

## Survey and Documentation of the Isnags Traditional Farming Tools and Implements

RONALD O. OCAMPO

ascrnd@yahoo.com

Apayao State College, San Isidro Sur, Luna, Apayao

PHILIPPINES

**Abstract** - This study was conducted to document farming tools and implements of the Isnags of Apayao. The study made use of the descriptive survey method of research with key informant interview and documentation as primary data gathering tools. The Isnags are bounded with beliefs and practices in all walks of their life. In the performance of these beliefs and practices, some of their farming tools are being utilized. A popular festival featuring ethnic songs, dances and rituals called the Say-am is being performed as a means of preserving their unique cultural traditions. The aliwa is used in the performance of a ritual as they cut the head of a dog or a pig to be used during say-am. After the say-am is the giving of food wrap in banana or "samak" leaves signifying the commence of the activity.

**Keywords:** Isnags, Traditional Farming, Tools, Apayao, Aliwa

### I. INTRODUCTION

The Isnags are the dominant ethnic minority in the province of Apayao. They are small ethnolinguistic group in the mountains of Apayao who were never subdued in nearly 350 years of Spanish rule. They live in settlements along the river, but move up the hills to tend their farms during certain seasons of the year. Upland agriculture is their main source of livelihood where most of them settle in their kaingin areas during planting season.

Little is known about where they came from before they settled in Apayao. Their origin can be traced back from the mountainous part of Ilocos usually from the towns of Vintar, Adams, Carasi and others. Historically, these people moved to Apayao via mountain ranges until they reached Apayao. The word Isnag probably came from an Ilocano word meaning "from Tineg," a town and a river in Abra. Isnag would also come from "uneg" meaning recede to the interior. The very reason of their being uncolonized by the Sapanish. The word later came to mean "enemy" and was later discarded, and this mountain people came to be known by their neighbors as Isnag. Isnag and Apayao are alternative terms that refer to the inhabitants of Apayao in what used to be a part of Mountain Province before it was partitioned into the five provinces of Benguet, Kalinga, Apayao, Mountain Province, and Bontoc.

Various names have been used to designate the Isnags. They are called los Apayaos or los Mandayas in Spanish references. Los Apayaos refer to the river along whose banks the people live; and los Mandayas is related to an Isnags word meaning "upstream". Today, the Isnags are sub divided into two distinct tribe and it is based in the position of the Apayao River- the *Immandayas* on the upper stream and the *Immalud*

on the lower stream. The Immadayas occupy the town Calanasan while the Immalud occupy the towns of Kabugao and Lower Apayao.

Very little is known about how the Isnags lived before the Spaniards came to the Philippines. It is probable that they lived much as they do today — by hunting, fishing, and kaingin farming/That there was direct or indirect trade with China is evidenced by the Chinese jars, plates, and beads that are prized possession of many Isnag families.

Agriculture has been their major occupation since time immemorial. The Isnags brought with them their important material culture as evidenced in the towering palms in their settlements. Their traditional farming practices is still in carried on by their generations as they continually clash for existence.

Along with are their traditional farming tools and equipments which they inherited from their forefathers. With the advent of technological advancement, these significant and maybe not promising implements and tools are in the verge of extinction. Hence this study.

### II. OBJECTIVES OF THE STUDY

This study was conducted to document farming tools and implements of the Isnags of Apayao. Specifically, it was intended to Identify farming tools intended for the following farming activities: land preparation, planting, harvesting and post harvest activities; to determine the uses and cultural significance of each farming tools and implements and to propose a measure to conserve and promote such farming tools and implements.

### III. REVIEW OF LITERATURE

#### Early Development of Farming Tools

The earliest tools of the farmers were made of wood and stone. They included the stone adz; sickle or reaping knife with sharpened stone blades, used to gather grains; the digging stick, used to plant seeds and with later adaptations, as a spade or hoe; and a rudimentary plow, a modified tree branch used to scratch the surface of the soil and prepare it for planting. The plow was later adapted for pulling by oxen.

