

## Gender Perspective on Strengthening Graduate Contributions to Sustainable Farming Universitas Malikussaleh

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### Abstract

*Women have achievements and changes in the business sector, including maintaining sustainable food security. On the other hand, the frequent absence of female farmers from agricultural development programs reflects the injustice and inequality in Indonesia between males and females. Performing daily the entire farming process, from seed preparation to planting and maintenance, and even harvesting. Collaboration is the vehicle for improving women's skills and participation in the agricultural sector. Women farmers' roles and contributions in the coffee farming sector must be considered. The research aims: (1) to strengthening graduates in the sustainable agriculture sector at Malikussaleh University (2) to Graduates' contribution to improving women's skills to study farming for the private sector coffee agricultural and technology at Malikussaleh University. This study used the qualitative method—descriptive data in written or oral words from people and observed behavior. The results showed that one of the reasons low participation of women in cooperatives is limited land ownership had caused woman farmers not eligible to register as cooperative members. Only one person is counted from each household/family and represented by the father/husband. This research provides recommendations on improving women's role and contribution in the agricultural sector by improving their participation in the coffee sector.*

### Keywords

gender perspective; women; contributions



## I. Introduction

Aceh province, is located in the Gayo highlands of Indonesia, is the country's largest Arabica coffee-producing region (Aceh Tengah and Bener Meriah districts). The plantation area sections is 93,316 Ha with production per year 27,444 Ton and productivity rate per Hectare is 700-800 Kg/year. The number of household heads involved is approximately 50,000. The type of coffee bean planted is 80 % Arabica, and the rest is Robusta. Women have played a significant role in the agricultural sector since the beginning. The existence of women in the agricultural sector is often marginalized due to the patriarchal culture that develops in society, leading to the problem of gender division of labour. We should admit that women's potential in agricultural development is very strategic. Its contribution to the farming sector has been able to participate in maintaining domestic food sovereignty. On the other hand, the frequent absence of female farmers in agricultural development programs reflects the injustice and inequality between men and women in Indonesia. The various efforts made to improve access to information to acquire knowledge for farmers have not involved many women (luluk 2020). The same thing happened in Aceh province. Females take an essential role in the agricultural sector, but women are still rarely included in the farming sector, disadvantaging women.

Most of the land is in the form of community plantations. The plantation area in the two sections is 93,316 Ha with production per year 27,444 Ton and productivity rate per Hectare is 700-800 Kg/year. The number of household heads involved is approximately 50,000. The type of coffee bean planted is 80 % Arabica, and the rest is Robusta. Women have played a significant role in the agricultural sector since the beginning. The women contribution has been able to maintain domestic food sovereignty. On the other hand, the frequent absence of female farmers in agricultural development programs reflects the injustice and inequality between men and women in Indonesia.

The women do almost the entire farming process, starting from seed preparation, planting, and maintenance, even to the harvest period done by women. One of the vehicles for improving women skills and participation in the agricultural sector is through cooperation. Women farmers' roles and contributions in the coffee farming sector must be considered. The research aims: to 1. strengthening graduates in the sustainable agriculture sector at Malikussaleh University 2. to Graduates' contribution to improving women's skills to study farming for the private sector coffee agricultural and technology at Malikussaleh University.

Marketing is a process of planning and execution, starting from the conception stage, pricing, promotion, to the distribution of goods, ideas and services, to make exchanges that satisfy the individual and his institutions (Dianto in Asmuni et al, 2020). According to Tjiptono in Marlizar (2020) marketing performance is a function that has the greatest contact with the external environment, even though the company only has limited control over the company's environment. In the world of marketing, consumers are assets that must be maintained and maintained their existence in order to remain consistent with the products we produce (Romdonny and Rosmadi, 2019).

This paper focuses on two significant aims. Both graduates' roles are to improve alumni skills in terms of marketing, farming ability, the technology used, etc. The influence of technology for farmers to strengthen their role in the farming industry has influenced alumni thought and work. This research looks at the benefit received, particularly by male and female alumni, to support their skills improvement of farming and their understanding of other aspects of agriculture as a business. Another important aspect included in this paper is the role of the government to support the farmers as individual/family workers. The access and control of resources and human and development resources, and development benefits. Discussing gender is attractive in Indonesia, especially in the agricultural sector.

