

# Participation of Sumbawanese Women in Cattle Fattening

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**Abstract.** The objectives of this study are to assess the change of participation level of Sumbawanese women in cattle fattening using Tarramba leucaena and to assess the role of women in decision making related to cattle farming. The study has involved 20 women participating in cattle fattening activities and was conducted by survey using prepared questionnaires, Focus Group Discussions (FGD) and in-depth interview. The study founded that there is impact of intervention on forage and cattle production system. The intervention stimulates farmers to plant Leucaena on their own lands. Farmers are also stimulated to fatten cattle in pens near their houses. Distance of Leucaena plantation to farmer house is relatively close. The short distance encouraged women to cut and carry Leucaena forages. 87% of Sumbawanese women and 63% of West sumbawanese women involved in the training in planting and management of Leucaena. In Sumbawa district, women participation increased from 42% to 100% in collecting feeds. In West Sumbawa, the participation increased from 8% to 45%. All respondents participate in the decision-making process. The decisions include time to sell cattle, selling price and use of money from selling cattle. The change of production system from extensive to cut and carry system and the availability of forages (Leucaena) close to the house has increased women participation. As a result, the workload of men has now been shared with women so male farmers can have more time to do off farm work or simply enjoy free time.

**Keywords:** Womens participation, cattle fattening, Leucaena leucocephala

## 1 Introduction

It is commonly believing that woman play an important role in livestock sector to support household livelihood. However, they are usually neglected in rural development even in household decision-making (Azahari, 2008). In fact, several studies shown that the roles and contribution of women have been proved to make beef cattle development program successful at the farmer level (FAO, 2011, 2012 Sajogyo,1983). Beef cattle development at the farmer level has not considerably involved women as working/business partner of men, whereas their roles in the beef cattle farms are quite important. This can be seen from the quick observation in some production centers of beef cattle in Sumbawa Island, West Nusa Tenggara.

Traditionally, Sumbawanese women have very little involvement in all aspects of cattle production. Women participations is low because culturally they are not encouraged to be involved in cattle production, cattle are mostly on free grazing so difficult for women to participate, traditional fattening system normally rely on grasses that farmers have to collect

from distant location. Another reason is because they are not suggested by their husbands to do so.

Cooperation UNRAM and CSIRO introduced *Leucaena leucocephala* var. Tarramba for cattle fattening that stimulate farmers to conduct cattle fattening close to their houses. After the program has been running for three years, an assessment on women participation in cattle fattening was carried out. It is necessary to conduct research about the extent of Sumbawane women contribution in beef cattle activities in Sumbawa districts. Research is needed to find out factors that lead to involvement of women as working partner in cattle farming activities. The objectives of this study are to assess the change of participation level of Sumbawane women in cattle fattening using Tarramba leucaena and to assess the role of women in decision making related to cattle business.

## **2 Research Methods**

Research to understand the involvement of women in beef cattle activities was conducted in August 2018 to evaluate impact of the intervention on women participation. The study involving 20 women participating in cattle fattening activities. The study was conducted by survey method using prepared questionnaires, Focus Group Discussions (FGD) and in-depth interview. Key questions were prepared accordingly to get answers which were in line with the objectives of the research. Parameters recorded were participation of women in collecting fodder, feeding, and providing drinking water and housing, cattle mating, vaccination and medication and decision-making process. Data were tabulated and analyses descriptively.

## **3 Findings**

### **3.1 Source of Household Income**

All female participants of FGD either located in Sumbawa regency and in West Sumbawa regency doing farming business in agriculture by planting corn and in the field of animal husbandry by doing cattle fattening business. As it is known that one of the excellent programs of West Nusa Tenggara Provincial Government is PIJAR Program (Cow, Corn and Seaweed), and corn production centre indeed in Sumbawa Island with suitable land for corn plant development.

Corn cultivation is done in the private garden or lease the land from other people. There are also who work as farm labourers for the job of planting corn and harvesting with income IDR 50.000/ day. Usually corn cultivation is done in December and harvest is done in March or April. Other agricultural commodities cultivated by FGD participants are peanuts, green beans, cashew nuts and vegetables (eggplant).

For those who grow nuts, planting is done in November and harvested in February, if possible then it can be planted one more time in March and the harvest will be done in May. After that usually all agricultural activities directed to maintain cattle or other animals, because the rain has begun rare and difficult water. The main sources of income in the three study locations are from cattle farming followed by grain crops such as rice and maize. The crops farming are dominated by rainfed upland thus the activities only occur during wet season and mostly no crops activities following crop harvesting time.

In addition to rice and maize, farmers in the area also grow beans such as peanut, mungbean and other beans and tuber crops such as cassava and sweet potatoes. The women also diversify their sources of income from other activities beyond agriculture sector such as selling foods, home industries such as making buffalo skin cracker, milk candy and trading of domestic need such as clothes, tablecloth, linen, blanket and other clothing material. This indicated that women in the study sites has multitude role on household activities ranging from taking care family life as a domestic duties and to some extend on economic activities.