Improvement in tools and implements were particularly important metal tools were longer lasting and more efficient, and cultivation was greatly improved by such aids as the ox-drawn plow fitted with an iron-tipped point.

#### Philippine Traditional Farming Tools

Within the Philippines, as in many other Asian nations, traditional rice farming practices have been on the decline

because of the use of new agricultural technologies. One prime example is the diminished use of harvesting knives, particularly the small hand-held variety. The different types of knives used in the Philippines are presented along with how they are manually used. These knives in particular are the transverse-bladed knife, the sickle, and the lingcao. Various beliefs and customs, as well as practical concerns, have shaped the appearance and usage of harvesting knives through time. It is apparent that within the foreseeable future, many of the traditions and techniques that affect their usage will no longer be actively practiced. To circumvent the loss of this cultural heritage, a concerted effort needs to be undertaken to document the knives' utilitarian role in harvesting and perhaps, more importantly, their being physical and symbolic representations of the beliefs and traditions of the society that utilizes them.

The harvesting of a rice crop is accomplished by cutting the stalks with a sharp hand tool. Some farmers reap only the panicles, whereas others cut right from the base of the stalk. Early rice farmers probably experimented with a number of sharp objects to obtain a suitable cutting instrument. Indigenous farmers in Africa have been documented to use mollusk shells, particularly the giant African snails, for harvesting. It is possible that early farmers in the Philippines did the same. Indeed, the German scientist Fedor Jagor observed in the 1870s, that some Philippine harvesters would use the sharp edge from a mussel shell, which could often be found in the irrigated rice fields. Farmers may have even relied on less. The Hanunóo, of Mindoro Island, traditionally harvest with only their bare hands.

It is most likely that the first harvesting implement designed was that of a small knife which cut off the ripe rice panicles one by one.

Rice is held in high regard. It is interwoven into the people's culture and beliefs. Not surprisingly, harvest time is a joyous time of the year because it represents the culmination of the season's work. A good harvest means the farmer and his family will have enough food to last until the following season.

The spike tooth harrow has a wooden frames that holds the teeth made of round metal or hardwood bars. The teeth are slightly bent. The harrow has hitch point on two sides, which makes the implement reversible. For covering the seed, the harrow is pulled with the bent turned backward; for weeding the bent is forward. ( Gupta & O'Toole, 1986).

Another implement is the "lithao", a hardwood implement with a handle, five to six equally spaced legs that open furrows, and a hitch bar where the rope to pull is tied. It is pulled by a bullock or water buffalo. As the lithao passes through the soil, it loosens the soil crust and leaves a shallow furrow. Lithaos also used in some cases to cover the seed and during early crop growth to control small weeds. During these operations the legs travel between the row.

According to M.M. Movillon and D. Schossen, harvesting is still done with small hand held-knives ( called finger- blade or traverse- bladed knives) that probably resemble the very knives developed. These knives look strikingly similar to those used in Asia and Africa. A small metal- blade, approximately 5-15 cm in length, is fitted crosswise into a short piece of

wood. The implement is held so that the blade runs transverse across the palm. To use the knife, the harvester bends their finger around the stalk at the neck of the panicle and draws it into the blade. Higher stalk varieties commonly found in the upland regions lend themselves nicely to harvesting with small hand-held knives. These knives are known by various names throughout the country due in part to the different language and dialect spoken.

Sickles are the most traditional harvesting tools for cereal crops. It is the implement most frequently utilized for harvesting on small farms in the Philippines. The lightweight knife consists of either a smooth or serrated hook-shaped blade fitted with a handle. Because upland rice has a low grain to straw ratio, sickle-harvesting efficiency is 25-35 kg rough rice compared to 45-50 kg for lowland rice.

