# INTEGRATING GENDER ANALYSIS INTO DAIRY CATTLE FARMING IN CENTRAL JAVA PROVINCE

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#### **ABSTRACT**

The study focused on the social and gendered nature of dairy cattle farming. The study aimed to explore the role of women in dairy cattle farming. Specifically, the study sought to analyze social and gender dynamics and how these affect dairy cattle farming. The study was conducted in Getasan Village in Getasan District, Semarang Regency, Central Java Province and the survey research design was used. The respondents are generally rural married women with ages ranging from 15 to 60 years. They are wives of beef cattle farmers. Since rural womens are the unit of analysis, the wives of farmers was interviewed. We choosen 96 the wives of farmers who working in farming activities by simple random sampling. After determining the respondents, questionnaires and interview guides which contained both closed are used. The result of the study shows that in all the communities the roles of women and men at the various stages of dairy cattle farming management are almost similar. Women not only work in the fields as much as or more than men, but they also have the major role in housework and caretaking. Women have almost equal access to all inputs required for dairy cattle farming (breeds, land, labour, feeding practices). Both male and female have equal opportunities to work in the fields. In general women have a role in decision making. The study provided some recommendations and proposed gender analysis as a indicators in the design and implementation of dairy cattle development projects.

Key words: Gender analysis, women role, dairy cattle farming

# **INTRODUCTION**

In Indonesia about 70% of the population is in the rural areas, and more than 40% of whom are women. The majority of them in developing countries perform far greater roles in the production and processing of food crops (FAO, 2004). Aside from child-care and household work, women play a pivotal role in improving the productivity, profitability, stability, and sustainability of beef cattle farming system. According to Yisehak (2008), it was nearly three decades since 1970 called into question if women and men benefited equally from economic development. Since then, gender issues in agriculture have become an important subject of inquiry. Gender is a socio-economic variable used to analyze roles, responsibilities, constraints, opportunities and incentives of people involved in agriculture. Although the involvement of women in agriculture is a long-standing tradition all over the world.

Asian women participation in agricultural production varies widely among and within countries. Since in some countries the contribution made by agriculture, the income of the poorest household is extremely small. There is a tendency of greater involvement of women in non-agricultural employment (trade, services, small-scall industry). Such measures to expand and increase job opportunities outside farming are then necessary.

Ahearn (2010) notes that women's contribution to farm production is frequently underestimated. Women are subjected to inequalities in job opportunities. They get jobs

which are for the low-skilled workers and low paying and provide less security. They have little access to opportunities or training for new technologies and promotions and other work experiences that may lead to marketable skills and better employment opportunities. As a result of the low status of women everywhere, they are usually regarded as auxilliary workers.

The role of women in dairy cattle farming is not documented in Central Java Province, Indonesia. On the other hand, women constitute a greater proportion of the population economically involved in agriculture. No information is used for gender analysis and is rarely used for development planning in Central Java Province.

# Objectives of the study

Generally, this study aims to investigate women's participation in beef cattle farming in the Central Java Province. Specifically, the objectives of the study focused on the social and gendered nature of dairy cattle farming. The study aimed to explore the role of women in dairy cattle farming. Specifically, the study sought to analyze social and gender dynamics and how these affect dairy cattle farming.

# **METHODOLOGY**

The study was a survey and conducted in Semarang Regency, Central Java Province with a total land area of 1.975,86 square kilometers divided into 19 districts, 273 villages. Data collection conducted towards respondents from Semarang Regency. Districts in Semarang Regency have chosen by *Simple Random Sampling* method, that is, we got two Districts (Getasan and Semarang). Of two districts above, we choose one village by *simple random sampling* (Getasan village). Since rural womens are the unit of analysis, the wives of farmers was interviewed. We choosen 96 the wives of farmers who working in farming activities by *simple random sampling*.

After determining the respondents, questionnaires and interview guides which contained both closed are used. For the respondents who are illiterate, the questions are translated into their dialect by trained enumerator. The respondents are generally rural married women with ages ranging from 15 to 60 years. They are wives of beef cattle farmers.

To get the 'rich information', this study used multi-method of collecting data (observation, direct interview, and focused group discussion) and multi-data sources (government offices, respondents, documents). The data were selected and grouped in the respective topics. This study was reported in the form of qualitative description and explanation.

#### RESULT AND DISCUSSION

# **Dairy Cattle Management in Semarang Regency**

Semarang Regency has a great potential in dairy cattle farming. It is representative of an upland corn-growing area with existing cattle raising activities, natural resource potential for fodder production. The area is also characterized by the farmers' willingness to participate in the dairy cattle farm, favorable cooperation and capability of the local government units (LGUs), presence of a farmers' association and land tenure. Moreover, the success of dairy cattle farming depends on how the farmers produce and manage their farm. The activities in the dairy farming include feeding, animal health, reproduction and farm management.

