of categories of tropical cyclones in CAR from 1960 to 2021 and Figure 7 displays the annual number of tropical cyclones in CAR from 1960 to 2021. Figure 8 details the areas affected by floods along with landslides.

Apart from hydrometeorological hazards, the area is also prone to geological hazards such as earthquakes. The research interlocutors mentioned that their most memorable was the magnitude 7.7 earthquake that struck the province of Ifugao and its neighboring areas in 1990. The Department of Health reported that there were 1,283 casualties and 2,786 injuries due to the said disaster.

Ifugao Provincial Environment and Natural Resources Office shared that the province is traversed by the Digdig fault, particularly the heritage municipalities of Hungduan and Banaue. It was suggested that it should be declared as a no-build zone and be used as a planting site to cushion the possible impact of an earthquake that may occur in the area. Figure 9 details the distribution of active faults in CAR.

The Municipal Disaster Risk Reduction and Management Office noted Kiangan as among the ten municipalities of Ifugao that is landslide prone. Landslides are often triggered by rainfall. During the intense duration of rainy seasons, water flows from mountain tops through V-shape gullies, creeks, and streams traversing the slopes. This may cause slides and erosions over and within the village areas that lead to loss of life, and damages to properties, crops, and infrastructure. This further causes the closure of access roads especially the Ibulao–Kiangan road as well as the Nagacadan–Tinoc Road.

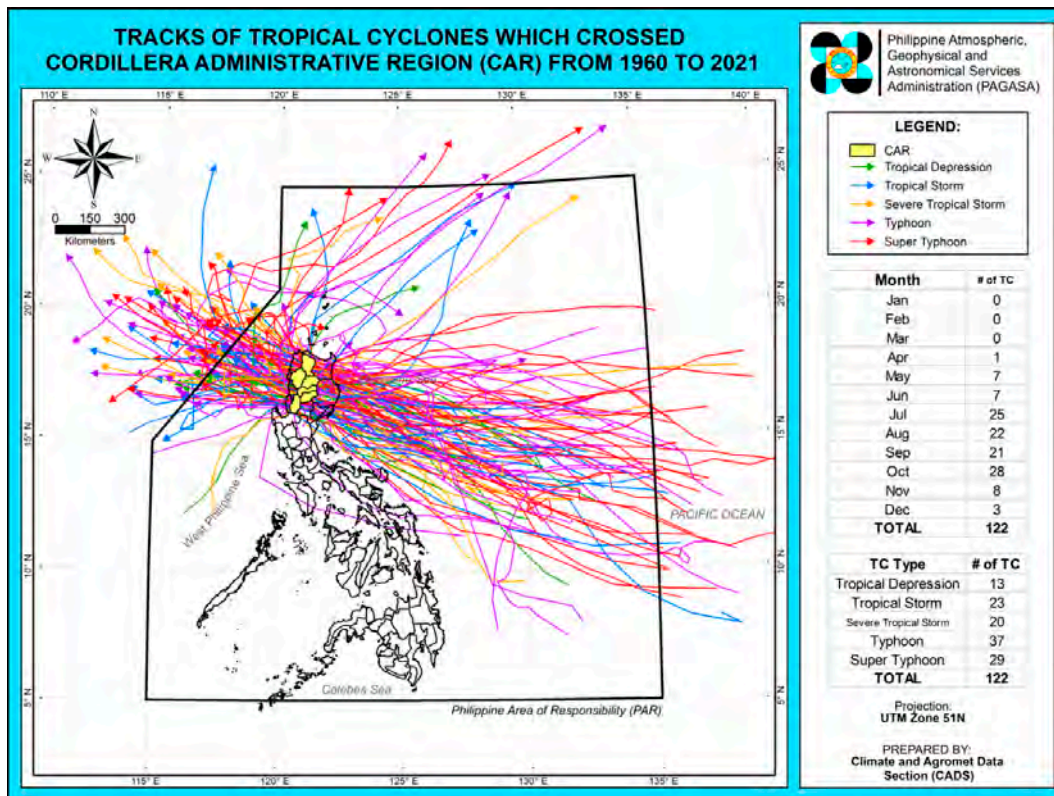


Figure 4 Tropical Cyclone Tracks in CAR from 1960 to 2021 (Source: Climatology and Agrometeorology Division, Department of Science and Technology – Philippine Atmospheric, Geophysical and Astronomical Services Administration, 2023)