Jars are the most common processing implements. Extra large jars according to Mary Ngalawen, an antique dealer, are used to ferment native wines like basi ( sugarcane wine) and Tapey ( rice wine). The smaller ones were used to cure the native homemade bacon called "itag". Natives would attest that the wines used in these jars are tastier and more zestful than those fermented in plastic jugs, glass container or even the newly made jars from abroad.

### **The Vanishing Harvesting Implements**

#### ***Hand-held transverse-bladed knives***

Today, in small areas of the Philippines, harvesting is still done with small hand held-knives (called finger-blade or transverse-bladed knives) that probably resemble the very first knives developed. These knives look strikingly similar to those used in Asia and Africa. A small metal blade, approximately 5-15 cm in length, is fitted crosswise into a short piece of wood (Fig. 1). The implement is held so that the blade runs transverse across the palm. To use the knife, the harvester bends their finger around the stalk at the neck of the panicle and draws it into the blade. Panicles of rice are transferred to the harvesters' other hand once a few have been cut. When a group has been collected, the panicles are either bundled or placed loosely into a basket. This individual selection of rice panicles translates into a highly laborious method of harvesting. Higher stalked varieties commonly found in the upland regions lend themselves nicely to harvesting with small hand-held knives. The knives are known by various names throughout the country due in part to the different languages and dialects spoken .

#### ***Harvesting sickles***

The sickle, used throughout Asia and Africa, is the implement most frequently utilized for harvesting on small rice farms in the Philippines. It is well suited to harvesting short-stalked varieties, which are found throughout the lowland regions. The lightweight knife consists of either a smooth or serrated hook-shaped blade fitted with a handle. Its size and shape can vary between areas, depending on cropping patterns, customs, and farmer preferences. When designed properly, the blade should be shaped in such a manner that the tool is balanced for easy handling and minimum effort. For harvesting, one hand holds the sickle for cutting, while the

other gathers rice stalks. Shattering of the rice kernels, due to the use of a sickle, is minimized by the dampening effect of the hand holding the rice stalk. The process is a tiring operation, as the harvester must constantly squat close to the ground. The length at which the stalks are cut can vary. Stalks are either laid loosely in rows, tied together to make uniform-sized bundles, or neatly stacked to allow for drying. Later they are collected and transported to where they will undergo threshing.

For harvesting, the time-saving benefits of a sickle over a small hand-held knife can easily be seen. Small knives are very labor-intensive. One particular study determined that it required about 240-250 hours a hectare in countries where it is used. The study showed that the labor-saving technology of the sickle required less time, only 80-160 hours a hectare in the countries where it was employed.

### 'Lingcao'

Another type of knife can also be seen in the lowland rice fields of the Philippines. The 'lingcao' or 'lingkaw' is a hooked tree branch with or without a curved knife fastened along the handle. Its name was probably derived from the contraction of the Tagalog words "likong kahoy" which literally means bent or curved wooden branch. The hook is used to gather the rice stalks into bunches which are grasped with the free hand. The tool is then shifted in the hand and the blade is used to cut the stalk about midway between the panicles and the ground. When the tool has no blade, a sickle is used to perform the cutting action. The lingcao offers the advantage of gathering uniform-sized bundles for binding, minimizes the risks of possible bruises or cuts to the hands from the hairy stalks, and serves as a precautionary measure to ward off or avoid rodents and pest snakes inside the ready to harvest fields.

## IV. MATERIALS AND METHODS

### Research Design

The study made use of the descriptive survey method of research with key informant interview and documentation as primary data gathering tools. The use of still pictures through the use of camera was used in the documentation of traditional farming tools and implements. Key informant interview was used to determine uses and cultural significance of the tools.

### Participants

The participating respondents of the study were Isnags who still possess their traditional farming tools. These were identified by the Barangay Captain of the barangay where the study was conducted. Selection was based on the availability of the material culture needed by the study.

