ETHNIC AND GENDER DIMENSIONS OF INDIGENOUS KNOWLEDGE: THE CASE OF THE MARANAO MUSLIMS' SWEETPOTATO PRODUCTION

Belita Amihan-Vega

The article underscores the socio-anthropological fact that localized practices are significant inputs in the overall understanding and development of economically essential commodities such as the sweetpotato. Specifically, the paper presents the Maranao sweetpotato farmers' existing indigenous knowledge practices which characterize their unique production system. Furthermore, the gender roles involved in sweetpotato production are analyzed.

Findings in Baloi, the principal sweetpotato-producing town in Lanao del Norte, show that ethnicity and gender are two analytical factors that influence the growth of sweetpotato into one of the leading commercial crops in the area. Within the Maranao Muslims' context, the interlocking of ethnic and gender factors offers added intra-household insights into the production-reproduction roles of men and women in agricultural development.

Introduction

The development of sustainable agriculture systems in the Third World countries does not only depend on the access to modern technology but also on the accumulated knowledge of farmers. This growing recognition of the value of the indigenous knowledge to address global agriculture, health, and environmental problems is a vital component of biodiversity that nurtures people and contributes to long-term food security (Food and Agriculture Organization, 1993: 2-4). In the Philippines, the campaign to modernize agriculture over many decades has observably relegated the importance of local knowledge to the "inefficient" and "backward" farmers. With the renascent significance of

traditional knowledge, its retrieval, reconstruction, and conservation have become imperative.

This paper focuses on the identification and analysis of key indigenous practices in sweetpotato production among the Maranao Muslims with emphasis on the ethnic and gender aspects. The data used in the following discussion were gathered through field and market surveys, key informants, documentary research, and actual household interviews conducted in November 1990 to May 1991. It is hoped that the information gained from the study shall guide future initiatives in sweetpotato farming and other similar production systems in the Maranao area.

Sweetpotato, Ethnicity, and Gender

The choice of sweetpotato for this particular case study is not without bias. Among the numerous Philippine crops, it emerged as the staple of the "poorest of the poor", often referred to as "the crop of the last resort" or famine food. As Perez (1991) puts it, by instinct, by tradition, and by necessity, poor farmers in the remote areas who till marginal lands not suitable to rice and corn take this rootcrop as their staple food. These farmers mostly include cultural communities like the Aetas in Zambales, the Ikalahans of Nueva Vizcaya, Igorots and Ifugaos of Mountain Province, the Ivatans of Batanes, the Subanons of Zamboanga, and the Mangyans of Mindoro. Perhaps because sweetpotato is attributed with the disadvantaged sector—the resource-poor, the ethnic communities, and the adverse ecological zones—many people attach low status and/or make derogatory slant on this particular rootcrop (and its consumer) vis-à-vis other crops. Sweetpotato experts lament that what should be underscored is its subsistence use because in terms of share of value among all Philippine rootcrops, sweetpotato ranks second (35.39 percent) to cassava (49.61 percent) (Agribusiness Factbook and Directory, 1987: 104, 105).

Moreover, despite the popularity of sweetpotato in the countryside, studies have shown that indigenous sweetpotato cultivars, which are highly preferred in the market, are fast disappearing (UPWARD, 1991). Together with the extinction of local cultivars is the loss of relevant cultural information that have undergone generational evaluation. It is only through a proper documentation that the indigenous knowledge is preserved and can be reused.

While the Maranao Muslims in Baloi only utilize sweetpotato as food supplement, their production system generally falls under the "commercial" typology. This is due to the fact that in 1991, an estimated one-fourth (2,500 hectares) of their total land area was devoted to sweetpotato with the minimum production of 100 bags per hectare (approximately eight tons per hectare). Moreover, Baloi sweetpotato has established market outlets in Iligan City, Cebu City, and Manila. For these reasons, the area has been identified as the major sweetpotato producing town in northern Mindanao by the marketing studies of the VISCA-based Philippine Rootcrops Research and Training Center. But for social scientists, the more significant question is, what is it in Baloi that makes sweetpotato one of the primary agricultural crops. This paper hypothesized that the unique ethnic dimension may have contributed to the development of sweetpotato as a commercial crop.