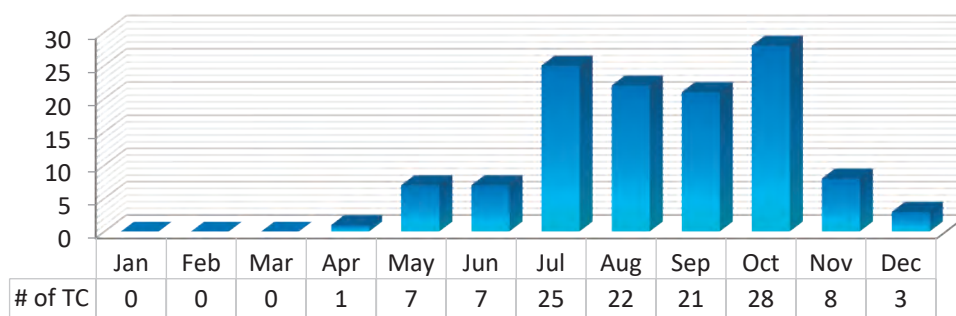


Figure 5 Monthly Distribution of Tropical Cyclones in CAR from 1960 to 2021 (Source: Climatology and Agrometeorology Division, Department of Science and Technology – Philippine Atmospheric, Geophysical and Astronomical Services Administration, 2023)

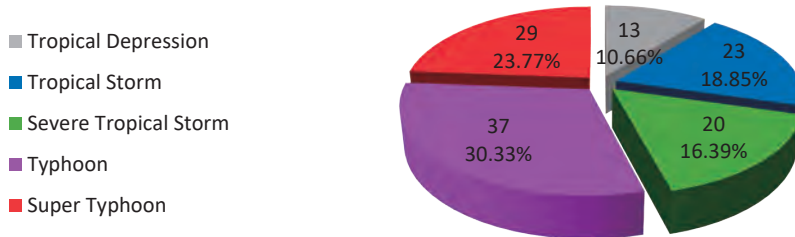


Figure 6 Category of Tropical Cyclones in CAR from 1960 to 2021
 (Source: Climatology and Agrometeorology Division, Department of Science and Technology – Philippine Atmospheric, Geophysical and Astronomical Services Administration, 2023)

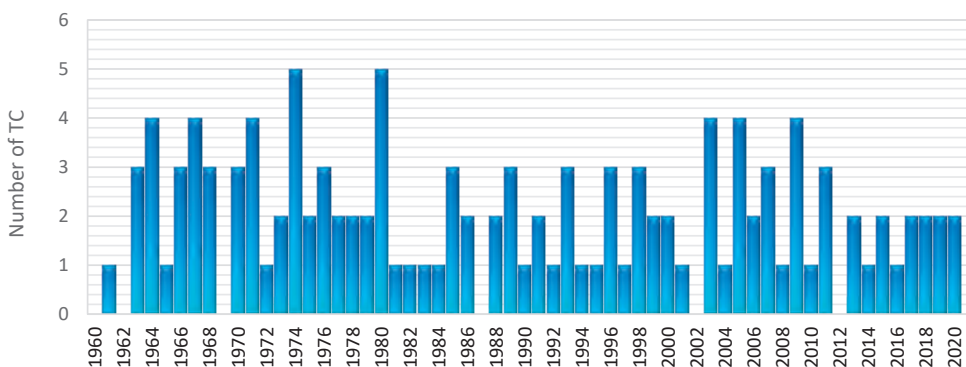


Figure 7 Annual Number of Tropical Cyclones in CAR from 1960 to 2021
 (Source: Climatology and Agrometeorology Division, Department of Science and Technology – Philippine Atmospheric, Geophysical and Astronomical Services Administration, 2023)

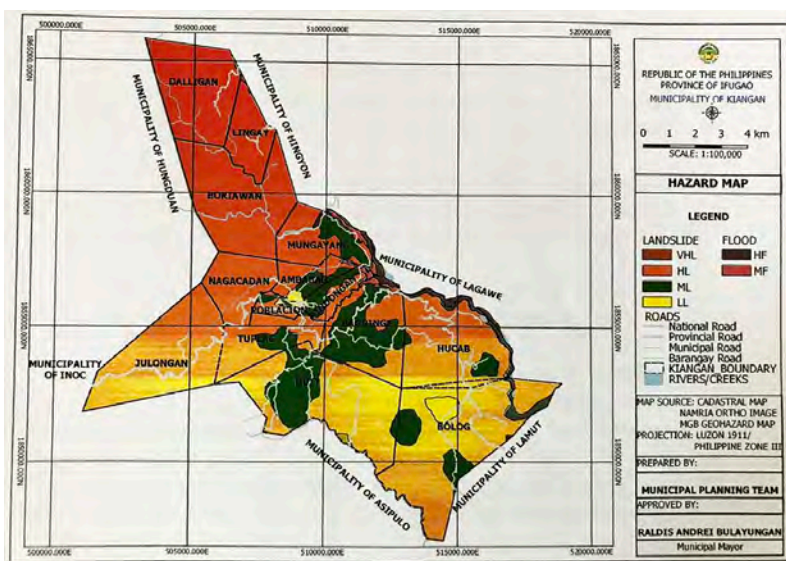


Figure 8 Map of Geo-hazards affecting the Municipality of Kiangán
 (Source: Municipal Planning Team, n.d.)