## **II. Review of Literature**

The role of male and female graduates in the cooperative at their home town and its contribution to improving alumni skills in terms of marketing, farming ability, the technology used, etc. Cooperative as a gathering point for farmers to strengthen their role in the farming industry has influenced alumni thought and work. This research looks at the benefit received, particularly by male and female alumni, to support their skills improvement of farming and their understanding of other aspects of agriculture as a business. Another important aspect included in this paper is the role of the government to support the farmers as individual/family workers as well as through cooperation. [www.worldbank.org/en/topic/financialsector/brief/agriculture-finance](http://www.worldbank.org/en/topic/financialsector/brief/agriculture-finance) There are alarming indications agricultural development that high population growth is again placing pressures on the supply and demand for rice, which is the staple source of livelihood for millions of people in Asia.

The emerging issues include growing scarcity of labor, water scarcity, and commercialization of farms, pressure to liberalize rice trade, pressure on the resource base, location specific problems and changing food consumption patterns. All of these will have implications on women engaged in rice research-which in the past had as its primary objective increasing yields and land productivity and preservation of these emerging in rice farming. Changes in the scarce land resources of Asia-must take on an additional challenge: how to simultaneously increase the productivity of labor, water and chemical fertilizers, while preserving natural resources, protecting the environment and providing livelihood to the socially disadvantaged groups, especially poor rural women. The world will need a great deal more rice-about 60 percent more than today's global production-to feed the extra billions who will rely on it in the coming three decades (IRRI, 1997).

According to evidence that shows women as playing a vital role in agriculture and food security in developing countries. The impact of the green revolution, for instance, has been the pauperization and marginalization of poor rural women. While on the one hand some technologies have increased the burden of tasks left to women, others have begun performing remunerative tasks that were earlier the domain of women. However, to allow women to fulfill their potential for generating income by national and international organizations must take policy steps such as nutrition. Strategies should aim to increase women's productivity both in paid work and in domestic production, food security, in order to enable them to increase their incomes without as improving their access to resources, technology, and information.

The Policy increase women's ability to generate income to maximize the benefits of women's incomes for household food security sacrificing additional time, their children's welfare, or their own health and nutritional status. Women farmers have a real and very important contribution to family food security. (Quisumbing, 1994).

Women have a very important role in efforts to provide food at the household level. The division of roles between husband and wife in agriculture is based on family consultation, but the decision maker is still a man (husband). This is caused by the people of Aceh adhering to Islamic law. In agricultural activities, men play a role in heavy work. While women play a role in light work.

This pattern refers to habits that have become a hereditary culture of society. Since childhood they have seen how parents divide roles in the family, so this also becomes their reference or basis in dividing roles between men and women in agricultural activities. Within the household, women are key actors in achieving household food security on the grounds that food security is part of their reproductive role. In this field, a woman makes decisions, for example choosing food ingredients, processing them healthily, and choosing the needs of environmentally friendly households. Therefore, knowledge about healthy food ingredients and meeting nutritional needs how to process them and the needs of environmentally friendly households are important for every woman to have (Shamadiyah & Nasution, 2018). Another issue is food security policies mostly refer to the government, whereas the participation of other actors such as academics and tertiary graduates is needed to be able independently help the community achieve family food security.

In this case, institutions also have an important role to help the government realize sustainable agricultural development. As stated in the Tridharma of Higher Education there are teaching, research, and community service activities. With teaching to students it is hoped that they will be able to produce superior scholars and be able to compete in the global market. In addition, universities can help the government create innovations and technologies that are useful for agriculture, for example with appropriate agricultural

technology, superior seeds, fertilizers, and others. In the field of community service, universities play a role in transferring research technology innovations that have been done so that people can understand and use these technologies. So that it is expected to improve the quality and productivity of community agriculture (Shamadiyah & Martina, 2018). In this policy debate, there are now many actors. Much of the food security discourse still is about governments, farmers and the poor (Lang & Barling, 2012). Socio-cultural factors can influence community participation in programs such as education, efforts in implementing programs, norms, society, knowledge, and perceptions about programs (Shamadiyah, 2010). Enhance capabilities for and interest in participation it cannot be assumed that all actors have the capacity or continuous interest to participate in program that might continue over several years.