### Locale of the Study

The study was conducted in some selected barangays of Luna and Pudtol where Isnags communities are located. The research sites were: Doña Loreta in Pudtol, Sta. Lina in Luna. Barangay Doña Loreta has been the site of the first Pudtol Highland Tribal Association Anniversary which was conducted March last year. This association aims to promote and preserve the dying culture of the Isnags of Apayao. Isnags tradition in this barangay is still existing.

### Procedure

The researcher sought permission from the school administrator to conduct the said study. After permission was granted, the researcher found time to identify Isnags communities in the municipalities of Apayao where their customs and traditions are still in place. After identifying the Isnags communities, a letter of request was given to the municipal mayors and the barangay captains for the survey.

Key informants were identified based on the availability of such farming tools utilized in their agricultural activities. Documentation follows with corresponding interview on the use and cultural significance of the farming tools.

### Instrument

The main data gathering tool used in the study is key informant interview. Unstructured interview was conducted to Isnags folk gathering information and other related data.

### Data Analysis

Data were presented in narrative form where it bears information on description, utilization and other relevant information about the farming tools being described. Data were presented in plates and figures.

## V. RESULTS AND DISCUSSION

### The Isnags Traditional Farming Tools

Table 1. The Isnag's traditional farming tools and implements and their uses.

Farming Activities	Farming tools	Uses
Land Preparation	Aliwa	Cutting objects/ trees, etc
	Paid	Cutting
	Sampilok	Cutting
	Pa-lu	Cutting grasses and small trees
Planting	Gadang	For making hole
	Tu-pang	Seed container
	Arin	For carrying
Harvesting	Iku	For cutting rice stalk
	Rakam	For cutting rice stalk
	Gassay	For cutting stalk
	Baqui	
	Patuki	For hauling harvest
	Sipi'	For grain storage
	Igaw	For cleaning (separating grains from stalk, etc.)
Post harvest	Allo'	For milling palay
	Altong	For milling palay
	Tiklis	For hauling/ storage
	Ligmaman	For carrying things
	Aratay	For hanging
	Lah-ba	For carrying
	Gusi (Durduri)	For storing food and rice
	Gusi (Binilibil)	For storing rice and wine



**Gusi' ( a. Binilibil b. dur-duri, c. burnay c. binilibil,)**

Figure 1. The varied forms of gusi, an earthen jar. Native would attest that the wines stored in these jars are tastier and more zestful than those fermented in plastic jags, glass container or even the newly made jars. The smaller jars are often used in curing the native homemade bacon called the "itag". Other used it as storage material for rice, beans and others. The binilibil is a small jar with shiny surface usually used in storing wine such as lambanog, tapey and basi. This is usually used as container for wine served during festivities

such as say-am, weeding, and other special occasions. Durduris are century old jars, regarded as one of the precious material culture of the Isnags. It is used as dowry when an Isnag man get married to an Isnag Girl. Its price ranges from three hundred thousand pesos to half million. The burnay which originated from the Ilocos region is an earthen jar of varied sizes. It is used in storing rice, wine and others.

Isnags today are slowly losing their grip on their rich cultural heritage. One of the reasons is that they are heartedly ceding their valuable artifacts.

The common practices of Pudtol Isnags on site selection is the conduct vegetatively survey inside their territorial boundaries, mostly upland farmers devote on some hilly portions. In upland farming of the Isnags, the urgency of self-sufficiency is the vision of every farmers. However, their vision could not fully realized because of their method but there are some Isnags that are practicing or using the modern technology just like Ilocanos. The influence of media and technological advances posses a threat to what has been used before to struggle for life.

