

BIBLIOGRAPHY

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ABSTRACT

The study was conducted to document the traditional sugarcane wine (fvayash) production in Sadanga, Mountain Province. Specifically it aimed to determine the production and marketing practices of wine producers and identify the problems encountered by the respondents so that solutions would be provided.

The study covered the 80 wine producers in Sadanga. The study was conducted from December 2012 to January 2013. Majority of the respondents were at their middle age and all males. The farmers harvested the sugarcane when it is fully matured and crushed with a crushing machine locally called as “poliwes”. The sugarcane wine processors were still following the traditional method of processing. The activities were done through “bayanihan” system. There was no developed market for the product thus most of the wine were used for home consumption and only a small amount was sold directly to consumers on cash basis and they used bottles as packaging materials.

The problems encountered by the respondents in sugarcane production were rats infestation. They identified high transportation cost, and absence of proper packaging materials as marketing problems.



INTRODUCTION

Rationale

Basi is made from freshly extracted sugarcane juice. The juice is boiled in vats and stored in earthen jars. Once cooled, flavorings made of ground glutinous rice and duhat (java plum) bark or other fruits or barks are added, followed by a dried powdered starter (bubod) to start the fermentation process. The mixture is left for up to three months to ferment and up to one year to age. The final product is a light brown color and has a sweet and a sour flavor. Basi is a sugarcane wine made in Ilocos Norte and particularly plentiful in Naguilian where a Basi Festival is held annually. The product has been produced and consumed even before the invasion of the Spaniards. The strong *basi* is called *basi lalaki* and if it is weak, *basi babae* (Cordero, 1992).

Sugarcane wine (basi) plays a significant part in Ilocanos culture beyond its usual recreational functions as an alcoholic beverage. A special basi is prepared and brought to the house of a woman during a *pamamanhikan*, a practice where the family of a man goes to the house of a woman to ask for her hand in marriage before the wedding plans are made. A different kind is served ceremoniously during weddings, where the newlywed's couple takes a first sip, and then the cup is passed to the guests and sponsors (Cordero, 1992).

According to Dizon (2009), the method used in extracting the juice of the sugarcane is called *dapil*. The one year old stalks of sugarcane are crushed in an iron rollers attached to a long pole tied to a carabao that moves around to operate the extractor or to move the rollers. The extracted juices are accumulated in a *sinublan* (large iron pan) where it is cooked. The *bagasse* (fibrous part of the sugarcane which is left after extracting the juice)



are dried and used as firewood mixed with dried bamboo. The taste of the sugarcane wine differs depending on what fermenting agent or starter culture a sugarcane wine maker will mix on the juice. In Naguilian, La Union, they use *chinese cake* (bubod) as a starter culture.

In Sadanga they called the sugarcane wine as *fvayash*, it is considered as a ceremonial wine served during special occasions such as weddings and large celebration like *fvagnash* (a bountiful harvest festival). Sugarcane farmers in Sadanga make different processed products out of sugarcane like sugarcane syrup (*inti*), muscovado, sugarcane wine (*fvayash*) and sugarcane vinegar. This native wine from fermented sugarcane juice is also produced in the other part of Mountain Province particularly in Mainit and Guina-ang.

The main source of income of Sadanga people is from rice farming, legumes production, backyard swine raising, and sugarcane wine production. The aim of the study is to document all the processes and practices involved in sugarcane wine processing in Sadanga, Mountain Province. This study will be then conducted to generate necessary data, which would be useful in developing and improving the management capability of sugarcane wine producers.



REVIEW OF LITERATURE

Sugarcane Crop

The sugarcane plant belongs to the genus *Saccharum*, a latin word which means sugar. Originally, the genus was created by Linnaeus with two species, namely, *S. officinarum* (cultivated species) and *S. spontaneum* (wild species). The noble cane or *S. officinarum* is the species referred to when sugarcane is spoken of. The growth cycle of the sugarcane plant can be divided into four phases, namely, germination, this phase start from planting up to the time the buds from the planted cuttings germinate and emerge from the soil surface and become the primary stalk. Tillering, it is a general characteristic of the grass species. The bud present in the basal portion of the primary shoot develops into secondary tillers which in turn give rise to tertiary tillers. Stalk elongation, this period is characterized by rapid stalk lengthening which starts at three to four months, with maximum rate at seven month of planting. And ripening, at the onset of this phase, stalk elongation slows down. The plant shifts its growth pattern by increasingly diverting sugar produced by the leaves to storage in the stalk. Growing requirements are different under each phases of growth so that requirements of each phase can be properly implemented (PCARRD, 2001).



METHODOLOGY

Locale and Time of the Study

The study was conducted in the municipality of Sadanga, Mountain Province. Sadanga is politically subdivided in 8 barangays: Anabel, Bekigan, Belwang, Betwagan, Demang, Poblacion, Sacasacan and Saclit. The main source of livelihood activities of the people here are: rice farming, legumes production, backyard swine raising, and sugarcane wine production. The people have their own traditional practices on these livelihood activities, which are being passed from one generation to another. The study was conducted from December 2012 to January 2013. Figure 4 shows the map of Mountain Province showing the locale of the study.