Figure 9
Map of Active Faults in CAR
(Source: Philippines Institute of Volcanology and Seismology, Department of Science and Technology, April 2015)

These disasters, hazards, and the deterioration of the rice terraces pose a threat to the continuity of the ICH practice along with the limited awareness of ICH across different sectors in the country, low appreciation of traditional craftsmanship and materials due to the access to various technologies, presence of technological risk analysis tools and the changing context of hazards, movement of people, loss/damage/replacement of traditional materials of place and tools associated with the ICH performance and death of the cultural bearers resulting to the limited intergenerational knowledge transfer.

ICH IN KIANGAN

Hudhud: Current ICH Inscribed in 2008 (3.COM) on the Representative List of the Intangible Cultural Heritage of Humanity (originally proclaimed in 2001)

UNESCO proclaimed the Ifugao epic *Hudhud* as one of the 19 masterpieces of the oral and intangible heritage of humanity in 2001. It was recognized based on: 1) its outstanding value, 2) its roots in the cultural tradition or cultural history of the community concerned; 3) its role as a means of affirming the cultural identity of the peoples and communities concerned; 4) its proof of excellence in the application of the skill and technical qualities displayed; 5) its value as a unique testimony of a living cultural tradition; and 6) its risk of disappearing. The said award was intended to raise awareness about the importance of safeguarding intangible heritage, with the following objectives: 1) to raise awareness among the public, and to recognize the

importance of oral and intangible heritage and the need to safeguard and revitalize it; 2) to evaluate and take stock of the world's oral and intangible heritage; 3) to encourage countries to establish national inventories of the intangible heritage and provide legal and administrative measures for its protection; and 4) to promote the participation of traditional artists and local creators in identifying and revitalizing the intangible heritage (ACCU, 2002; Batin, 2014).

Hudhud is historical narrative chants performed by the local Ifugao community members during the rice sowing season, funerals, and rituals (Blench and Campos, 2010; Moore, 2015; Royeca and Molina, 2018). It details at least 40 historical tales for a period of three to seven days (Moore, 2015; Peralta, 2008; Royeca and Molina, 2018).

ICH in Disaster Risk Management

During the conduct of the fieldwork, the community members composed of women, men, farmers, Indigenous Peoples' Mandatory Representatives (IPMRs), and elders were also consulted about the natural hazards they experienced over the years along with the ICH they used to cope and recover from the situations. Table 5 presents their experience.

Table 5 Community Hazard Experiences and ICH Used (Source: Tawali Women, Men, Farmers, IPMRs and Elders)

| Year | Hazard/ Disaster | Impact | ICH Used |
|-------------------|--------------------------|---|--|
| 1956 | Mt. Atade Landslide | <ul style="list-style-type: none"> – Displaced families – Damaged forest trees and banana plants – Death of livestock and poultry animals – Soil erosion – Evacuation of 4 families | <i>Baddang Opah Honga</i> |
| 1964 | Five days of heavy rains | <ul style="list-style-type: none"> – Landslide – Damaged roads – Damaged houses and rice fields | <i>Baddang Opah Honga</i> |
| 1967 | Drought | <ul style="list-style-type: none"> – Dried rice plants – Cracked rice fields – Soil erosion (after the rain came) – Famine | <i>Baddang Opah Honga Bayuhibi</i> |
| Between 1968–1969 | Earthquake | <ul style="list-style-type: none"> – Evacuation of families – Landslide – Liquefaction in some areas e.g., Poblacion and Nagacadan – Slightly damaged houses – Damaged rice paddy | <i>Baddang Honga</i> |
| July 16, 1990 | Earthquake | <ul style="list-style-type: none"> – Several aftershocks – Landslide – Grounded topography in some parts of Kiangang Town – Food shortage – Road closure – Disruption of livelihood and economic activities – Heavily damaged houses and rice paddies – Increase in the prices of commodities | <i>Baddang Opah Honga</i> |

| Year | Hazard/ Disaster | Impact | ICH Used |
|-----------------|--|---|---|
| 1991 | Mt. Pinatubo Eruption | <ul style="list-style-type: none"> – Volcanic ashfall – Induced respiratory diseases e.g., asthma, pneumonia – Damaged crops and vegetation covered by ashfall | <i>Baddang</i> |
| 1998 | Drought | <ul style="list-style-type: none"> – Bamboo has flowered, a sign of famine and hunger | <i>Bayuhibi</i> |
| 2004 | Typhoon Yoyong (International name: Nanmadol) | <ul style="list-style-type: none"> – Landslide – Damaged rice paddies and rice fields – Damaged vegetation and fruits – Some casualties among Kiangang residents – Death of animals e.g., pigs – Uprooted trees – Erosion of rice fields | <i>Baddang Opah Honga</i> |
| 2005 | El Niño | <ul style="list-style-type: none"> – Damaged rice paddies and vegetation – Absence of water – Death of livestock animals – Hunger – Food scarcity | Prayers <i>Baki Baddang</i> (also received livelihood assistance from the government) |
| August 29, 2007 | Continuous heavy rain resulting to landslide in Hingyon, Ifugao | <ul style="list-style-type: none"> – 4 casualties – 1 injured – 1 totally damaged houses – Road closure – 2 partially damaged houses | <i>Baddang</i> - search and rescue operation Financial, material and food assistance |
| 2008 | Continuous heavy rains | <ul style="list-style-type: none"> – Soil erosion – 9 casualties – Landslide – Damaged rice paddies due to silt – Damaged houses – Road closure | <i>Baddang Opah Honga Inubaya/Ubaya</i> |
| May 7, 2009 | 2 landslides at Poblacion Landslide at Dinapugan | <ul style="list-style-type: none"> – Road closure – Disrupted businesses | Clearing of roads |
| May 8, 2009 | Landslide at Maitab, Lagawe | <ul style="list-style-type: none"> – 8 casualties – 8 Totally damaged houses – Damaged roads – Road closure – Disrupted businesses – Displaced families | <i>Baddang</i> - search and rescue operation Financial and material assistance Helped commuters cross over area Use of dogs to smell missing buried person |
| 2009 | Typhoon Ondoy (International name: Ketsana) resulting to 2 landslides in Poblacion, Kiangang | <ul style="list-style-type: none"> – 6 casualties – 2 totally damaged houses – Road closure – Displaced families | <i>Baddang</i> - search and rescue operation Financial, material and food assistance |