Side by side with the ethnic factor, an analysis of the gender component is equally crucial to an understanding of men and women's roles in managing critical agricultural resources like sweetpotato. Gender is dynamic historically and culturally determined social construct created by men and women to define their relationships with each other and with the environment (Thomas-Slayter, et al., 1991:1). It is a reality that home and farm production tasks are not within the exclusive domain of either men or women only in like manner that indigenous knowledge in agriculture is possessed by both men and women. By taking into account gender, local responses to promote agricultural sustainability can be fully understood.

Cultural Embeddedness of Sweetpotato

Before Lanao was split into Lanao del Norte and Lanao del Sur, the municipality of Baloi was one of the 15 royal sultanates. Out of the 21 villages populated by 25,500 people (as of the 1990 Census), only two villages are predominantly inhabited by Christians.

Historical records indicate that the introduction of sweetpotato into Baloi coincided with the town's inception. Baloi's old name, "Momongan," was derived from an old sweetpotato cultivar called momohan, which was said to have been brought to town by a Chinese trader during the seventeenth century. Such accounts jibe with data that the Philippines was the recipient of sweetpotato introduced from South

China in 1594, presumably an overland dispersal from Southeast Asia. Since then, various sweetpotato varieties have been brought to the area but most of them (e.g., tapul and hilos-hilos among others) are now extinct due to the growing adoption of high yielding varieties. Nevertheless, up to this day, Baloi is always associated with its delicious, tasty local sweetpotato varieties that are highly preferred especially by average consumers in the nearby Iligan City. Over the centuries, the local sweetpotato has not only become an indispensable commercial crop of the town but it has also been regarded by the people as a cultural symbol. A "source of pride", it tends to affirm that the cultural importance of sweetpotato is one of the underlying reasons why its production is thriving despite the problems previously mentioned.

Sweetpotato Production: The Maranao Muslims' Way

In general, the Maranaos have distinct localized sweetpotato farming practices but only older farmers are continuously adopting them. These are observable in the production phases:

- 1. <u>Land preparation</u>: At least six steps are involved in the activity namely:
 - a. Karikik or the cutting of the grass which is usually done at early dawn
 - b. Drying the grass in the field for three days to be sure that the roots are withered
 - c. Kampisol or the process of burning dried grasses (e.g., cogon) before the clearing of the land
 - d. Kapamongkal, the first plowing using a carabao-driven plow called dado
 - e. Kasemban, the final plowing and clearing
 - f. Baknal or the making of mounds ready for planting
- 2. <u>Planting</u>: The farmers use an arm's length of sweetpotato cuttings or dawah kakatang ah rapa. They usually plant one cutting per mound arranged in the V- or U-shaped position with both cuttings appearing on top of the ground. The spacing used is "two-thumbs" distance between plants in a row for shorter spacing, "two foot steps" distance for wider spacing. But before planting, the cuttings are stored under big shady

trees covered by banana or coconut leaves. According to the sweetpotato experts, storing under the shady trees prevents rapid moisture loss that may result in the fast wilting of sweet potato cuttings. This method also encourages the root initiation in preparation for adverse field conditions. Since the average sweetpotato area in the sample village is one fourth of a hectare, planting takes place for a day or two with the help of the family members. In farms of more than a hectare, help is sought from hired labor.

Like the Christians and other ethnic groups, the Maranaos believe that sweetpotato planting should be timed on a "right day" and when they are in the best mood. They believe that when they are happy while planting, the plants will grow robust and healthy. They also sprinkle their fields with blessed rice or *salawat* for bountiful harvest. Adults usually kneel while planting so that the sweetpotato roots will grow big like their knees.

3. <u>Cultivar selection</u>: The cultivars that farmers plant are based on their preference to taste (sweet), yield, and market potential. These preferred characteristics are embodied in each cultivar as *Order* or *Chinese*, *Macapuling*, *Imelda*, *Corolao*, and *Malucamba*. The most extensively grown cultivars in the area are those with high market potential. *Order* or *Chinese* cultivars are known for their sweet taste and moist or soft texture while *Macapuling* and *Imelda* are sweet but with dry textures. Cuttings of these highly preferred cultivars are getting more scarce. According to a long-time Baloi sweetpotato trader, a truckload of cuttings enough to plant a hectare of land costs as much as P1,500. However, lately, no supplies are available due to the shortage of the local planting materials.

