

Rationing Change as Coping Strategy Employed by Buhid Households against Food Insecurity

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ABSTRACT

The Mangyans as a group of people traces a history of marginalization both in their ancestral domain and in their access to basic social services, particularly, health and education. This study was conducted to: 1) determine the socio-economic characteristics and household food expenditures of the Buhid women; 2) determine their food security condition; and 3) identify the food insecurity coping strategies employed. The descriptive method was employed. The United States Department of Agriculture (USDA) Food Sufficiency Questionnaire and Coping Strategy Index (CSI) was used to enumerate both frequency and severity of coping strategies of households faced with short-term insufficiency of food. Results show that majority of the Buhid women were between 20 and 39 years old, which means that they were still in their middle age and can still perform reproductive and productive activities. They have big household size, with low level of basic education, and with an average monthly income below the poverty threshold. The biggest portion of the household expenditure was spent for food. The Buhid women experienced “food insecurity with moderate hunger” in which adults in the households have experienced reductions in food intake. It is recommended that further study on the relationship between the socio-economic characteristics of the Buhid women and household security status and their coping strategies be conducted.

Keywords - Social Science, food security, coping mechanism, Buhid women, food diary, descriptive design, Occidental Mindoro, Philippines

INTRODUCTION

Mangyans' status barely meets the basic needs of food, health, and education. Mangyans are mainly subsistence agriculturists. Their land holdings are generally small, sloping and communal. Their economy is basically dependent on slash-and-burn or "kaingin" farming, which has essentially remained at subsistence level (Gapuz, 1995; Lumbo et al., 2009).

According to the FAO (2009), there is an increasing number of people without enough food to eat on a regular basis in Asia and Africa. The proportion of people who are hungry, however, is greater in Africa (33%) than Asia (16%).

Food and Agricultural Organization (1996) states that food security exists when all people have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life." The Life Sciences Research Office's (LSRO) definition of food insecurity closely follows the FAO definition and states that food insecurity is the "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways" (Bickel, Nord, Price, Hamilton & Cook, 2000).

In the recent survey in the Philippines, there are 4.8 million families who said they experienced hunger in September 2014—about 1.2 families more than in the previous quarter, as hunger has risen in all regions except Mindanao. Moreover, 3.6 million families said they experienced involuntary hunger at least once in the last three months. These data draw a picture or pattern of bouts of hunger based on the experience of those afflicted by hunger regardless of whether they experienced hunger only "once" or "a few times" (moderate hunger) or went hungry "often" or "always" (severe hunger) (Doronila, 2014).

There is variety of different coping strategies that households are likely to adopt when faced with food shortage. For instance, when faced with famine, Ethiopian villagers were shown to draw on their savings, use food reserves, diversify sources of income and reduce expenditure on non-food items in the initial stages of famine; whereas during the later stages of famine, they switched to consuming famine foods and even migrated (Webb & Braun, 1994).

OBJECTIVES OF THE STUDY

This study was conducted to: 1) determine the Buhid mothers' socio-economic characteristics and their household food expenditures; 2) determine their food security condition; and 3) identify the food insecurity coping strategies employed.

METHODOLOGY

The study was conducted in the community of Salafay, Monteclaro, San Jose, Occidental Mindoro, Philippines. It is surrounded by six Buhid communities namely; Kubkob, Yabong, Dayaga, Malumak, Mantay and Dulis. The Buhids of Salafay, San Jose, Occidental Mindoro were the respondents of the study. The community is composed of 35 households, 70% of which served as the respondents of the study.

The mothers in each household were chosen based on the following criteria: 1) those who had both a pre-elementary and grade school child; and 2) those who had resided in the area for at least five years.

To comply with research ethics protocol, the researchers obtained informed consent from everyone who was interviewed on given questions to answer. The United States Department of Agriculture (USDA) Food Sufficiency Questionnaire was adapted to measure household food security. The Coping Strategy Index (CSI), developed by World Food Program (WFP) was used to enumerate both the frequency and severity of coping strategies of households faced with short-term insufficiency of food.

Descriptive statistics such as means, frequency distribution, and percentages was used to describe the respondents' attributes and the coping mechanisms employed.

RESULTS AND DISCUSSION

Socio-economic Characteristics of the Buhids

Majority of the respondents were between 20 and 39 years old, which means that they are still young and can perform the work requirements in doing reproductive and productive activities. They have big household size with number of children ranging from 0-11.