Based on the interlocutors' sharing and discussions, the following are the ICH practices in relation to natural hazards and disasters. This may also address climate change since it can be employed in long-term shifts of temperatures and weather patterns.

Baddang

The practice and principle of *Baddang* among the people of Kiangán are important in disaster risk management (DRM) because they cover all aspects of the four thematic areas: disaster preparedness, disaster prevention and mitigation, disaster response, and disaster rehabilitation and recovery. Apart from the simple gesture of helping the commuters cross over a particular area, *Baddang* is also manifested in the conduct of search and rescue operations after a particular disaster event. It also covers helping each other in any way to prepare, prevent, mitigate, respond, rehabilitate, and recover from any hazard or disaster event. It is a multi-stakeholder partnership and engagement that fosters a collective process of DRM. The Institute for Climate and Sustainable Cities wrote that *Baddang* is a form of *bayanihan* system that is key to community adaptation along with cooperative labor groups of Ifugao. As a post-disaster intervention, the whole community offers help to its affected members: it can be in the form of clearing blocked roads, destroyed houses, and eroded farmlands. These were also attested by the community members, and they also disclosed that in the earlier times, they helped move the houses of their fellow community people as the need arose and if their farmlands were destroyed, they assisted in the reconstruction of the rice paddies. This could be the reason why up to this day, the rice terraces that were identified as UNESCO World Heritage sites in Kiangán are still intact and managed well.

Honga

Another widely mentioned ICH among the participants of the data-gathering sessions is the performance of *Honga*. Among the *Tuwali*, the *Honga* is done to cure a sick person. It can be practiced in healing all kinds of sickness, like post-traumatic stress disorder that one may experience after a particular disaster. The said ritual can be also performed to gain prestige and express gratitude. The thanksgiving process has two kinds: *Hongah di kitaguwan*, which happens inside a house, and *Hongah de page*, which transpires in the rice field. In *Hongah di kitaguwan*, the household conducts the thanksgiving ceremony to express gratefulness for the good life, and favorable status of the family and to wish for the continuous abundance and wellness of the family. For *Hongah de page*, thanksgiving is done 12 times to follow the agricultural calendar of farming. This ritual is practiced ensuring good yield in the coming harvest season. *Honga* is performed by a *Mumbaki*, a male Ifugao religious specialist or the native shaman. The process of *Honga* involves a prayer (that depends on the religion of the family) and the butchering of pigs. The number of pigs depends on the economic status of the family leading it.

Opah

Opah is another post-disaster ritual and is done when somebody dies. It is practiced seven to nine days after the body is buried to force the souls into the place where their ancestors dwell. It is a ritual that calls for the spirit of the dead to get down

from the sky since it is believed that, when the mortal body dies violently, its spirit wanders up the sky.

Tuguinay (2009) narrated that it is also performed after the bone cleansing ritual called *Bogwa* when the family is ready to bring home the bones. The *Opah* ritual is once again done in the morning before the bones are brought in the afternoon. The ritual also involves name-calling the living persons who helped or handled the victim after the incident. A pig is butchered during the process. A cluster of the red *Dongla* leaves are tied to the hilt of the spear which is briskly raised towards the sky in the direction of the sun by the *Mumbaki* who shouts the name of the dead person. The spear is abruptly reversed with the blade towards the *liga-u* (rice winowing tray) shaking it briskly. The pig is also used for the practice of *Bogwa*.

Bayuhibi

This ritual was performed to invoke Gods for rains during drought in Kiangan and other parts of Ifugao. The word *Bayuhibi* means rain shower (Ananayo, 2009). It is one of the types of rains experienced in Ifugao along with *Dondonyag*, having sunshine while it is raining, and *Dumalallu*, when hail accompanies heavy rainfall.