### **III. Research Method**

It is still closely related to the imbalance of the division of labour, unclear work status and burdens that are considered too heavy, the quantitative and qualitative participation of women and men in various agricultural and development. The number of Faculty of Agriculture graduates has reached thousands in number and has spread into several work sectors, including family farming (Arikunto (2007). Universitas Malikussaleh is expected to contribute to agricultural development for the community. However, to confirm this hypothesis, it is necessary to research to discover the role of the graduate female in society to enhance food security and boost their family farming productivity through the transfer of knowledge they gained at the university.

### **IV. Results and Discussion**

The problem of discussing gender are attractive in Indonesia especially in the agricultural sector is still closely related to the imbalance of the division of labour, unclear work status and burdens that are considered too heavy, the quantitative and qualitative participation of women and men in various agricultural and development.

#### **4.1 Strengthening graduates in the sustainable agriculture sector at Malikussaleh University**

Success in the work of female farmers can make them rise to a higher status in the family or community because the income they receive will affect the economy of family. Women farmers can even send their children to college with the agricultural products they get. However, the society will still see man (husband/father) who is the main and the head of the family even though their income is below the wife/mother participation in Cooperative and Social Organization It is rare for people to register as members of farmer cooperatives because there are not many cooperatives around their village. Usually the cooperative is located in a sub-district or district city. However, there are also graduate families who are members of cooperatives. According to graduates who are members of the farmers' cooperative, in the cooperative they receive counseling and agricultural equipment.

Although there are more female graduates who do not participate in activities in their communities, there are also those who are active in social activities in the community, including the national anti-drug movement is tasked with providing an understanding of the dangers of drug abuse and drug laws to the public, especially the younger generation. There are also female graduates who participate in farmer group meetings. They attend this

meeting depending on the discussion presented in the group or exchange opinions with other farmers about knowledge of coffee plantations.

Female graduates also attend agricultural training held by women's farmer groups so that they can gain broader insight. They like to interact with people and can also apply the knowledge gained in universities (agriculture graduates). Cuéllar-Gálvez (2018). Even though there are more male graduates who do not participate in activities in their communities, there are also those who are active in social activities in the community, including (youth empowerment) the reason to follow him because he is active in the social community and has been following for a long time. They are quite active in every activity held. They contribute to making program plans and communicating the program with others, and others. Male graduates also attend Karang Taruna (youth organization) as a forum for discussion. Male graduates also attended meetings held by coffee cooperatives with the aim of finding out more details about coffee. For example, knowledge about coffee plants affected by pests and how to overcome them. As coffee farmers, they participate in agricultural counseling conducted by the Agricultural Extension Center (BPP) to gain knowledge about coffee plants and they can provide opinions or solutions to problems experienced by fellow coffee farmers.

The amount of agricultural production depends on the area of land that is owned, the quality, and the weather. The crops are sold and sometimes only enough for family needs. The market for agricultural produce is always there, but there is no guarantee of a price. The opportunity for farmers to sell their crops is actually very large, but sometimes market games are very disturbing to farmers who expect the price to be in accordance with the business that has been done. Marketing of agricultural products is sometimes also sold to wholesalers or known as "toke" to cover debts before harvest (usually to buy production inputs such as equipment, fertilizers, pesticides, or family needs) so that farmers only get a small profit.

The marketing channel through this agent could not very profitable in terms of income because the price is determined by the market mechanism, but this marketing channel is the fastest marketing channel and the agents come directly to their land and bring agricultural products without farmers having to bother thinking about transportation for sales. Apart from agents, currently some farmers have joined farmer cooperatives to sell their agricultural products and the prices they get are fairer. There are also consumers who come directly to the farmers to buy, but this is very rare. Apart from planting core crops, farmers also plant vegetable crops in their yards or the remaining plantation land for sale to the market or for personal consumption. Due to Covid-19, the price of agricultural products has fallen, even though not significantly.