The upland farming activities done by the Isnags where the *aliwa*, *pa-id*, *sampilok* and *palok* were used for land preparation on clearing the area through weeding and burning in their fields to be ready for planting. The materials used in planting are the *gadang* and *topang* wherein the seeds are planted directly on the farm and they do not used any mechanical implements. In terms of crop management practices, while the crops are growing the farmers have to regularly monitor their field, they do use any kind of fertilizer and their fields are not irrigated. They just keep on weeding, cleaning the fields and removing plants that destroy by insect pests or damaged. The harvesting of a rice crop is accomplished by cutting the stalks with sharp hand tool. During harvesting time, *iku* or *rakam*, *arin*, *baqui*, *tiklos*, *patuki*, *igaw*, *lah-ba* and *ligmaman* were used.

For post harvest and marketing, the materials were needed and used by the Isnags are the *sipi*, *allo* and *altong*, *guzi* and *a-ngang*. Upland farmers have many problems as regards to their marketing of their products. They sacrifices to carry the products and hire jeeps to bring their products to market for sale.

### Cultural Significance

The Isnags are bounded with beliefs and practices in all walks of their life. In the performance of these beliefs and practices, some of their farming tools are being utilized. A popular festival featuring ethnic songs, dances and rituals called the *Say-am* is being performed as a means of preserving their unique cultural traditions. The *aliwa* is used in the performance of a ritual as they cut the head of a dog or a pig to be used during say-am. After the say-am is the giving of food wrap in banana or "samak" leaves signifying the commence of the activity.

Accordingly, there are agriculture-related beliefs and practices as they undergo slash-and burn agriculture (Uma). These are:

1. At the start of the harvest non-member of the family is not allowed to enter the house.
2. At the start of the harvest, borrowing/ asking favor from the one who harvested is not allowed.
3. It is their common practice that they will cook glutinous rice upon harvesting. A portion of which is offered to their *anitos* using the *igaw* or *lah-ba*.

Gupta, P. C. et.al. 1986. Upland: A Global Perspective. Los Baños, Laguna. Pp247-261

Bram, Leon L. 1986. Funk and Wagnalls New Encyclopedia. Funk and Wagnalls Corporation. USA. P248

Bitner R. 1948. Collection/ Conservation. Northbattleford's WDM. <http://www.asiarice.org/sections/whatsnew/others.html>

## IMPLICATIONS

At the start of the farm modernization program of the government through the Department of Agriculture in which mechanization is one of the concerns, the Isnags of the Apayao are still practicing their traditional farming activities. Hence, their traditional farming tools are still in existence. These farming tools constitute their important material culture. Collection and conservation efforts must be an utmost concern.

## VI. RECOMMENDATIONS FOR CONSERVATION

1. Learning institutions in cooperation with the Local Government Units and other institutions should join effort in the collection and conservation of these traditional farming tools.
2. A museum should be established for keeping the collected tools and implements. This is to foster awareness among *Iyapayao*, the Filipino people and the rest of the world. This will be part of the tourism industry of Apayao.
3. Promotion of the proposed museum should be done.
4. Inter-agency/ institutional linkages should be done to enhance promotion of the said project.
5. Result of this study should be transpired to offices such as the NCIP, the LGU, the Office of Tourism Council, the Provincial Agricultural Office and other offices.
6. A module should be developed , piloted and promoted.

## ACKNOWLEDGEMENT

Grateful appreciation and recognition is due to the following for making this study possible: Hon. Batara Laoat, Ex-Governor and president of the Pudtol Highland Tribal Association for inputting some insights; Barangay Captains of the area where the study was conducted for allowing the researchers conduct the study; Mr. Victor Iddig for accompanying the researcher in the study area.

## REFERENCES

-----Frontier Culture Museum.

<http://www.frontiermuseum.org/interest.htm>

Hassan, Magdi. Blacksmith Forge New Skills.

[http://www.itdg.org/html/itdg\\_sudan/s6-blacksmith.htm](http://www.itdg.org/html/itdg_sudan/s6-blacksmith.htm)

Okigbo, Bede N. Criteria for Designing Sustainable Farming Systems in Tropical Africa.

<http://www.unu.edu/unupress/unupbooks/80964E04.htm>