# INDIGENOUS RICE WINE MAKING IN CENTRAL PANAY, PHILIPPINES

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#### ABSTRACT

This study was conducted to document the process of making rice wine called 'pangasi' by the Panay Bukidnon indigenous people (IP) in Tapaz, Capiz. Specifically, it aimed to describe the ingredients and procedure used and to compare them with other rice wines made in the Philippines. Likewise, it also aimed to describe and discuss the emerging themes deduced from documenting the making of 'pangasi' rice wine by the Panay Bukidnon IP. Information were collected through direct observation and semi-structured interview gathered from key cultural informants who were also the participants in the focus group discussion. They are members of the Council of Elders of the Tapaz Indigenous People's Organization (TIPO). The information gathered were cross-checked with literature of documented traditional wine making from different areas in the Philippines. The indigenous rice wine, 'pangasi' used by the Central Panay Bukidnon Indigenous People in Tapaz, Capiz is different from the 'pangasi' made by the Subanons in Zamboanga del Norte The main ingredient used in making 'pangasi' of the Central Panay Bukidnon (IP) is ordinary, non-waxy, upland rice while the 'pangasi' Subanen indigenous people of Zamboanga del Norte, use of cassava tubers as the main ingredient and a starter consisting of a concoction from 24 to 60 species of plant herbs, as reported by Nabua (2013). However, it is similar to' pangasi' or 'gasi' which is a traditional drink among the Subanuns of Mindanao, made also from rice with added crushed ginger root and red hot pepper, but water is added to it. It is almost the

same as 'pangasi' made from rice in North Western Mindanao, specifically in Bukidnon, in a study cited by Sanchez (2008) from Sakai and Caldo (1985b). However, they reportedly used sugar solution which is added for the second stage of fermentation instead of sugar cane juice, which is used by the Central Panay Bukidnon IP in Tapaz, Capiz. The use of leaves in the processing of 'pangasi' which included, 'adgaw', 'talus', and young coconut leaves have not been mentioned in earlier related studies. However, regarding their local knowledge on cleanliness and sanitation, it is believed that these leaves are naturally clean, especially if they are 'ugbus' or young, and have not been too exposed yet in the environment. Indigenous women have an important role to play in using and preserving this valuable local knowledge. They just have to be better recognized and supported by the community. The value of "pangasi" is much more than just a traditional drink one can hold in his hand, rather it is one that holds the indigenous community altogether. Aptly described by Fox (1984) as having this social and ritual value, the use of rice wine may be seen as a powerful integrating force which links and binds the individual to the group (Fox, 1984). The local knowledge of the Panay Bukidnon (IP) in making 'pangasi' is comparable to the other local knowledge of other indigenous cultures in the Philippines. They just need to have it standardized so that their practice will no longer be always as per 'estimate' basis but would be quantifiable or in terms of measured quantities so as to yield a consistent, quality product.

## INTRODUCTION

## Background and Rationale

## Philippine indigenous groups

The Philippines is a multi-cultural country. According to the Summer Institute of Linguistics, there are 183 living languages in the Philippines and 175 of them are indigenous, that is, still being spoken by its respective ethnolinguistic group (Lewis, 2009). One of these language groups is called *Sulod* located in Central Panay, with alternate names as *Bukidnon*, or *Mondo* (Ethnologue. Languages of the world, Philippine country report). Some of the members of this ethnolinguistic community are residents of Tapaz, a municipality in the province of Capiz, Philippines, in the center of Panay Island.



Figure 1. Site Area

Tapaz lies within the central mountain ranges of Panay Island with 58 barangays, 28 of these are within ancestral domain or land of the indigenous peoples (IPs)

known as the Panay Bukidnon. More than 10,000 indigenous people (IP) are living in these 28 hinterland barangays.

The Tapaz IPs have brown to fair skin, with straight black hair and spread out in the upland barangay in about 40,000 hectares of land, considered as the biggest IP communities in Western Visayas. (The Manila Times, February 20, 2016).