There are two notable feeding systems observed for dairy cattle farming in Semarang Regency, namely, tethering and "cut and carry". Tethering is the system where animals are

tied to pegs and allowed to graze a certain portion of land. It is usually practiced during the cropping season to avoid destruction to standing crops. The practice of tethering the cattle is done mostly by the household head with the assistance of his wife and children. An average of two to three hours is spent in tethering the animal twice a day, in the morning and in the afternoon. Meanwhile, cut and carry is a feeding system in which the animals are supplemented by cut forages harvested from the paddy bunds and roadsides. The type of feeds given is usually native roughage/grass. In the dry season, the farmers usually use concentrate as a source of feed because they can not find grass/roughage easily. Sometimes, the farmers also supply *lamtoro gung* (*Leucaena leucocephala* leaves) and *kolonjono grass* (*Setarium*) which are forced fed to the animals to enhance the weight gain.

Parasitism is the major health problem in raising cattle in Semarang Regency. This disease might be due to improper housing and farmers' practices of tethering the animals in the pasture during daytime. Some of the farmers have no permanent housing and just leave their cattle under the tree. If the cattle got sick, the farmer would ask help from the local veterinarian. Vaccination is observed only if there is a free vaccine coming from the local agriculture office. Taking good care of animal health does not only mean treating an animal when it is sick, it also means helping the animal to avoid becoming ill. The best thing to do is to discuss disease prevention measures with a veterinary officer who will give an advice that applies to a farmer's situation.

There is very little number of indigenous cattle found in Semarang Regency because most of the farm owners use artificial insemination technique for breeding purpose. There is a huge number of crossbred dairy cow available in this area due to this practice. For this reason, a good number of Holstein Friesian stocks are found in this area.

In general, the farmers in Semarang Regency perceived themselves as poor but majority of them owned the land they use in farming including the house where they live. Some of them have sent their children to college and own several household appliances like TV, electric fan, and karaoke. A few farmers even have children who work abroad and acquired property from the earnings in the dairy cattle farming. Although they do not have savings because they still have children who go to school, all of them are satisfied with the way the dairy cattle industry is handled.

From the above discussion, it can be concluded that the management condition of small dairy farm in Semarang Regency is more or less traditional. The government should immediately take important steps for the improvement of small dairy farms like subsidy on animal feed, cultivation of fodder, providing milk marketing facilities and financial support, expansion of veterinary service, reasonable price of milk, giving management training of farm owners, etc. Dairy cattle rearing can be recommended as an income generating activity at the farmers' level of Semarang Regency.

### GENDER ROLES IN DAIRY CATTLE FARMING

In general, men dominate the division of gender roles in households. Men and boys are responsible for taking care of livestock, wage labor, building and repairing houses. Women and girls in the households usually had responsible for household decision making (e.g. household spending), buy food, take care of children, cook, and wash clothes.

One of the advantages of dairy cattle management at the farmer's level is that they use locally available cattle feed resources. Family members are involved in feeds processing and daily feeding of cattle. The result of the study shows that in all the communities the roles of women and men at the various stages of dairy cattle farming management are almost similar. Women not only work in the fields as much as or more than men, but they also have the

major role in housework and caretaking. Women have almost equal access to all inputs required for dairy cattle farming (breeds, land, labour, feeding practices).

The result of the study shows that women are heavily engaged in dairy cattle farming activities. Adoption levels by gender showed high adoption among respondents with respect to feeding practices (56%), disease control (50%), and milking management (100%). Almost a half of the respondents (44,4%) had low level of knowledge towards reproduction. Among the respondents, 48.9 percent had low level of knowledge towards artificial insemination technique for breeding purpose. About 42,2 percent of the respondents did not know how to prevent and control cattle diseases (mastitis control).

Both male and female have equal opportunities to work in the fields. The activities in the dairy farming include feeding practices, animal health, reproduction and farm management. Both men and women do activities such as selling milk product. Men and women had equal responsibility (60%) in feeding practices assisted by children. 48% women were involved in recording of animal health and reproduction. 72% women were involved in milking, while milk processing was done by women assisted by girls.

The result of the study shows that only 61% respondents had access to public extension services in dairy cattle farming and 48% women had access to credit services. Men had better access to services like extension and credits because of patrilineal structure in community where men are the headed of the family. Although, women and men can sit and plan together, which did not happen previously. Moreover, the study indicated that women had access in selling and controlling incomes of the family from selling milk products. Generally, a large proportion of household income was controlled by women, but decision making about farming was equal for men and women.

In general women have a role in decision making. However, the differences exist depending on the family, position of the women in the household and individual people involved. Today, women are taking a greater role in farm decision-making. Such gender stereotyping where men carry the overall decision making responsibilities for important issues, suggests that local government and extension agents should incorporate ways to increase women's participation in overall planning, construction and monitoring.

# CONCLUSION AND RECOMMENDATION

The result of the study shows that dairy cattle is a significant commodity that has been supporting the socio-economic status of people in Semarang Regency. Human resources and level of knowledge were important factors to improve women participation in dairy cattle farming. The government should improve ways in disseminating knowledge and information among the women about dairy cattle management. From the statement above mention, women should also be provided with improved and better access to financial assistance and availability of the needed farm inputs by the government and the extension agents.

The study provided some recommendations and proposed gender analysis as a indicators in the design and implementation of dairy cattle development projects. The government should improve ways to improve women participation in dairy cattle farming. Develop a policy that ensures gender-sensitive participation becomes integral into development projects.

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