Inubaya

This ritual was suddenly performed after the death of nine people in Kiangan due to strong rains in 2008. This is a special practice that is no longer performed after a long time. According to the SITMo CEO, 'disasters also lead to the remembrance of old practices that are no longer popular in today's generation. Disasters also help the people realize and recognize our ICH that is already forgotten by the younger people'.

A *Munhaw-e*, lead chanter and *Mumbaki* leads the *Inubaya*. It is a ritual for rice and men performed to drive evil spirits away for the welfare and protection of the people.

Baki

Dulawan (1989) wrote that *baki* is the sacrificial ritual performed on all important occasions. The ritual is divided into 'the ritual for people' and 'the ritual for rice culture'. As for the rituals for people, some examples are rituals for childbirth, diagnosis of an illness, healing, epidemics, and protection of health and wealth. As for the rice culture, it includes rituals performed at different times of the agricultural cycle: sowing, before transplanting, after transplanting, when rice plants grow new leaves, when rice grains form, harvest time, stacking rice in the granary, and the removing of first rice bundles from the granary. Most rituals follow a general pattern beginning with a) an invocation to ancestors, messengers, cultural heroes, and gods; b) offering and divination; c) chanting (usually of myths or legends); and d) a repeat of the invocation and conclusion. A chicken is usually sacrificed and its gall bladder is read to determine the efficacy of the ritual. Aside from chickens, there are also pigs.

SAFEGUARDING ICH FOR THE CONTINUITY OF A HERITAGE AND DISASTER AND CLIMATE RISK REDUCTION

Leadership and Partnership of Local Government Units (LGU) with Various Sectors and the Involvement of the NCIP, IPMRs, and Indigenous People's Organizations (IPOs)

In a key informant interview with the Tourism Officer, he disclosed the importance of the local government leadership and partnership with manifold stakeholders in safeguarding ICH, as stipulated by this narrative, *'The LGU must take a lead role in preserving (our) intangible heritage because we see this as our identity. We are trying to partner with private institutions like the Save the Ifugao Terraces Movement, or other groups that are involved in cultural conservation. The reason why we must do this is because we see so many changes and adaptation(s) coming from young generations. Once we do not do something to protect our culture, there might come a time when we will lose this identity. We are going to mainstream the culture which means our identity as indigenous people will stay as much longer as it can. So, the LGU must take a major role in these initiatives. So far, what the LGU is doing is I couldn't mention that we are partnering with some other organizations that involved themselves in cultural conservation. But we also have our initiatives, like to host a cultural festival. We try to fund, as much as we can, the existing traditions that are still in here.'*

This was also supported by the Municipal Disaster Risk Reduction and Management Officer. She noted, *'It is important to involve the LGU as the focal agency in leading and fostering partnership, not just for ICH safeguarding, but also for the overall framework of the disaster risk reduction and management (DRRM).'*

In the validation session of the research, the participants noted that the NCIP along with the IPMRs and IPOs have a huge role to play in the safeguarding of the ICH since they are the practitioners and frontliners of the praxis of the ICH. Without them, no one will continually conduct and promote all the ICH of the Ifugao people.

Conduct of Various Festivals to Commemorate ICH

One of the celebrations commemorated by the community to ensure the continuity and passing on of ICH is the *Gotad Ad Kiangán*, the annual town fiesta of the municipality of Kiangán. This festivity is celebrated between April and May. It is a festival of traditional Ifugao performing arts of dancing and chanting. It is inspired by *uya-uy*, an Ifugao prestige ritual, which is a required step for couples to be elevated to the *kadangyan* (noble) status. It also functions as a mechanism to invoke the deities for more children if they only have one child or if they are childless. It involves several days and may even reach a month of performance of *naba* nights filled with the beating of the gong, announcing to the community that a couple is undergoing the prestige ritual. Critical to the *uya-uy* is the observance of *holyat* that culminates the long nights of observing the *naba*. The *holyat* then is a prelude and the start of the celebration of *gotad*, when the whole community joins in the festivity with the beating of gongs, butchering of animals, drinking of rice wine, and dancing. Apart from the abovementioned festival, they also sponsor a post-harvest festival. Other

than that, an ordinance for *Kalanguya* and *Ayangan* Festival was also authored by the current local chief executive when he was still a councilor.

Indigenous Peoples' Education (IPEd)

The municipality of Kiangán also implements Indigenous Peoples' Education (IPEd) since 2004. IPEd is a program of the Department of Education (DepEd) institutionalized through DepEd Order 62, series of 2011, or the National Indigenous Peoples Education Policy Framework. The policy adopts a rights-based approach and directs the implementation of an education that is anchored on the social and cultural context of IP learners. The Indigenous Knowledge Systems and Practice (IKSP) modules along with Math, Science, and English subjects are the coverage of IPEd. Table 6 summarizes its timeline in the Philippines based on the laws and policies enacted in the country.

