

Gender Analysis in Swamp Buffalo Milk Processing Business

Thirtawati, Rosana.Elly, and Arbi. Muhammad

Abstract—This paper present Gender Analysis in Swamp Buffalo Milk Processing Business at Pampangan District, Ogan Komering Ilir Regency, South Sumatra. This study revealed the role of housewife managing swamp buffalo milk processing business; showed the constraints faced by housewife in managing this business; and find the needs of housewife in running it. Research subject is six households owned swamp buffalo milk processing at Bangsal and Pulau Layang Villages. The results showed that this business has important role in fulfilling household needs. Both husband and wife had their own roles in this business. Wife role was more dominant in the stage of tools preparation and gula puan cooking processes, while the husband role was limited in purchasing raw material and marketing. In terms of access and control of resources and benefit, this business valued as “feminine” business and has a role as a complementary in fulfilling their needs

Keywords—Swamp Buffalo, Gula Puan, swamp buffalo milk, gender analysis in agriculture.

I. INTRODUCTION

SWAMP buffalo or better known as Pampangan buffalo is native species and one of the genetic riches of South Sumatra (BPTP South Sumatra, 2011). Buffalo serve as a source of labor to cultivate agricultural land, fertilizer source, asset/ family savings, and as an essential component of the culture in some areas. Buffalo is one animal that has enough potential to produce milk that has been well known since ancient times (Hardjosubroto, 2006). However, peoples not familiar to consume fresh milk produced by swamp buffalo. So the swamp buffalo milk production is more frequent processed as Gula puan (milk sugar), Sagon puan, buffalo oil and buttermilk.

Wirdahayati et al (2006) Research revealed that pampangan swamp buffalo milk production can reach 800 liters / lactation, the lactation period for 200-300 days, females give birth first buffalo aged 3-4 years 1-2 years lambing distance nature.

Data from OKI Agriculture Agency (1999), showed that the population of Pampangan buffaloes tended to decrease from about 4125 (in 1993) consisting of 612 males and 3513 females, to 3625 head in 1998. This is partly due to system maintenance are still traditional, especially in terms of

Thirtawati is a lecturer at Department of Socio-Economic Agriculture, Sriwijaya University, Indonesia. e-mail:thirtawati@yahoo.com.

Rosana is a lecturer at Department of Socio-Economic Agriculture, Sriwijaya University, Indonesia. e-mail:ellyrosana_27@yahoo.com

Arbi is a lecturer at Department of Socio-Economic Agriculture, Sriwijaya University, Indonesia.

providing food and lack of breeding system management (breeding). Swamp buffalo hang around during the day and stabled in the afternoon before the night. In the morning before buffalo released, the farmers made milking. Milking processed is usually done by the owner. While processing buffalo milk usually done by the wives of farmers.

Buffalo milk has the potential to be developed as well in addition to health, can improve family nutrition, also have a exotic value that are expensive on the market. Buffalo dairy products price such as sugar can reach US\$ 4/kilograms or IDR 40.000/kg. So the mother's ability to process buffalo milk household a distinct advantage to support their family income.

As a strategic sector that resistant to crisis and recession, until now agriculture is labor absorbing potential with a tendency actors are women. (Irianto, 2003) Unfortunately the housewife role has not been in the spotlight because the aid is considered normal. This led to the emergence of fundamental questions, namely how the processing of buffalo milk can be highly selling if not done coaching the housewife. What about their needs in processing buffalo milk. Should women formed a special institution to accommodate the aspirations of their activities.

It is unfortunate if the role of housewives are not considered as a "potential" for development. In fact, according to research of Heifer (2007) at Pampangan, that giving opportunities to women to create groups, manage capital and additional skills make women become more empowered and self-reliant (Heifer, 2007).

Referring to the above background, this study aimed to 1) reveal the role of the housewife in the swamp buffalo milk processing, 2) revealed the division of labor, division of roles in decision-making and control over resource levels seen in the swamp buffalo milk processing.

II. METHODS

The purpose of this study was to understand the role of housewife in swamp buffalo milk processing. Therefore, this study leads to the construction of the existing realities of day-to-day activities that families do swamp buffalo milk processing.

This study used qualitative research methods. With a phenomenological research framework analysis tools to reveal the role and needs of women in business process and swamp buffalo milk Harvard gender analysis framework to see the division of labor and women's access to and control of

business processes swamp buffalo milk.

Researchers chose Pampangan District as the location of the research, with consideration in this district are native swamp buffalo breeders of South Sumatra, there are also craftsmen swamp buffalo milk processing. Time studies conducted over the past five months, starting from July 2012 until December 2012.

Subjects were households that do swamp buffalo milk processing. Determination of informants done intentionally (purposive) that select informants in accordance with the study design. Informant selection procedure conducted by the determination snowball sampling technique starts from key informants and develop following information or data needed in research.

Primary data were obtained using the two methods of data collection: participant observation and in-depth interviews and observations. While the sources of secondary data obtained through these documents include: the Department of Agriculture and Livestock of Komerling Ogan Ilir, Centre of Statistic Bureau, and the Village Office.