### 3.2 Impact of intervention on forage and cattle production system.

One of the main activities in the maintenance of cattle is the provision of feed. Cooperation ARISA and UNRAM introduced lamtoro as the leading feed in the cattle fattening business. Feeding animals is the most enjoyable job for women and other cattle raising activities. All female FDG participants said they liked to feed cows

"If the cow is fat, we are also fat, if the cows eat a lot ..

it sounds kriuk kriuk we love to see it .. '

".. if cow is full, glad we see .."

The change of production system from extensive to cut and carry system and the availability of forages (Leucaena) close to the house has increased women participation. The study found that there are impact of intervention on forage and cattle production system. The intervention stimulates farmers to plant Leucaena on their own lands and Increase of women farmer participation in planting Leucaena.

As we know before intervention, sumbawanesse women only partly help their husbands in planting lamtoro as cattle feed, feeding cattle and participate to clean / bath the cows and clean the coshed, but seeing the success of ARISA farmer farmers who feed lamtoro on cows, they adopt technology by feeding lamtoro. Some of the FGD participants participated in a field visit to a group of Balinese ethnic breeders in Jatisari village who had been involved in cattle raising and planted lamtoro as feed plants. Currently they have planted lamtoro in their garden for cattle feed as one participant says:

"We already see the leucaena plant in Jatisari, we are inspired to participate in the garden"

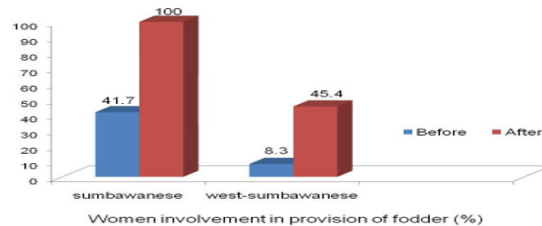


**Fig.1** Mrs Aprianti, a Sumbawanesse woman is harvesting Leucaena (above) and feeding it to cattle (below)

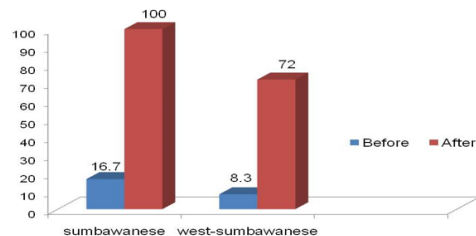
Farmers are also stimulated to fatten cattle in pens near their houses. Distance of Leucaena plantation to farmer house is relatively close (ranges from 100m-2000m). The short distance encouraged women to cut and carry Leucaena forages. Some women use motorbikes to cut and carry forages from longer distance. As a result, the workload of men has now been shared

with women so male farmers can have more time to do off farm work or simply enjoy free time.

The increase in participation of Sumbawane and west Sumbawane women farmers was also due to the facilitated cross visit to Balinese village where many women independently work on the cattle fattening business. Involvement of Women in cattle farming in general there are no specification or separation activities between man and women in cattle farming. Women participation in cattle farming involve in various activities such as collecting fodder, feeding, provide drinking water and housing, mating and vaccinate.



About 87% of Sumbawane women and 63% of West sumbawane women involved in the training in planting and management of leucaena. In Sumbawa district, women participation increased from 42% to 100% in collecting feeds. In West Sumbawa, the participation increased from 8% to 45%. Increase of women farmer participation in planting Leucaena, harvesting leucaena and cattle feeding due to facilitated cross visit to the Balinese farmers and proximity of forages to animal pens.



In general, women in Sumbawa enjoy all activities related to cow raising, but the most fun activity is cow feeding activities.

"- if the cattle fat, we are fat too .. we are happy if the cow eat a lot, if they do not want to eat it irritated .."

Women also get benefit after ARISA's intervention, the price of cattle increase, because after being feed leucaena, the average cow's weight rose 5 kg within a month.

**Women involvement in decision making.**

In terms of decision-making, women participate in negotiations to make decisions because women are already involved and participate in cattle raising activities. Prior to intervention, she did not know at all about when and how many cows were sold by her husband, and what the selling price was, after intervention where women got knowledge and information and would be involved in the provision of feed, livestock maintenance, health and hygiene reproduction of livestock, then women are invited to discuss by husband (men) in the

production and marketing of livestock. But in terms of production and marketing, decision making is more dominated by men.

#### **4 Conclusion**

Planting *Leucaena* on own land and fattening cattle on backyard increases women participation in forage planting, harvest and cattle feeding. The close proximity with the cattle stimulates women to play more roles in feeding cattle, provide drinking water and cleaning pens. Increased involvement in cattle business improves women role in making decision on when to sell cattle, selling price and how to use the money.

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