The indigenous people (IP) like the Panay Bukidnon have a knowledge of the natural resources that make-up their food environment. They have learned to develop a wealth of experiences and explanations relating to the mountainous environment in which they live in. This traditional knowledge is often referred to as indigenous or local knowledge. Rees (1999) as cited by Balayan et al (2016) pointed out that this indigenous knowledge is accumulated store of cultural knowledge generated and transmitted by communities from one generation to another about how to adapt to, make use of, and act upon physical environments and their material resources in order to satisfy human wants and needs. This local knowledge is important since it is the main asset they invest in the struggle for survival, to produce food, provide for shelter or achieve control of their own lives. Significant contributions to global knowledge have originated with local people even dating back for instance, to an age-old tradition of fermenting food as in making wines. Such local knowledge is developed and adapted continuously to a gradually changing environment. It is passed down from generation to generation and closely interwoven with people's cultural values (FAO, 2017).

Barnhardt and Kawagley (2005) affirmed that Indigenous people throughout the world have sustained their unique world views and associated knowledge systems for millennia, even while undergoing major social upheavals as a result of

transformative forces beyond their control. Many of the core values, beliefs and practices associated with those worldviews have survived and are beginning to be recognized as having an adaptive integrity that is as valid for today's generations as it was for generations past.

Likewise, as cited by Olaide (2012), the World Bank (1998) stated that

Today, many indigenous knowledge systems are at risk of becoming extinct because of rapidly changing natural environments and fast pacing economic, political, and cultural changes on a global scale. Practices vanish, as they become inappropriate for new challenges or because they adapt too slowly. However, many practices disappear only because of the intrusion of foreign technologies or development concepts that promise shortterm gains or solutions to problems without being capable of sustaining them. The tragedy of the impending disappearance of indigenous knowledge is most obvious to those who have developed it and make a living through it. But the implication for others can be detrimental as well, when skills, technologies, artifacts, problem solving strategies and expertise are lost.

Specifically, a lot of studies have been done about ethnic fermented foods and alcoholic beverages of Asia (Tamang, 2015). In addition, more specific studies have already been published on indigenous fermented foods of

Southeast Asia (Owens, 2015). In the Philippines, Halili (2004) pointed out that wine manufacture included basi, an Ilocano wine from sugar cane; pangasi, a Visayan wine made from rice; lambanog, a Tagalog wine produced by distillation of tuba (made from coconut sap); and the tapuy, an Igorot wine made from rice. On the other hand, Dampier (as cited by Sanchez (2008)) mentioned an alcoholic drink made by natives of Mindanao, from boiled rice that was allowed to steep in water for some time in earthen jars. According to Sanchez (2008), the Bukidnon method of preparing starter culture for making pangasi begins with soaking nonwaxy rice overnight. The soaked rice is then drained, pounded finely, and mixed with ginger root extract, a small amount of old tapay (termed agonan) and sufficient water to make dough. The tapay is flattened and shaped spherically and allowed to dry for two weeks inside a room and another two weeks under the sun. A variation in the method is made specifically for the Preparation of agkud, a three-day-old fermented rice similar to the Northern Luzon binubudan. In the preparation of agkud (starter culture), sugarcane juice instead of water is mixed with ginger root extract and agonan.

Furthermore, Sanchez (2008) pointed out that the Subanun or Bukidnon method for the preparation of rice wine, locally called *gasi*or *pangasi*, was first reported by Christie (1912); later studies were done by Sakai and Caldo (1985a).

Specifically, Sanchez (2008), cited Chistie (1912) that a traditional drink made from rice isgasior *pangasi*, is popular with the Subanuns of Mindanao, in the southern part of the Philippines. *Gasi* is the principal drink offered to visitors of rank. It is also offered to souls of the dead and to various classes of spirits. The *gas* is placed on or beneath the altar or the image, and the spirits are formally invited by a medicine man to partake of it. Subanuns occasionally drink *gasi* during religious and marriage ceremonies.