The data analyzed in this study were performed with interactive qualitative and runs continuously until data saturation (Miles and Huberman in Sugiyono, 2009).

Three activities in data analysis are:

1. Data Reduction Phase
2. Stage Presentation of Data
3. Withdrawal Phase Conclusions and Verification Data

III. RESULT AND DISCUSSION

A. Profile of Buffalo Milk Processors Households

Informants in this study is the swamp buffalo milk processor that processed buffalo milk into several products, such as *gula puan* (milk sugar), buffalo oil, *sagon*, and *penjeman*. Although the village of Pulau Layang and the Bangsal Village is the center of buffalo milk, but there was not many household that processed swamp buffalo milk. There are only three processors in each village. Here's a profile of informants that do swamp buffalo milk processing.

1. Swamp buffalo milk processing at Pulau Layang Village

Three swamp buffalo milk processor family in the village of Pulau Layang are Dulhak family, Absoh family, and Nawi family. Those family has a primary livelihood as farmers at lowland paddy. While become milksugar just a sideline. Swamp buffalo dairy products that are produced by the household just *Gula puan* (milksugar), this is done with a reason to saving time and cost.

2. Swamp buffalo milk processing at Bangsal Village

Swamp buffalo milk processing at Bangsal village are Mrs. Nursiah (67 years), Cik Na (63 years), and Mrs. Ena (58 years). The main livelihood is lowland paddy farming. *Gula Puan* (milk sugar) processing is only a sideline. The revenue from swamp buffalo milk processing businesses use to compliment the daily necessities of life. Informants also process milk into buffalo oil, sagon, and penjeman.

B. Gender Analysis

Gender analysis is a systematic process that is built to

identify and understand the division of labor/ roles of men and women, access and control over resources and participation and the benefits they have.

Discussion of gender analysis in this paper is divided into several parts, the picture of the households activity profile in the processing of buffalo milk, profile of access and control over resources and benefits.

C. Profile of Household Activities

The livelihoods of most people in the Bangsal village and Pulau Layang Village engaged in agriculture, ranging from lowland paddy fields, rubber plantations, duku, fisheries and swamp buffalo livestock businesses. With swampy marsh topography, lowland paddy farming is highly dependent on the rainy season because it has no irrigation system.

In those villages, there is also a potential livestock Ward Buffalo Swamp. There are approximately 500 swamp buffaloes are bred together in communal cages in the village of Pulau Layang. The main outcomes of swamp buffalo are milk and meat. Normally farmers sell buffalo at a time of considerable need. While buffalo milk, sold and consumed by the local community as well as the main ingredients of milksugar process.

Buffalo milk processors begin work in the morning. At the beginning of the day, at around 05:30 to 06:00 the men ready to buy the main ingredient in the form of buffalo milk. They go to communal cages on the Pulau (the name for the area where communal cage is located, is the highest point of land in the village of Pulau Layang) across the prairie where buffalo marsh foraging. In the dry season the men riding a motorcycle or bicycle, while in the rainy season boat. Around 07.00 the man had returned home bringing the buffalo milk. In the dry season milk production is much less than during the rainy season. Buffalo milk is then cooked with white sugar that has been shaped caramel. The process of caramelizing that causes milk sugar has brown color. Approximately dough is cooked for 3 hours, until thickened and formed a "*gelundu*". This is what is referred to as *gula puan* or milk sugar. The process of making milksugar is usually done by women. But in Dulhak- Nobilis, households, the husband was more often do this process, and his wife make a living as a laborer in the fields.

Once cooked sugar ladies usually placed in plastic buckets and then be packed in plastic. Packaging process is done is very simple, just use the plastic without the trademark. The finished products are then sold to consumers. In the Pak Dulhak-Nobilis household, ready-made milk sugar sold directly to consumers who have already booked or sold into the market. While the informants Nawi, although every day making *gula puan*, but the sale is done once a week. The Products are not sold on the local community or in the market, but to Palembang City. In Palembang, this traditional products are still much desirable, especially by native Palembang.

Today craftsmen covered with household activities in general. The process of making *gula puan* take less than half a day. Used for the rest of the day resting, drying crops, or gardening and other household activities. Buffalo milk

processing business in the household informant is not a major effort. Their main businesses are raising paddy or gardening. But the dairy processing business is very supportive of their economic life, especially for buy side dishes everyday. In the Bangsal village, for example, the activity of *gula puan* process usually done only when they had an order. Meanwhile, in the village of Pulau Layang the three informant households routinely make and sell *gula puan*. As an authentic product from Pampangan, the government often invite the producer of *gula puan* to attend the exhibition.

D. Division of Labour in Buffalo Milk Process between Men and Women in the Household Level

In the swamp buffalo milk processing activities, both men and women are equally involved. But it appears there was a difference of activities performed by both men and women. This can be seen in the table 1.