Maranao farmers have a unique way of naming their cultivars. They are named after persons responsible for bringing them to the place. For example, the *Chinese* cultivar is named after the Chinese trader, Mr. Ian Go who brought the said cultivar to Baloi. Oral accounts revealed that the sultan of Baloi ordered three sacks of planting materials. Since then, the cultivar was interchangeable called *Order* or *Chinese*. *Imelda*, on the other hand, was formerly known as *Balagatasa* cultivar but was changed to *Imelda* after Imelda Marcos who spearheaded the green revolution program that included the planting of sweetpotato in the area.

4. Fertilization and pest control: Traditionally, the Maranaos do not apply inorganic fertilizers to their sweetpotato plants. Instead they use carabao manure and umbi aragami (burned rice straw). In controlling insect pests and diseases, one of the old practices includes the putting of bamboo poles, bottles filled with water, and strips of paper with some Arabic words in the middle of the farm. Farmers believe that the words will cause the bad "spirits" that compose the insects and other forms of pests including human beings to flee the farm. Apog-umbi (mixture of limestone and ash) is also sprinkled in the fields to drive away evil spirits. Interestingly, the application of limestone in the sweetpotato fields would tend to correct the soil acidity especially for the red soils in the acidic area. The addition of limestone raised the pH level of the soil thereby making it productive for sweetpotato.

- 5. <u>Cropping pattern</u>: Sweetpotato was either planted in monoculture or in combination with coconut, corn, peanut, vegetables, and other rootcrops. The most common cropping pattern in the sample village was raising sweetpotato under coconut. Another type was planting of corn, peanuts, and sweetpotato (one after the other). This practice of crop rotation prevents the rapid depletion of soil fertility through the crop removal. Leguminous plants, for instance, are known to be a good nitrogen fixture and its residues benefit the field after harvest.
- 6. Harvesting: Sweetpotato is allowed to grow from four to six months depending on the cultivar used. For early maturing cultivars, the farmers practice kapangali starting the third month to test for the presence of uod (pest) or enlarged storage roots. In the fourth month, when the plant is mature and ready for harvest, they use pangbar and parang in harvesting storage roots. In contrast to the usual practice of staggered harvesting (depending on needs), the Maranaos reap their sweetpotato at one time or in bulk because of the ready buyers who pick up the produce right on the fields. The peak harvest season in Baloi is during the months of August to October.
- 7. Storage: The harvested produce is usually stored in basong, a container made up of tree bark or taliong, a box carved out from the trunk of a big tree. These containers can store sweetpotato up to two weeks.

- 8. Marketing: As previously mentioned, marketing was done directly in farmers' fields or delivered to the town buyers. But for smaller quantities of sweetpotato produce, the farmers sell them directly to the consumers during market days in the town or in Iligan City. In Baloi alone, our interviews revealed that there are 12 recognized sweetpotato traders, composed of nine Muslims and three Christians. The latter are among the oldest traders (30 years in the business) with established markets in Cebu.
- 9. Processing and utilization: The Maranaos either prepared sweetpotato into katinda (boiled) or used it as one of the ingredients in biobug or sweet porridge. The indigenous uses are for cooked or fresh vegetables (leaves) and for curing victims of fish poisoning (both of boiled stalks and leaves). Sweetpotato leaves cooked with coconut milk is not recommended for lactating mothers because informants believe that the flow of mother's milk will be prevented. Older Maranao women process sweetpotato into katahpung or sweetpotato chips to make flour for bread and cakes.

In sum, the local practices of Maranao sweet potato farmers are largely rooted in the peoples' religious and ethnic orientation. While they cling to these age-old practices, observations show that they are also rational and open to new positive innovations. Their sweetpotato production has always been guided by the users' preferences and the market potential of the produce.

Gender Roles in Sweetpotato Growing Households

A holistic understanding of the farm and household dynamics in sweetpotato production is incomplete without considering the gender factor. The typical assumption that the household is a unit of convergent interests wherein the benefits and burdens are shared equally by all its members has increasingly been disputed, observes Agarwal (1988:83). Therefore, the challenge for alternative development strategies cannot be posed adequately without taking note of the gender dimension.

Research findings confirmed that there exists a gender division of labor in Maranao farm households particularly in general farm decision making. Women usually do housework while men perform most of the

field work. The men show dominance in such crucial decisions as when to plant; how to plant; what inputs to apply and when to apply them; who allocates the farm produce, and who makes the record and budget. The women were only influential as far as determining who shall process the farm produce. Not surprisingly, it is typically the woman's task.