One of the key groups that led the establishment of IPEd in Kiangán is the Save the Ifugao Terraces Movement (SITMo), a non-governmental organization. Its advocacy is to educate the community members and the youth about the Ifugao culture through education in schools. SITMo believes that there is a need to change the way youth and children are being taught. In 2006, it partnered with Ifugao State University and the Department of Education (DepEd) in the mainstreaming of indigenous knowledge in education through the development of modules on Ifugao indigenous knowledge that localized and contextualized education. SITMo also led the development of the IPEd Center, which includes a library and museum of textiles and artifacts. It also collaborated with the NCIP for the line agency to teach indigenous knowledge to the Ifugao people.

Before SITMo, a national office called the Ifugao Terraces Commission (ITC) advocated for indigenous education in Ifugao province. The aforementioned is a presidential commission that formulates short and long-term plans for the restoration and preservation of the Ifugao rice terraces in the municipalities of Banaue, Hungduan,

Table 6 Indigenous Peoples Education Timeline in the Philippines (Source: IHPAS President, n.d.)

| Year | Law/Policy | Implication |
|------|--|---|
| 1997 | Republic Act 8371: Indigenous Peoples Rights Act | Recognition and protection of the rights of indigenous cultural communities/IPs |
| 2004 | Department of Education (DepEd) Order 42 series 2004 | Permit to operate Primary Schools for IPs and cultural communities |
| 2010 | DepEd Order 101 series 2010 | The Alternative Learning System for IPs |
| 2011 | DepEd Order 62 series 2011 | Adopting the National Indigenous Peoples Education Policy Framework |
| 2013 | Republic Act 10533 | The Enhanced Basic Education Curriculum Act of 2013 |
| 2016 | DepEd Order 22 series 2016 | Indigenous peoples Education Program support fund |
| 2019 | Commission on Higher Education (CHED) Memorandum Order (CMO) 2 series 2019 | Integration of IP studies in the relevant higher education institutions |

Mayoyao, and Kiangan. It was created through Executive Order (EO) No. 158 on February 18, 1994, under the term of former President Fidel V. Ramos. In 1999, it was replaced by the Banaue Rice Terraces Task Force through EO No. 77, which was mandated to restore, preserve, and develop the Ifugao rice terraces as well as to prepare a development plan. In 2002, the Banaue Rice Terraces Task Force's functions were transferred to the Provincial Government of Ifugao. This resulted in the development of the Ifugao Rice Terraces Cultural and Heritage Office under the Office of the Provincial Governor, which was later replaced by the Ifugao Cultural Heritage Office.

Establishment of Ifugao Intangible Heritage Performing Arts Society

It is crucial to establish a group that values and practices ICH since it will pave the way for the intergenerational knowledge transfer and popularization of the heritage outside of their area. The Ifugao Intangible Heritage Performing Arts Society (IHPAS) is an example. The group was originally known as the Ifugao Performing Arts group. It was organized in partnership with SITMo, and the head of the Ifugao Museum serves as its president. In an interview with the president, she explained that the organization was established to *'get to know more about our culture and promote our heritage in today's generation'*.

To become a member of IHPAS, one must be willing to learn performing arts such as music and dances of the Ifugao. It also requires its membership fees: an annual membership of 50 Php (roughly 1 USD) or 300 Php (about 6 USD) for a lifetime membership. Currently, there are 60 members of IHPAS. Half of them are affiliated with the Tuwali IP group which came from the 14 barangays of Kiangan, and the other half are affiliated with the Ayangan IP group which came from the Municipality of Lagawe. These members are composed of elementary and high school students, cultural advocates, and retirees.

Restoration of Rice Terraces

Imperative to the safeguarding of ICH is the restoration of rice terraces that involves forest management and natural resources management. The practice of some rituals in Ifugao is tied with the traditional farming practices. According to the SITMo CEO and the Tourism Officer, this is a challenge since the Department of Agriculture introduced modern agricultural techniques and new rice cultivars that are dependent on pesticides and fertilizers. Once farmers engage in the usage of new rice cultivars and modern agricultural techniques, rituals associated with agriculture will be no longer performed. As a rule of thumb, only traditional rice varieties are allowed to be used for rice rituals.

The Municipal Disaster Risk Reduction and Management Officer also raised that the agricultural rituals are threatened since most of the farmers shifted to cash crops to be more financially stable. With this shift, some farmers who used to plant rice opt not to plant the said species anymore since cash crops generate more income. According to the IPMRs, there was also water scarcity resulting from the conversion of the rice terraces into gardens and residential areas. Only a few of those who have water sources can perform traditional farming practices.

To address these concerns, the local government of Kiangnan subsidized farmers who perform traditional farming practices, and the Office of Municipal Tourism will organize a harvest festival that is similar to the *Punnuk* festival to revitalize and promote the restoration of the rice terraces of Kiangnan. The festivals are dependent on government funds nowadays.

School of Living Traditions (SLT)

Dulnuan (2014) emphasized that an effective tool worth replicating is the School of Living Traditions (SLT), whereby those interested are taught the art of *Hudhud* chanting, the knowledge and art of gong beating, the proper ways of the Ifugao dance, proper use of attire, and the other performing arts that children and adults alike had forgotten. The formal educational sector has gone further and started to introduce indigenous knowledge and systems into their curriculum. The SLT was organized through the effort of the NCCA.