There are at least seven Buhids with formal schooling, but merely at lower level

of basic education. Majority (72%) have not acquired formal basic education, but they can read and write their names and perform basic mathematical operations. It could be attributed to the fact that the Minority School was only established in 2005. It is noteworthy that today, they send their children to school, but the latter could not continue their schooling because of lack of finances and distance to a secondary school.

The Buhids are generally poor. The average monthly income per household with five members is more or less Php 1000 (USD 22.83), which is less than the annual per capita poverty threshold for Occidental Mindoro that stood at P14, 064.00 or USD 321.09 (NSCB, 2006).

Table 1. Socio-economic characteristics of the Buhid women

Socio-economic Variables	Category	Frequency	%
Age	19 years old and younger	4	16.00
	20-29	9	36.00
	30-39	6	24.00
	40-49	3	12.00
	50-59	1	04.00
	60 years old and older	<u>2</u>	<u>08.00</u>
		25	100.00
	Mean:	31.88 years old	
	Range:	14-65 years old	
Educational attainment	Grade 1-3	5	20.00
	Grade 4-6	2	08.00
	None	<u>18</u>	<u>72.00</u>
		25	100.00
		Mean:	0.80 grade level
	Range:	0-6 grade level	
Number of children	4 and below	2	08.00
	5-7	9	36.00
	8-10	13	52.00
	11 and up	<u>1</u>	<u>04.00</u>
		25	100.00
		Mean:	7.08 children
	Range:	0-11 children	
Monthly Income (Family)	P 1,000.00 and below	15	60.00
	P 1,001.00-1,500.00	5	20.00
	P 1,501.00- 2,000.00	4	16.00
	P 2,001.00 and above	<u>1</u>	<u>04.00</u>
		25	100.00
		Mean:	P 1,018.00
	Range:	P 500.00-2,100.00	

Household food expenditures

Household food expenditures refer on how much money a family spends on each week based on their food diary.

In the national level, income distribution is highly skewed. Of the 88.6 million people living in the Philippines, 27.6 million live at the poverty level, representing 32.9% of the total population. While the upper 50% of the population make 80% of the nation's income, the bottom 50% only account for 17% of the nation's wealth.

The average monthly income of a Buhid family is Php 1,018.00 (23 USD) ranging from Php 500.00 (11 USD)-2,100.00 (47 USD), which means that they could barely provide the basic needs of food, health, education, housing and other social amenities of life.

Based on Figure 1, the monthly expenditure is divided into food (60%), education of children (15%), transportation (5%), agricultural inputs (15%), and others (5%) that include expenses on communication and medicine (2%). The household expenditure for food is more than half (60%) of the total expenses in a month, which implies that food is given a greater weight in monthly budgeting.

Similarly, based on the NSCB (2014), the household spending continued to expand in the second quarter of 2014 by 5.3 percent from 5.1 percent last year. Food and Non-alcoholic beverages expenditures, which accounted for 41.2 percent of the total household spending, grew by 4.0 percent but showed a slowdown from its 5.0 percent growth registered in 2013. On the other hand, the following expenditure items posted decelerated growth: Miscellaneous goods and services, 5.8 percent from 7.9 percent; Housing, water, electricity, gas and other fuels, 5.5 percent from 8.2 percent; Recreation and culture, 3.7 percent from 8.9 percent; and Education, 2.8 percent from 5.1 percent.

The findings of the study corroborate with Eustaquio (nd) that food expenditure accounts for the largest portion in every household's budget for it alone constitutes more than half of the personal consumption expenditures. Moreover, family size, educational expenses and total income of the household significantly increases the food expenditure of households. If the household head's occupation is considered an operator, a rise in food expenses is expected, while it would decrease if the age is between 61 and 70. The more employed members of the household are, the lesser the expenditures on food because it would increase the total income but decreased the proportion of expenses.

However, in the study of Sekhampu (2012), male-headed households were found to spend more of their income on food compared to female-headed

households. The proportion of household income spent on food increased with household size. The results of the study also show that married respondents spend a lower proportion of their income on food compared to those who are not married.