Specifically in sweetpotato production, the gender division of labor is clearly defined though there tends to be complementarity as indicated by the shared contribution of men and women in more than half of the production tasks. It is noteworthy that the women have more participation in the collection and storage of planting materials as well as in raising sweetpotato. In-depth interviews revealed that differentiation in allocating farm labor was most significant among woman's rank in marriage. Since Muslims are legally allowed to practice polygamy, the men can have as many as four wives as long as they can provide the necessary sustenance. The first wife who is often the oldest devotes more time in the farm and performs most of the farm tasks compared to the recent wife who is younger ("more loved") and who is busy with child rearing. The wife has always a land to till because it is part of the dowry (two hectares of land plus cash) given by the husband during marriage.

Moreover, in terms of women's contribution to indigenous knowledge in sweetpotato production, it is best manifested in their maintenance of sweetpotato planting materials through homegardens. They help in promoting sweetpotato's diversity by being actively involved in sourcing local plant materials and in selecting the preferred cultivars. Thus, to label sweetpotato as man's activity would be misleading because the data showed that women are also knowledgeable of its production activities.

In terms of the gender division of labor in basic household tasks, that is, the wife is primarily for the home, holds true in Maranao households. Gathering firewood, fetching water, doing laundry (with female children) are relegated to women. But what is encouraging is that keeping the family's purse and marketing for home use are shared tasks by men and women.

Conclusions

The social, cultural, and economic significance of sweetpotato production among the Maranao Muslims is interwoven into their active maintenance of indigenous knowledge that contributes to agricultural sustainability. However, despite the usefulness of indigenous knowledge, I still believe that long term sustainability requires an equal harnessing and utilization of scientific and local knowledge especially in counteracting potential environmental crisis. It is my hope that in crafting development alternatives for the disadvantaged agricultural sector, the planners and decision makers take these concerns into account.

Bibliography

- Agarwal, Bina (ed.) 1988. Structure and Patriarchy: The State, the Community, and the Household. London: Zed Books, Ltd.
- Agribusiness Factbook and Directory. 1987.
- Baradas, David B. 1980. The Quality of Being Maranao. In Filipino Heritage, The Making of a Nation, Volume 4, Manila.
- Bautista, Annabella and Belita Amihan-Vega. 1991.

 Indigenous Knowledge Systems on Sweetpotato Farming Among Maranao Muslims in Northern Mindanao. A final research report submitted to User's Perspective with Agricultural and Rural Development (UPWARD), August 1991, Visayas State College of Agriculture, Baybay, Leyte.
- Demetrio, Francisco Radaza, SJ (ed.). 1970. Dictionary of Philippine Folk Beliefs and Customs, Book IV. Cagayan de Oro City, Xavier University.
- Food and Agriculture Organization. 1993. Harvesting Nature's Diversity. October, Rome, Italy, pp. 2-4.
- Perez, Cledualdo B., Jr. 1991. Welcome Remarks. In Sweetpotato Cultures of Asia and South Pacific. Proceedings of the 2nd Annual UPWARD International Conference, Los Baños, Laguna.
- Thomas-Slayter, Barbara, Diane Rocheleau, Dale Shields, and Mary Rojas. 1991. Introducing the ECOGEN Approach to Gender, Natural Resources Management, and Sustainable Development. A working paper published by Clark University, USA.

- Unte, Hadja Sohaylah Sodioda M. 1979. One Ordinary Day. In Mindanao Art and Culture, No. 2, Marawi City: University Research Center, Mindanao State University.
- UPWARD. 1991. Sweetpotato Cultures of Asia and South Pacific.
 Proceedings of the 2nd Annual UPWARD International
 Conference, Los Baños, Laguna.
- Villamayor, Federico G., Jr. 1987. Indigenous Technologies in Sweetpotato Production and Utilization. Paper presented during the International Symposium on Sweetpotato (May 20-23), VISCA, Baybay, Leyte.

Acknowledgements

My appreciation to UPWARD, specifically Dr. Gordon D. Pran, for the financial support to this study. Also, to Ms. Annabella Bautista-Tudin, my co-researcher of the original Maranao study from which I have drawn this paper.