TABLE I.
ACTIVITY PROFILE OF INFORMANTS IN SWAMP BUFFALO MILK PROCESSING

Swamp Buffalo Milk Processing Activity	Actors	
	Woman	Man
• prepare equipment	✓	-
• buy the main ingredient	✓	✓✓
• doing the cooking process	✓✓	✓
• Product packaging	✓	-
• marketing	✓✓	✓

Description: ✓✓ more dominant

From table 1. shown that both men and women in the household participate in the activities. For example, taking raw materials such as milk taken directly home and market their work is mostly done by men. While the women involved in the preparation equipment, cooking and packaging. But once the work is done predominantly by women. Men typically buy the main ingredient in the form of buffalo milk into the cage that is located relatively far indeed with poor road access. The main reason for this work is done by men is because men can ride a motor vehicle.

Women especially are more dominant in the process of making *gula puan*, packaging and marketing. In some households even buffalo milk processing steps performed by nearly all women. Men do more work primarily as farmers. As was the case in households where the husband of Absoh household really did not assist these *gula puan* business. Everyday Mom Absoh assisted by son and her daughter, while her husband is prefer do their farm activities. Milk Sugar business was derived from her mother and grandmother, so this skill inheritance passed down to daughters. If you do not have a daughter, then *gula puan* cooking skills will tranfered to children in-law, as happened in the family of Nawi.

Gula puan are package into plastic buckets, stored at room temperature. If anyone would like to purchase or order, then the sugar is packaged in clear plastic. In the marketing process, the roles of men and women equally, women are usually sold directly on the market, while men sell around with their motorcycle..

Family is a sub system of the society and the state, which has a social structure as well as the system itself. In the family, a person's life begins, where a child gets comfortable protection with a wife / mother do the job, get the rights and perform the mother duties, a father / husband give comfort, peace, performing his duties as head of the family. (Widaningsih 2007)

In informants' family not only buffalo milk processing activities are walking, but also reproductive activities. Reproductive activity is how gender roles performed by men and women in a household due to certain household. Reproductive activities such as covering work related to energy fulfillment of family members, keeping the children, preparing meals, cleaning the house, and so on. Picture of reproductive activity is described in table 2:

TABLE II.
PROFILE OF INFORMANTS ACTIVITIES IN REPRODUCTIVE ACTIVITY

Activities	Woman	Man
Reproductive activity		
• Take the water	✓	✓
• Preparation of food	✓	✓
• Keeping children	-	-
• Health	✓	✓
• Cleaning the house	✓	-
• Improve the home	-	✓
• Shopping at/ sell to Market	✓✓	✓

Description: ✓✓ more dominant

Table 2 shows how the division of labor performed by men and women, which looks pretty balanced. The trend of a more equitable division of labor in the household, the demographics included in the demographic cycle of the old type, in which the households in the study sites are household older generation, who no longer have children living together in one house. This condition makes the division of labor between men and women equally.

E. Profile Access and Control of Resources and Benefits in Household Swamp Buffalo Milk Processors

Profiles of access and control to see how men and women rank domestic buffalo milk processing and control access to their resources and their perceived utility. This analysis led to how a decision made.

Access and control of resources to the resources include how decisions made. Resources within the household informants include production equipment, labor, money, and vehicles. Profile access and control of resources can be seen in table 3.

TABLE III.
PROFILE OF ACCESS AND CONTROL OF RESOURCES

Resources	Access		Control	
	Woman	Man	Woman	Man
• production equipment	✓✓	✓	✓✓	✓
• Labor	✓✓	✓	✓✓	✓
• Money	✓	✓	✓	✓
• Vehicles	-	✓	-	✓

Description: ✓✓ more dominant

Table 3 shows that access to and control of resources, means of production and labor are in women. While men have access to and control over resources such as vehicles.

Decision making depends also depend on access to and control of benefits can be seen at table 4

TABLE IV.
PROFILE OF ACCESS AND CONTROL OF BENEFITS

Benefit	Access		Control	
	Woman	Man	Woman	Man
• Additional Income	✓	✓	✓	✓
• Fulfillment Needs	✓✓	✓	✓✓	✓

Description: ✓✓ more dominant

Making sugar ladies are not the only income for the informants, on average they have a paddy field or garden or work as farm laborers. Their needs will be satisfied from the food source crops. If the crop is quite a lot, they also sell it, especially if there is an urgent need. For daily needs, revenue from the sale of milk sugar is sufficient. Income from the sale of milk sugar used to buy side dishes, school needs for their children or grand children, or buy cigarettes.

Access and control of women seems more dominant in the fulfillment of needs. The money from the sale kept by the wife,. Wife also has the authority to determine the use of the money.

IV. CONCLUSION

1. Swamp buffalo milk processing business has an important role in fulfilling the needs of the household. Both husband and wife have their respective roles in this effort. Wife more dominant role in the preparation and cooking process sugars tools ladies, while men are restricted to taking raw materials and marketing.
2. Access and control the resources held by the wife more because basically the business is assessed informant characterized as feminine lines of business, and complementary in meeting the needs of the household. The access and control over the benefits are also more dominant in the hands of his wife.

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