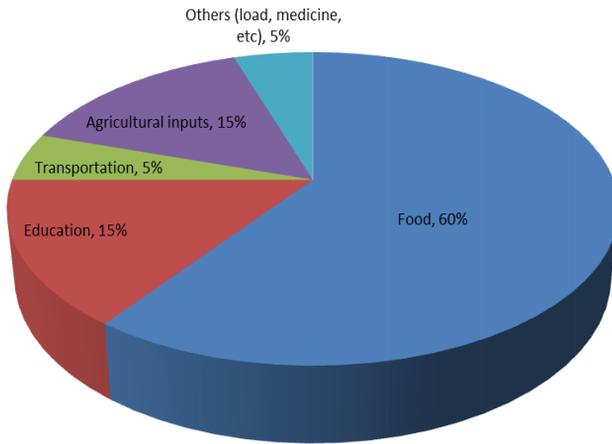


Figure 1. Household expenditure

Status of food security

Food security was defined as “access by all people at all times to sufficient food for an active, healthy life” (World Bank, n.d.). In practical terms, this encompasses the physiological needs of individuals, the complementarities and trade-offs among food and other basic necessities (especially healthcare and education), changes over time in terms of people’s livelihood strategies, the assets to which they have access, and uncertainty and risk (that is, vulnerability).

Food security is about more than just how much people have to eat; having “enough” food to eat is the most important outcome of being food secure; while physiological requirements differ since people largely know whether they have “enough” or not. Moreover, food security is also defined as situation where all people at all times have physical, social and economic access to sufficient needs in food preferences for an active and healthy life (Hoddinott, 2006). In addition, household food security refers to a household’s ability to acquire food. A household is food secure when it has access to the food needed for a healthy life for all of its members. It means adequate in terms of quality, quantity, safety and culturally acceptable), and when it is not at undue risk of losing such access (Gillespie & Mason, 1991).

There are six components to define a food secure community: 1) Availability of variety of foods at reasonable cost; 2) Ready access to grocery stores and other retail food sources; 3) Sufficient personal income to purchase adequate food to meet the nutritional needs for household members; 4) Freedom to choose personally acceptable foods; 5) Confidence in the quality and safety of available food; and, 6) Easy access to understandable and accurate information about food and nutrition.

The status of food security of the Buhid women (Figure 2) was categorized based on the following: a. *Food secure* — household shows no or minimal evidence of food insecurity. It means that they have enough food to eat; b. *Food insecure without hunger* —household food supply is adequate but there are adjustments to household food management, including reduced quality of food and increased unusual coping patterns; c. *Food insecure with hunger (moderate)* —food insecure households with children shows that there is not enough of food to eat. Thus, there is a reduction of food for adults but not for children and; d. *Food insecure with hunger (severe)* — at this level, adults in households with and without children have repeatedly experienced more extensive reductions in food intake.

Results revealed that majority (55%) of the Buhid women families were ‘food insecure with hunger (moderate)’. It showed that the households have higher evidence of food insecurity, which is also in line with the coping strategies they employ. Root crops and banana were used as substitute to rice, while some children ate junk foods to lessen hunger.

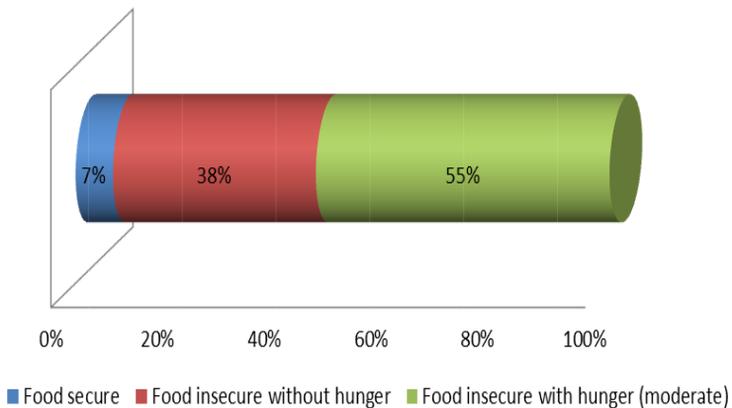


Figure 2. Status of food security

Coping strategies

The acquisition of food and the provision of adequate nutrition are among the most basic of human endeavors. In general, people respond to conditions under which they do not have enough to eat, and various means of “coping” is what people have to do when they do not have enough—the more people have to cope, the less food secure they are. Household decision-makers organize the resources at their disposal to limit the short-term effects of not having enough to eat. With this, people start to change their consumption habits when they anticipate a problem. They do not wait until food is completely gone (Christaensen & Boisvert, 2000).