#### **4.2 Graduates' Contribution to Improving Women's Skills to Study Farming for the Private Sector Coffee Agricultural and Technology at Malikussaleh University**

Female graduates stated that technology helps men more in agricultural activities such as lawn mowers and hand tractor. There are more men who use machines in agriculture because they understand how to operate machines better than women, so that women still work using conventional technology such as harvesting coffee by hand, not using a machine. At the moment, they still harvest coffee manually because there is no technology to support it. In addition, manually harvesting coffee can absorb a lot of female labor because it is easy to do, not hard work, and does not take much time to work. The requirement to become a coffee harvester is understand the characteristics of ripe coffee bean. After harvesting, coffee is also sorted according to size and quality manually because not all coffee farmers own coffee sorting machines. Women also do coffee sorting. This

sorting is carried out from noon to late in the evening after the drying is finished. Usually coffee farmers who have joined the cooperative only pick coffee and dry it. In the cooperative there will be a large scale coffee sorter.

Most of the male farmers use technology such as tractors, tripe machines, and coffee mills. However, there are also some female farmers who use tractor machines and sprayers to fertilize coffee. A number of female farmers in their village appear to be less proficient in using agricultural tools because part of their work such as harvesting does not use agricultural machinery. Most of the alumni feel that agricultural modernization helps farmers to increase agricultural production and makes it easier for them to do work, such as training in making organic and inorganic fertilizers, procuring agricultural machinery, and training related to increasing production. But on the other hand, there are also farmers who refuse because modernization means bringing in machines to replace human labor. This has an impact on decreasing farm labor income.

The form of modernization in the village is the latest technology machines and pesticides. Agricultural modernization follows community needs, but cannot be ascertained. The local government helps farmers a lot, such as providing agricultural counseling and providing assistance in the form of seeds, fertilizers, and machine needed by farmers. Alumni practice what they get in university such as making spray machines, processing agricultural products, and crop cultivation techniques. Agricultural extension conducted by the Agricultural Extension Center/Agricultural Agency / Industry and Trade Agency which was attended by female graduates such as Counseling coffee seeds and plantation tools, Hydroponic seminar, Agricultural marketing. While Agricultural extension has been attended by male graduates were increase in crop production, pruning, how to use organic fertilizers and liquid organic fertilizers and Superior coffee seed management.

The extension provided for female currently is fit to their role at the farming land, without any thought to engage them in the broader tasks to support the agricultural activities especially beyond the hereditary passed by generations. There is no intention and effort so far done by government and society to change it. Some women alumni feels confident to do tasks unusually done, however they don't feel comfortable to be pioneer to start discussing this idea. Assistance received from the government so far were Fertilizer subsidies from the District Official of Agriculture, Direct cash assistance (BLT), Fund with agricultural tools such as hoes, booth shoes for gardening, subsidized seeds, tripe machines, and Agricultural business capital aid

## V. Conclusion

The number of Faculty of Agriculture graduates has reached thousands in number and has spread into several work sectors, including family farming. Universitas Malikussaleh is expected to contribute to agricultural development for the community. However, to confirm this hypothesis, it is necessary to research to discover the role of the graduate female in society to enhance food security and boost their family farming productivity through the transfer of knowledge they gained at the university. Contributions is to increase agriculture productivity, achieve sustainable agriculture, and raise family food security. Agriculture is only a second job done and does not become the main jor side job while waiting for a suitable job. They decided to work in agriculture primarily for personal and family reasons, such as working in the family's plantation/field. The form of modernization in the village is the latest technology machines and pesticides. Agricultural modernization follows community needs but cannot be ascertained.

1. The local government helps farmers a lot, such as providing agricultural counseling and assistance in seeds, fertilizers, and machines needed by farmers—agricultural processing products and crop cultivation techniques.
2. Most of the alumni agricultural modernization increasing agricultural production and making it easier for them to do work, such as training in making organic and inorganic fertilizers, procuring agricultural machinery, and training related to increasing production. But on the other hand, some farmers refuse because modernization means bringing in machines to replace human labour. It has an impact on decreasing farm labour income.

### Advice

The number of Faculty of Agriculture graduates has reached thousands in number and has spread into several work sectors, including family farming. Universitas Malikussaleh is expected to contribute to agricultural development for the community. However, to confirm this hypothesis, it is necessary to research to discover the role of the graduate female in society to enhance food security and boost their family farming productivity through the transfer of knowledge they gained at the university. We argue that actors' contributions could increase agriculture productivity, achieve sustainable agriculture, and raise family food security. Success in the work of female farmers can make them rise to a higher status in the family or community because if they are successful, the income they receive will also be higher and affect the economy of their family. Overall, from a cognitive perspective, the University curriculum has increased student knowledge, but what is still lacking is a practice in the field.

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