The Subanuns prepare *gasi* by mixing parts of certain plants with pounded rice. The mixture is cooked and set aside to ferment, after which, it is formed into small balls, dried and stored for future preparation of gasi. The wife prepares the gasi. Cooked rice is spread on a mat; while still warm, it is thoroughly mixed with one or more balls of the previously prepared mixture (n powder form). The mixture is allowed to ferment for a few hours. The bubbling mash is then transferred to a Chinese jar, and a calculated amount of water is added to it. In some cases, crushed ginger root and red hot pepper are added for flavor. As soon as liquid is formed, 'gasi' is consumed by siphoning the liquid off with a bamboo tube with small diameter. Sometimes, a sweetsmelling herb is placed on top of the liquor before it is served. The amount withdrawn from the jar is replaced with water so that as gasi is consumed, the strength of the alcohol decreases.

Nabua, et al (2013) conducted a study to determine the production, processing and marketing of 'pangase' wine as an identity of the Subanen tribe in Zamboanga del Norte. They reported the use of three raw materials such as cassava tubers, rice hull and a concoction of herbs called "tapay" (made from 24 to 60 herbs). The pangase wine undergoes fermentation process in a ceramic jar called "bandi" or "tibod" for two weeks to three years. Its potential in the market is promising but there are a few known producers to supply it.

Meanwhile, Sanchez (2008) cited the studies conducted by Sakai and Caldo (1985b) on 'pangasi' made in North Western Mindanao, specifically in Bukidnon. They reported that it is prepared like 'tapuy', except for slight variations in the process. The cooled cooked non-glutinous rice is inoculated evenly with approximately 7% powdered tapay (starter) and allowed to undergo saccharification in a bamboo basket lined and covered with leaves of 'hindang' (Macarangahispida [Blume] Muell. Arg.) for 3 days. The

mixture is transferred to earthen jars for several weeks of fermentation. The liquid formed (termed 'lihing') is siphoned through a bamboo tube with small diameter called *usok*. A small amount of sugar solution is added for the second stage of fermentation that usually lasts until most of the rice mixture is hydrolyzed and fermented.

So far, only Hamili (2004) has made mention of 'pangasi' wine in the Visayas but it did not specify as to the specific location. In fact, there have been no documented cases yet of making pangasi rice wine in Western Visayas.

For this reason, the Panay Bukidnon indigenous people (IP) in Tapaz, Capiz might face the potential loss of this knowledge in making rice wine due to lack of use by younger members of the society and to gradual loss of elder members who know the most about these resources. Thus, local knowledge about making rice wine 'pangasi' must be documented. However, as Shava (2005) pointed out, there is a need to have some practical application of this local knowledge to benefit the members of the indigenous community themselves.

In this connection, the researchers would like to document the making of 'pangasi' rice wine by the indigenous people in Central Panay as part of their tradition so as to preserve their local knowledge.

# Objectives of the Study

In general, in this study we aimed to describe the process of making rice wine called 'pangasi' by the Panay Bukidnon indigenous people in Tapaz, Capiz.

# Specifically, we aimed to:

1. describe the ingredients and procedure used in making 'pangasi' by the Panay Bukidnon (IP);

- 2. compare the ingredients and procedure used in making 'pangasi' by the Panay Bukidnon IP with other rice wines made in the Philippines; and,
- 3. describe and discuss the emerging themes deduced from documenting the making of 'pangasi' rice wine by the Panay Bukidnon IP.

## Definition of Terms

Indigenous Peoples. Indigenous peoples referred to as "national minorities by the 1973 Philippine Constitution and as "national cultural minorities" by the 1987 Constitution. With the passage of the Indigenous Peoples' Rights Act of 1997 (RA No. 8371, or simply IPRA, they are now referred to as indigenous peoples (IPs) or indigenous cultural communities (ICCs). According to IPRA, indigenous peoples are a group of people or homogeneous societies identified by self-ascription and ascription by others, who have continually lived as organized communities community bounded and defined territory, and who have, under claims of ownership since time immemorial, occupied, possessed and utilized such territories, sharing common bonds of language, customs, traditions, and other distinctive cultural traits, or who have, through resistance to political, social, and cultural in roads of colonization, non-indigenous religions and cultures, become historically differentiated from the majority of Filipinos.