As per the interview with the representative of the NCCA, through the SLT program, e-learning documentation and the publication of learning guides were carried out despite the pandemic.

Strengthening the Indigenous Peoples Mandatory Representatives and Indigenous Peoples Organizations

To promote and safeguard the ICH, there is a need to strengthen the Indigenous Peoples Mandatory Representatives (IPMRs) and Indigenous Peoples Organizations (IPOs) since they are the bearers of knowledge to validate research studies being conducted about the Ifugao culture. The IPMRs and IPOs were set up through the promulgation of the NCIP Administrative Order No. 3, series of 2018, otherwise known as the Revised National Guidelines for the Mandatory Representation of the Indigenous Peoples in Local Legislative Councils and Policy Making Bodies.

CONCLUSION

Despite the existing efforts, there is still a need to continually invest in the promotion and safeguarding of the ICH in the communities due to the threats posed by the occurrence of hazards and disasters and the economic challenges that drive people to shift their traditional farming techniques to modern agriculture in the municipality of Kiangnan. There is also a need to help the *Mumbaki* pass on the knowledge of the Ifugao culture since most of them are now elderly. All the rituals and practices are tied to the *Mumbaki*.

Despite the presence of School of Living Traditions (SLT) and practice of the Indigenous Education (IPEd), there are still some youth members who have limited awareness of their cultural heritage due to religion and education in schools along with the absence of transmission of knowledge from their very own parents. Most schools and colleges do not cover the Indigenous Knowledge Systems and Practices (IKSP). With this, it is crucial to sustain the funding support in education, especially the SLT and IPEd in the municipality and across the country to reach more audiences. Moreso, IKSP must be mainstreamed not just in elementary and primary education, it

must reach universities since it is also critical to educate the youth who may become our next leaders and educators and consequently, cultural ambassadors.

It is also necessary to continue the interventions of the NCCA on training workshops in safeguarding and mobilizing ICH in the context of disasters wherein the ICCs/IPs were engaged in the discussion on safeguarding ICH in disasters and how their inventories could be updated according to the current situation. According to their representative, they already conducted the training at the three islands: Luzon, Visayas, and Mindanao. However, they recommend continuous awareness. The research team supports this and recommends that the capacity-building must be sustained and should be cascaded at the community level by capitalizing on the Disaster Risk Reduction and Management Fund (DRRMF). As per section 21 of the Republic Act 10121 or the Philippine DRRM Act of 2010, 70% of the DRRMF can be used for disaster preparedness and this includes capacity-building activities.

Awareness can also be in the form of tourism education. Dulnuan (2014:30) highlighted the need to have sustainable and balanced tourism to preserve the living rice culture. She noted, *'tourism education is what distinguishes the new forms of tourism (ecotourism, heritage tourism, green tourism, etc.) from mass tourism. Both guests and hosts interact and learn from each other. The host community and tourism enterprise are also educated about the nature of tourism, especially its impact, benefits, and damages, as well as the tools that could be used to mitigate damages and harness benefits. Thus farmers and businessmen should know more about carrying capacities, ecological footprints, zoning, and other such tools that they could employ in tourism management'*.

It could be also a means for cultural appreciation, environmental enhancement, biodiversity conservation, income generation, and empowerment of the community. SITMo advocates for the preservation of the living rice culture since there would be no tourism if the rice culture is gone (Dulnuan, 2014; SITMo, 2008). To preserve the living rice culture, consideration must be given to all the practices, rituals, and processes that accompany and result in the living rice culture, and this can be practiced through the application of Tourism Education (Dulnuan, 2014).

As also suggested by the NCCA representative, it is also imperative to integrate the ICH in the context of DRR plans, policies, and programs (PPPs), and these PPPs must be implemented. The research team also believes the aforesaid and it must be complemented with proper budget appropriation across different levels: national, regional, provincial, city/municipal, and barangay/village levels.