Coping strategies refer to the mechanisms used to offset threats to a household’s food and economic resources in times of hardships. One of the most common methods for identifying food insecure households or regions is to look at the frequency and types of coping strategies (in conjunction with consumption, expenditure, food share, and nutritional status indicators).

Adopting any of the coping strategies (Table 2) has implications for the household, and its members. The overall mean of 2.83 shows that the different coping strategies were “moderately true to me.” When there is not enough budget to spend for food, the respondents rely on less preferred and less expensive food with a mean of 3.37 which is evaluated as “always true to me”. This includes instant foods and canned sardines, and “junk food” which are considered as a dietary change. It becomes popular because of low cost, time and energy saving convenience in preparation. The “always true to me” coping strategies were to limit the amount of food given to each household member during meal time (mean=4.37), and reduce number of meals eaten in a day (mean=3.36), which belongs to the rationing strategies. Relying on the help from a relative or friend outside household with (mean =3.47) is one of the characteristics of Filipino, which is close family ties. It is also a strategy used by the Buhids in times of ‘*tagkiriwi*’ or hardship.

Several studies have also identified similar strategies that households employ to protect themselves against food insecurity. It includes changes in food consumption patterns, rationing food intake, migration, liquidation of assets and borrowing money (Molnar, 1999).

Similarly, household when faced with food insecurity induced food shortage; they were forced to drastically reduce their food consumption and even resort to more socially unacceptable options such as begging (Molnar, 1999). In Bangladesh, households facing flood-created food shortages had reduced their

number of meals per day, change their types of food consumption and borrowed food from neighbors (Frongillo Chowdhury, Ekström & Naved, 2003).

Adopting any of the coping strategies described above during food insecurity has implications for the household and its members and that is why we need to study these strategies. For instance, changes in food consumption patterns, due to a reduction in the number of daily meals or a decline in the quality of food consumed, can be harmful to the health of household members especially to the long-term well-being of children (Arimond & Ruel, 2004).

Table 2. Coping Strategies employed

Coping Strategies	Indicators	Mean	Interpretation
Dietary Change	Rely on less preferred and less expensive foods	3.37	Always true to me
Increase Short-Term Household Food Availability	Borrow food from a friend or relative	3.47	Always true to me
	Purchase food on credit	3.16	Moderately true to me
Decrease Numbers of People	Rely help from relative or friend outside home	1.20	Slightly true to me
Rationing Strategies	Limit portion size at mealtimes	4.37	Always true to me
	Restrict consumption by adults in order for small children to eat	1.86	Moderately true to me
	Reduce number of meals eaten in a day	3.36	Always true to me
	Skip entire days without eating	1.88	Moderately true to me
	Overall mean	2.83	Moderately true to me

Legend: 3.34 – 5.00= Always true to me; 1.67 – 3.33 = moderately true to me; and 0.09 – 1.66= slightly true to me

The Coping Strategies Index (CSI) was the tool used. The CSI measures behavior: the things that people do when they cannot access enough food. There are a number of fairly regular behavioral responses to food insecurity—or *coping strategies*—that people use to manage household food shortage. These coping strategies are easy to observe. It is quicker, simpler, and cheaper to collect information on coping strategies than on actual household food consumption levels.

CONCLUSIONS

Based on the pertinent findings, the following were the conclusions drawn from investigation: 1) Majority of the Buhids were young, with big household size, low-level of basic education, and with an average monthly income below the poverty threshold; 2) The biggest portion of the household expenditure is spent for food. To cope with food insecurity, they employed “rationing change” strategies; and 3) The Buhid experienced “food insecurity with moderate hunger” in which adults in the households with and without children have experienced reductions in food intake.

TRANSLATIONAL RESEARCH

The results of this study could provide insights to the Buhid Mangyans with regards to their food security condition and food insecurity coping strategies employed. It could also provide an opportunity to the Occidental Mindoro State College to take part in the different interventions for this sector. The College could also provide technical expertise in crafting policy and programs that will improve food security in the municipality.

For the other concerned government as well as non-government organizations, the study would provide background information on the status of food security in the said IP community.

Finally, the results would likewise provide benefits to the researchers in the related fields, for the information gathered can be used as a basis for some research undertakings.

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