In the Philippines, these groups have been referred to, through the years mainly by the government, as indigenous cultural communities, cultural minorities, tribal Filipinos, ethnic minorities, and highlanders. The United Nations popularized the use of the term "indigenous people,"

especially after the declaration of 1993 as the Year of the Indigenous People (Molintas, 2013).

Indigenous knowledge. It is knowledge that is unique to a given culture or society (Grenier, 1998). In this study, indigenous knowledge includes local knowledge, skills known, and practiced in making 'pangasi' rice wine and passed down from one generation to another.

Fermentation. Production of acids or alcohol or subtle flavors and aromas from starchy or sugary medium with the action of microorganisms, such as yeasts and bacteria (Worku, et al, 2015) In this study, fermentation is the process of production of traditional alcoholic beverage from rice called 'pangasi'.

## Significance of the Study

The results of this study could be beneficial to the following:

Government officials. It could provide them with valuable information to enable the indigenous community to meet food security and livelihood needs.

Members of the indigenous community (Panay-Bukidnon). It could help to preserve their culture specifically in terms of traditional food preservation methods and be able to apply these for livelihood purposes.

Other researchers. They could also benefit from this study to develop better utilization of these local food resources. Students and the General public. They could be made aware of the indigenous culture of the Panay Bukidnon so as to learn from them and to appreciate them as well.

# Scope of the Study

The study was conducted in the mountainous area of Barangay Sinunod, Tapaz, Capiz in Central Panay among the indigenous people who are referred to as Panay-Bukidnon. The focus of the study was on documenting their traditional 'pangasi' rice wine making in the context of the indigenous communities in Tapaz, Capiz. The study site was in one of the IP Barangays, that is located in Brgy. Sinunod. This is where the other cultural informants met for a focus group discussion and how they can have practical application to benefit the local IP community. These informants are authorized representatives or tribal chieftains in the other IP Barangays such as BrgySinunod, Batobato, Maliao, Rizal Norte and Tacayan.

There were no physico-chemical analyses conducted on the 'pangasi' rice wine.

#### METHODOLOGY

This study aimed to describe and understand the making of 'pangasi' rice wine by the indigenous people (IP) in Central Panay. Information were collected through direct observation and semi-structured interview. Due to limited immersion time of four days, important information were gathered from key cultural informants. These people were selected by the key cultural informant from the National Commission on Indigenous Peoples (NCIP) in Tapaz, Capiz. These people also comprised the participants in the focus group discussion. They are members of the Council of Elders of the Tapaz Indigenous People's Organization (TIPO). Likewise, they are tribal chieftains of selected IP Barangays such as Brgy Sinunod, Bato-bato, Maliao, Rizal Norte and Tacayan. The information gathered were cross-

checked with existing literature of documented traditional wine making from different areas in the Philippines.

An interview guide and focus-group discussion guide were used to collect information. A digital recorder and camera were used to transcribe information for proper documentation and data analysis.

## Ethical considerations

The researchers sought permission from the Regional Office of the National Commission on Indigenous People (NCIP), other local authorities such as the Mayor of Tapaz, Capiz and community leaders, to visit the IP barangay. The cultural informants gathered at the Barangay Health Center of Brgy. Sinunod. The researchers stayed there for four (4) days to establish rapport and to interact with the indigenous people, especially those belonging to older generations to get to know the traditional methods of making rice wine.

The data gathering process was properly guided by representatives from the National Council for Indigenous Peoples (NCIP), Tapaz Indigenous Peoples' Organization (TIPO) and local government officials.

The respondents were given a chance to review the findings of the study for consistency and validity. This was done during the IP research presentation conducted as part of the Indigenous Peoples' Day Celebration at Central Philippine University, Jaro, Iloilo City on March 7, 2017.