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REFERENCES

- Aguilar, C.H.M., Altoveros, N.C., Borromeo, M.H.F., and Koohafkan, P. (2020). Traditional rice-based agroecosystem in Kiangán, Ifugao, Philippines: drivers of change, resilience, and potential trajectories. *Agroecology and Sustainable Food systems*. DOI: 10.1080/21683565.2020.1813861
- Ananayo, Z. (2009). *Traditional Weather Indicators: Implications to Ifugao Agriculture and Daily Life*. Nurturing Indigenous Knowledge Experts among the younger generations, Phase 3. Retrieved on December 18, 2023 from <https://nikeprogramme.net/?p=91>
- Asia-Pacific Cultural Center for UNESCO (ACCU). (2002). *Asia-Pacific database on intangible cultural heritage (ICH): Promotion of the “Proclamation of masterpieces of the oral and intangible heritage of humanity.”* Final report of the 2002 Regional Workshop for Cultural Personnel in Asia and the Pacific, ACCU: Tokyo, Japan, 2002. Retrieved on October 1, 2013 from http://www.accu.or.jp/ich/en/pdf/2002_Tokyo.pdf
- Batin, J.J. (2014). Hudhud of Dinulawan and Bugan at Gonhadan (oral literature of Ifugao culture). *JPAIR Multidisciplinary Research*:17-35. <http://dx.doi.org/10.7719/jpair.v16i1.269>
- Blench, R. and Campos, F. (2010). Recording Oral Literature in a Literate Society: A case study from northern Philippines. In: I. Gunn and M. Turin (eds), *Language Documentation and Description*. London: SOAS, 49-65.
- Camacho, L.D., Gevaña D.T., Carandang A.P. and Camacho, S.C. (2016). Indigenous knowledge and practices for the sustainable management of Ifugao forests in Cordillera, Philippines. *International Journal of Biodiversity Science, Ecosystem Services & Management* (12)1-2:5-13. DOI: 10.1080/21513732.2015.1124453
- Department of Environment and Natural Resources (DENR). (2014). *Muyung: a sustainable traditional indigenous forest resource management systems and practices of the indigenous peoples of Kiangán, Province of Ifugao*. A project report. Philippines: DENR. p. 47.
- Dizon, J.T., Calderon, M. M., Asa, J.U., Andrada, R. II, and Salvador, M.G. (2012). Youth’s perceptions of and attitudes towards the Ifugao rice terraces. *Journal of Environmental Science and Management* 15(1):52-58. doi: <http://dx.doi.org/10.7718/ijec.v10i1.772>
- Dulawan, L. (1989). Baki. *Journal of northern Luzon* 15(1-2): xvii,116.
- Dulnuan, E. D. (2014). The Ifugao Rice Terraces Tourism: Status, Problems, and Concerns. *IAMURE International Journal of Ecology and Conservation* 10:19-31.
- Fao-Gef. (2014). *Conservation and sustainable management of globally important agricultural heritage systems (GIAHS)*. Pilot Country: Philippines. Terminal Report.
- Food and Agriculture Organization (FAO). (2017). *Globally important agricultural heritage systems: Designated sites around the world*. Accessed January 10, 2023. <http://www.fao.org/giahs/giaharoundtheworld/designated-sites>.
- Herath, S., Soriano, M., Diwa, J., and Bucton, B. (2015). *Surface and groundwater flow response to climatic change in the Ifugao rice terraces*. Rice Terrace Farming Systems Working Paper Series Number 06. Tokyo, Japan: United Nations University Institute for the Advanced Study of Sustainability.
- Lambrecht, F. (1957). The Missionary as Anthropologist: Religious Belief among the Ifugao. *Philippine Studies* 5(3): 271-286.

- Manuta, J. B. (1993). Tenurial arrangements and forest resource management in Haliap, Kiangan, Ifugao, Northern Philippines. Fourth Annual International Association for the study of Common Property (IASCP) Conference, Manila, Philippines, 16-20 June 1993.
- Moore, J. G. (2015). *Consequences of the introduction of commercial cultivars on Ifugao rice terraces world heritage site*, Leiden (unpublished MA thesis Leiden University).
- Peralta, J.T. (2008). The Philippines: on Safeguarding Intangible Cultural Heritage. Terminal Report on the Safeguarding and Transmission of the Hudhud Chants of the Ifugao. Manila: National Commission of Culture and Arts.
- Republic Act No. 8371. (1997). An Act to recognize, protect and promote the rights of indigenous cultural communities/indigenous people, creating a national commission of indigenous people, establishing implementing mechanisms, appropriating funds therefor, and for other purposes. Congress of the Philippines (Tenth Congress); 1997 Oct 29; Manila.
- Royeca, J.E. and Molina, F.G.J. (2018). *Accounts of Ifugao rituals in the Municipality of Asipulo, Ifugao, Diliman* (unpublished paper University of the Philippines Diliman).
- Save the Ifugao Terraces Movement (SITMo). (2008). IMPACT: The Effects of Tourism on Culture and the Environment in Asia and the Pacific: Sustainable Tourism and the Preservation of the Ifugao Rice Terraces, Philippines World Heritage Site. Bangkok.
- Tuguinay, A.D. (2009). Old Ifugao Traditions- BOGWA (Bone cleansing ritual). Accessed March 5, 2023. <http://ifugaocustoms.blogspot.com/2013/02/old-ifugao-traditions-bogwa-bone.html>
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2008). Impacts: the effects of tourism on culture and the environment in Asia and the Pacific: sustainable tourism and the preservation of the World Heritage sites of Ifugao Rice Terraces, Philippines; Bangkok.
- United Nations Development Programme Philippines (UNDP). (2010). Indigenous peoples in the Philippines. UNDP Philippines [Internet]. [cited 2014 Sep 1]. Available from: http://www.undp.org/content/philippines/en/home/library/democratic_governance/FastFacts-IPs.html.