Respondents of the Study

The respondents of the study were the sugarcane wine producers of Sadanga. There were 80 wine producers in the different barangays as respondents.

Table 1 shows the distribution of the respondents in terms of Barangay address.

Data Collection

The data were gathered using survey questionnaires. A follow up interview was done to validate the data. Some of the production and processing practices was documented using digital camera.

Data Gathered



The data gathered include the profile of the respondents, production, processing, and marketing practices of the respondents and lastly the problems encountered by the producers in terms of production, processing, and marketing of sugarcane wine.

Data Analysis

The data gathered were analyzed using frequency analysis, categorized and tabulated. Descriptive statistics such as percentage was employed to interpret results.



RESULTS AND DISCUSSIONS

Profile of the Respondents

Table 2 presents a brief profile of the respondents in terms of the following variables; a) gender, b) civil status, c) age, d) educational attainment.

Gender. The gender of the respondents, were all males. This is because sugarcane wine production is a farm activity delegated to the men only.

Civil status. Out of 80 respondents 97.50% were married and 2.50% were single.

Age. In terms of age, 7.50% belonged to the age bracket of 20-30 years old. Twenty five percent fall under the age bracket of 31-40 while the age bracket of 41-50 were 27.50% followed by 23.75% who belonged to the age bracket of 51-60 and 8.75% fall under the age bracket of 61-70 then 7.50% for the age bracket 71-80. This finding implies that the production of sugarcane is managed mostly by farmers who are at their middle age.

Educational attainment. Majority (63.75%) of the respondents finished elementary while 26.25% reached high school. Three (3.75%) of the respondents have attended college and five (6.25%) did not receive any formal education. This implies that formal education may not be an important factor in sugarcane production because it had been a traditional product of the community.



SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The study was conducted to document the sugarcane wine production, processing, and marketing practices in the different barangays of Sadanga, Mountain Province. Ten sugarcane wine producers in each barangay were the respondents of the study. It was conducted from December 2012 to January 2013. There were respondents were 80 sugarcane wine producers equally distributed in the eight barangays of Sadanga.

All of the respondents were male. Most (97.50%) were married and 2.50% were single. Several (27.50%) of the respondents belonged to the age bracket 41-50 years. As to educational attainment, majority (63.75%) reached elementary level while some (6.25%) did not receive any formal education.

In the production practices of the sugarcane makers, all of them utilize family labor and most of the costs incurred in the production were non cash. All of the respondents do not practice plowing, irrigation and fertilizer application. As to the tools and equipment being used, all of the sugarcane wine producers use iron vats and extractor that are a common property of the barangay.

All of the sugarcane wine producers use “gamu” as fermenting agent. All of them produce sugarcane wine, forty-six (57.50%) produce vinegar and 68 (87%) were making sugarcane syrup for household consumption. All of them use earthen jars (burnay, tadugan and gosi) in fermenting the sugarcane extract. All of the respondents ferment the sugarcane extract for three to four months.



Considering the buyers of the sugarcane wine producers, all of the respondents sell their products directly to the consumers on cash basis. Majority (65%) of the sugarcane wine producers sell their products based on the prevailing price.

Pests such as rats were the most common production problem encountered by the producers. Others include: limited area to be planted and the occurrence of natural calamities. As to the problems in processing, the respondents mentioned that lack of technology was also the common problem. Another problem cited was the lack of materials to use. The problems encountered by the sugarcane wine producers in marketing are the low buying price, high transportation cost, lack of market outlet, no proper packaging materials and limited buyers.

Conclusions

The following conclusions were drawn based on the findings of the study:

1. Sugarcane wine production in Sadanga is primarily the work of the male and even with low educational attainment;
2. Family labor is being utilized and most of the costs incurred are non-cash;
3. The facilities used by sugarcane wine producers in Sadanga are simple machine that are improvised and are communal properties of the barangay;
4. Products produced by the sugarcane wine producers are: sugarcane wine, vinegar, sugarcane syrup (inti), muscovado;
5. Destruction of sugarcane by rodents is a major problem of farmers in Sadanga because this lowers the quality of sugarcane and lowers the yield of the sugarcane juice;



6. Sugarcane processing in Sadanga is done in a traditional way and similar to the processing methods adopted by La Union, Pangasinan, and Ilocos. They differ in the fermenting agent used and the aging period; and,

7. The packaging materials used by the processors are recycled bottles and no labels are used because they use it for home consumption and they only sell a small amount within the community.

Recommendations

Based on the conclusions, the following recommendations are offered:

1. The municipal government should administer seminars or trainings to improve the knowledge and skills of the sugarcane wine producers in the production, processing and marketing of their products;

2. The farmers should form an association or cooperative so that they could easily seek assistance from the Department of Science and Technology (DOST) for trainings and even equipments for processing, the Department of Trade (DTI) for assistance in the marketing of their products; and,

3. The farmers should seek the assistance of the agriculturist to source out fund through project proposal to finance sugarcane wine production as one source of income for farmers engaged in sugarcane wine making as an income generating project.



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