## Data Analysis

Thematic analysis was used in analyzing the data collected. Information gathered were categorized according to emerging themes.

## **RESULTS AND DISCUSSION**

Rice wine is a popular traditional alcoholic beverage in the Philippines. Specifically, It is called 'pangasi' by the Central Panay Bukidnon indigenous people (IP) of Tapaz, Capiz,. The informant demonstrated two types of rice wine, one that is fermented for a longer period of time and used for special occasions such as in wedding ceremonies, rituals, etc, and they called it 'pangasi'. On the other hand, another type of rice wine is for ordinary, commercial use and fermented for a shorter period of time, called 'baluk'.

According to the informants, rice is abundant in their locality and it is one of their agricultural products. In fact, boiled rice is their traditional staple food. Any rice variety may be used but the ordinary, non-waxy, upland rice was used in this case. Rice has to be pounded using their wooden mortar and pestle because it is what they have as an indigenous tool. They would not use milled rice, because according to them, if they have it milled somewhere else, it might get contaminated with dirt from other produce that might have used the same rice mill.

There have been a lot of studies on traditional fermented alcoholic beverages, such as rice wine in almost all countries of the world. Starch is the major constituent of rice and makes up 90% of rice in dry weight. According to Suresh, et al. (1999) as cited by Wadhai and Gondane, most biological processes concerned with the conversion of starchy materials into alcoholic beverages have three steps, such as liquefaction of starch, enzymatic saccharification and fermentation. The main ingredient used in making 'pangasi' of the Central Panay Bukidnon (IP) is ordinary, non-waxy, upland rice, since it is abundantly available in their natural environment. This is in contrast to the 'pangasi' traditional wine among the Subanen indigenous people of Zamboanga del Norte, as reported by Nabua, et al, (2013)

which makes use of cassava tubers as the main ingredient and a starter consisting of a concoction from 24 to 60 species of plant herbs and the specification of the mixture is even a guarded secret handed down to a selected few throughout the generations. On the other hand, Sanchez (2008) cited Christie (1912) as having referred to "pangasi" or "gasi" as another traditional drink among the Subanuns of Mindanao, made also from rice with added crushed ginger root and red hot pepper, but water is added to it. Another similar study cited by Sanchez (2008) is from Sakai and Caldo (1985b) who conducted studies on "pangasi" made from rice in northwestern Mindanao, specifically in Bukidnon. However, they reportedly used sugar solution which is added for the second stage of fermentation instead of sugar cane juice, which is used by the Central Panay Bukidnon IP in Tapaz, Capiz. This usually lasts until most of the rice mixture is hydrolysed and fermented. In a way, the adding of sugar cane juice or sugar solution to the remaining mash after two weeks of fermentation is also similar to what Sanchez (2008) reported in the traditional Bontoc and Benguet methods of making rice wine and the Ifugao method rice wine called 'tapuy'. But the Ifugaos used red glutinous or waxy rice which is roasted instead.

Their rice wine, "baluk" which has a shorter shelf life, just like "tapuy" in Northern Philipines is normally harvested and directly consumed as soon as liquid forms in saccharified cooked rice. Similarly, their "pangasi", like "tapuy" is also normally consumed after one month of fermentation without further processing. As mentioned by the informant earlier in this study, if the sugar cane juice to be added in the "pangasi" is cooked first and its volume in the cooking pot is reduced by 2 inches from the top, the resulting rice wine would last longer and would be of a better quality. He likewise noted that if it were so, it could last up to six months or even one year. This observation affirms what Sanchez (2008) likewise reported, that pasteurization of "tapuy" is needed for product quality improvement.

## Plants Used for Fermentation Starters

In a study by Sota and Tetsuo (2011), plants used in making fermentation starters in Cambodia are either spices and herbs, such as red chili pepper (Capsicum frutescens) and ginger (Zingiberofficinale) and a sweet ingredient such as sugar cane (Saccharum officinarum). Spices and herbs are known for their antimicrobial properties (Dung et al. 2005: Saono et al. 1982) as cited by Sota and Tetsuo (2011). The informant from the Central Panay Bukidnon IP mentioned that red chilli pepper and ginger are hot and spicy and are strong flavoured. So, just like the Cambodians as cited in an earlier study by Sota and Tetsuo (2011, it was believed that rice wine made with starters containing them would be hot and strong as well. Dorantes, et al (2000) as cited by Omolo, et al (2014) noted that the pungency of chili peppers is due to the accumulation of capsaicinoids, a group of naturally produced compounds that are unique to the Capsicum genus. A study by Omolo, et al (2014) also reported the natural antimicrobial properties of chilli peppers. On the other hand, antioxidant properties of ginger root (Zingiber officinale) have been reported in a study by Adel & Prakash (2010).

As mentioned earlier, the use of sugar cane (Saccharum officinarum) would make the rice wine taste sweet. As cited by Sota and Tetsuo (2011), Hayashida and Kinoshita (2004) reported that saccharides act as nutrients that promote the growth of yeast and as the source of ethanol fermentation, which inhibits the growth of unwanted bacteria.

The use of leaves in the processing of "pangasi" in Central Panay Bukidnon which included, "adgaw" (Premnaodoratablanco), "talus" (Alpiniahaenki Pres), and young coconut leaves were not mentioned in earlier related studies. According to (Pinzon, undated).

"Alagau" plant or "adgaw" in Visayan is scientifically named as Premnaodorata Blanco (Verbenaceae). It is native to the Philippines where it is not commonly cultivated and thrive in the less accessible limestone forests. In the Philippines, the leaves are used as an ethnomedicine for various ailments. It is one of the seven components of a commercialized Philippine herbal preparation called "Pito-Pito."

The Panay Bukidnon IP informant 1996) used "adgaw" (*Premnaodoratablanco*) leaves to clean their tools because these have been traditionally used by their ancestors to clean their tools also.

He said, "Matinlo dya nga klase ka dahon" (This kind of leaves are clean.)

In another study by Pinzon et al, and Ali et al, (2011), "Adgaw" (Premnaodoratablanco) leaves have been used in Malaysian indigenous medicine (traditional, ethnoand folk-medicine) for antiviral and cytotoxic activities, anti-inflammatory antimicrobial. chemopreventive and "adgaw" reported from flavones have been (Premnaodoratablanco) leaves. On the other hand, "talus" (Alpiniahaenki Pres.) leaves was reported by Madulid, et al (1989) as being used by the Ati tribe in Nagpana, Barotac Viejo, Iloilo as a traditional medicine for boils.

# Gender Issues in Making Rice Wine

Among the elders in the Tapaz Indigenous Peoples' Organization (TIPO) who were interviewed, only one of them was a woman, who was also knowledgeable about their indigenous culture. The rest of the elders were men and when they were asked who taught them how to make "pangasi", each one made mention of the following:

One informant said,

"Ini nga paghimo sang pangasi, sang buhi pa si Nanay ko, amoni ang obra nya...Kon may okasyon gani, bisan didto sa pihak, siya ang ginasugat nga mag-obra sini". (When my mother was still alive, this is what she used to do, and whenever there are special occasions, she is the one who is picked to make the 'pangasi', even if she has to go to a distant barangay to do it.)

Still, another informant said, "Natun-an koni kay Lola ko" (I learned it from my grandmother).

Similarly, another informant mentioned, Nakita ko ang akun Tiya nga nagahimo sang pangasi ("I saw my aunt doing the *pangasi*").

The only woman informant present in the focus group discussion who was also a member of the Council of Elders of TIPO said,

"Babayi gid man ang kalabanan nga nagatrabaho sini. Kay ang babayi mahipid. Mauti siya. Kag kalabanan sa nagaobra sang pangasi, isa lang siya. Gina preparar niya ang tanan antes siya mag-obra, pero pwede man siya kapangayo bulig para magsag-ob kag magpainit sang tubig kag mag-preparar nga ilaga-un ang adgaw." (Actually, it is really the woman in the indigenous community who is knowledgeable in doing the 'pangasi'. She is mostly left alone in the house doing the preparations all by herself, but she can also ask help to fetch water and prepare to boil the adgaw leaves).

According to her, this is to ensure that everything is kept clean and tidy. She further explained that during the focus group discussion, where most of the members of the Council of Elders were men, and they were the ones available for the interview.

This concept of women as bearers of local knowledge regarding traditional rice wine production holds true also in other cultures, such as the one studied by Sota and Tetsuo (2011) in Cambodia. The women usually produced the starters, and the men sometimes helped with the collection of plants or the pounding of rice and plants. In another study by Isnouf (2012), he found out that women in rural Sudan are often responsible for food processing and storage, collecting of water and firewood and for generating incomes for subsistence. He further reported that indigenous methods and solutions applied by women to sustain household food supplies are culturally acceptable, economically practicable, and more appropriate for the local environment and conditions than modern techniques and solutions suggested by scientific experts.

## The Value of the Rice Wine

In this study, the informants who represented the different barangays in the indigenous community during the focus group discussion were elders, tribal or barangay chieftains and officers of the Tapaz Indigenous Peoples' Organization (TIPO). The president of the organization was considered an authority in making their rice wine 'pangasi', however he was not scheduled to arrive on the first day, yet. Since the researchers arrived early in the study site, they were excited to ask preliminary questions about rice wine, because the host barangay welcomed them warmly and the men in the community had recreational drinking. The informant in the village made it clear to everyone, including the researchers to wait for the person in authority to explain

about 'pangasi'. It was a signal indeed, that rice wine has a very important part in their culture, not just for prospective profit or market value, but so much more. In fact, after the interview with the President of TIPO, he mentioned that although he is knowledgeable about rice wine and that he has taught many others how to do it, there's no one in his barangay selling the rice wine starter. Instead it is now being made and sold in the other nearby barangays. The fact remains that he is the one responsible to pass on this local knowledge about making rice wine to the next generation.

Just like in the case of the Tagbanuwa indigenous people in Palawan, the traditional values underlying the use of the rice wine are both religious and social. Fox (1984) studied the Rice Wine Complex among the Tagbanuwas of Palawan. Basically rice wine is used for ceremonial drinking associated with religious ceremonies as well as in social drinking and associated activities. It is a happy occasion for singing and dancing and for renewing ties with friends and relatives who have been invited from other places. This is also being practiced among the indigenous people of Central Panay Bukidnon. They may be referred to by other names, such as 'Ambahan' which is similar to the drinking songs "Sudsud" of the Tagbanuwa in Palawan. According to Fox (1984), "Sudsud are simply short traditionally learned songs and verses sung in competition during the drinking parties. It is the act of singing with their veiled words and tunes which evokes an emotional response. These songs are an expression of a collective identification and of in-group superiority as well as pride. A contestant also enjoys the privilege and advantage of 'monopolizing the jar of rice wine as his 'opponent' gets engrossed with singing."

Not only is 'pangasi' important to the Central Panay Bukidnon IP during happy occasions like harvest, weddings, birthdays and family reunions, it is so much more of cultural value during religious ceremonies or rituals, such as during times of illness or death in the family. The earthen jar

containing the 'pangasi' is so precious that it is considered an heirloom, passed on from one generation to the next. It is a well-guarded community and family treasure which cannot be bought nor sold but can only be borrowed every time there is a need for it. In fact, one informant said that their old earthen jar has been in existence since the Spanish period in the Philippines.

Having this social and ritual value, the use of rice wine may be seen as a powerful integrating force which links and binds the individual to the group (Fox, 1984). On a personal note, the informants value the 'pangasi' as healthful because according to them, the ingredients are natural and locally available in their environment since they do not use fertilizers for their plants. They do not have to spend money in order to have a drink. Besides they do not have money to buy commercial wines but they know how to make their own and they take pride this local knowledge that has been handed down to them from one generation to the other.

# Local knowledge regarding cleanliness and sanitation

During the focus group discussion, the informants always emphasized the need to wash and clean ingredients and all the necessary tools and improvised equipment they use in making 'pangasi'. For instance, they make sure that they grow their own rice. They do not use fertilizers or chemicals in growing rice. This is to make sure that the rice is free from chemical contaminants. They also grow their own herbs and spices in their surroundings. This assures them that these plants have not been exposed to chemical fertilizers or pesticides. The ladles and the drinking straws they use are made of freshly gathered bamboo. They make their cooking utensils themselves, by freshly scraping or working on the bamboo to transform it into clean food containers or cooking tools such as in 'salidangdang', a kind

of bamboo tray where they dry up the starter. They also use leaves which are considered clean by nature, such as banana leaves, 'talus' (Alpiniahaenki Pres.) or 'payaw' and also the, 'adgaw' (Premnaodoratablanco) leaves.

# **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

The study was conducted to document and steer indigenous knowledge on food preservation such as traditional rice wine making in Central Panay Bukidnon. It aimed to describe and understand food preservation among the indigenous community. Information were collected through direct observation and semi-structured interview. Important information were gathered from key cultural informant. This information were cross-checked with existing literature on documented traditional wine making from different areas in the Philippines.

Likewise, an interview guide and focus-group discussion guide were used to collect information.

traditional fermented beverage, alcoholic 'pangasi' used by the Central Panay Bukidnon Indigenous People in Tapaz, Capiz is different from the 'pangasi made by the Subanons in Zamboanga del Norte The main ingredient used in making 'pangasi' of the Central Panay Bukidnon (IP) is ordinary, non-waxy, upland rice while the 'pangasi' of the Subanen indigenous people of Zamboanga makes use of cassava tubers as the main del Norte. ingredient and a starter consisting of a concoction from 24 to 60 species of plant herbs, as reported by Nabua (2013). However, it is similar to 'pangasi' or 'gasi' which is a traditional drink among the Subanuns of Mindanao, made also from rice with added crushed ginger root and red hot pepper, but water is added to it. It is almost the same as 'pangasi' made from rice in northwestern Mindanao, specifically in Bukidnon, in a study cited by Sanchez (2008)

from Sakai and Caldo (1985b). However, they reportedly used sugar solution which is added for the second stage of fermentation instead of sugar cane juice, which is used by the Central Panay Bukidnon IP in Tapaz, Capiz. The use of leaves in the processing of 'pangasi' which included, 'adgaw', 'talus', and young coconut leaves have not been mentioned in earlier related studies. However, regarding their local knowledge on cleanliness and sanitation, it is believed that these leaves are by naturally clean, especially if they are 'ugbus' or young, and not have been too exposed yet in the environment.

Indigenous women have an important role to play in using and preserving this valuable local knowledge. They just have to be better recognized and supported by the community.

The value of "pangasi" is much more than just a traditional drink one can hold in his hand, rather it is one that holds the indigenous community altogether. Aptly described by Fox (1984) as having this social and ritual value, the use of rice wine may be seen as a powerful integrating force which links and binds the individual to the group (Fox, 1984).

The local knowledge of the Panay Bukidnon (IP) in making 'pangasi' is comparable to the other local knowledge of other indigenous cultures in the Philippines. They just need to have it standardized so that their practice will no longer be always as per 'estimate' basis but would be quantifiable or in terms of measured quantities so as to yield a consistent, quality product.

It would be much more valuable however, if 'pangasi' could be improved to create employment to benefit the Central Panay Bukidnon Indigenous People themselves. The local knowledge of the Panay Bukidnon (IP) in making 'pangasi' is comparable to the other local knowledge on rice wine making of other indigenous cultures in the Philippines.

They just need to have it standardized so that their practice will no longer be always as per 'estimate' basis but would be quantifiable or in terms of measured quantities so as to yield a consistent, quality product.

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