

1. Introduction

Women play an essential role in developing the agricultural landscape. However, their contribution to the agricultural sector remains unrecognised. So far, women's role in this sector have been closely linked to their domestic roles, including doing household chores, managing household finances, and overseeing their children's education. Men farmers are considered to be more dominant in terms of land rights and land management decisions. Women farmers, on the other hand, contribute significantly to the development of farming businesses and the increase in farmers' household income. However, there is a limited availability of data and research on gender equality and the roles of women farmers.

The Government of Indonesia, through the Ministries of Agriculture and Women Empowerment and Child Protection, recognises women's strategic potentials in agricultural development. Various targeted programmes are implemented to close the gender gap in the agricultural

Key Findings

- 1. Gender equality in the agricultural sector in Pagar Alam is relatively good. Most agricultural-related decisions in households are made by both men and women farmers. However, women's opinions/ suggestions in these joint decision-making processes are less than men's because women are disinclined to express them. To achieve gender equality, it is necessary to prioritise the development of women's capacity and confidence in expressing their opinions, particularly in the agricultural sector. It is expected that family decisions will better reflect women's voices and interests.
- 2. Men and women farmers both choose coffee and vegetables, in addition to rice, and avocado, as their primary agricultural commodities, with economic factors as the main criterion. This shows that the agricultural sector is the main source of income for the Pagar Alam community, most of whom are small-scale farmers. Most of farmers, both men and women, are willing to accept and implement innovations. Therefore, it is essential to continue developing agricultural policies and programmes in Pagar Alam that benefit small-scale farmers, are equitable to men and women farmers, and innovative.
- 3. Men farmers have a larger share in agricultural activities, especially in commercial agricultural commodities with relatively high-income potential, such as coffee, while women farmers play a larger role in irrigated rice farming. In this case, it is necessary for men and women farmers to have access to agricultural capacity building, training, and information that is relevant to their roles and interests in farming business development. Considering the domestic chores of women, training must be tailored to their daily activities.

sector in terms of access, participation, control, and benefits. Targeted programmes to enhance farmer capacity and close the gender gap must be carefully designed by considering the differences in women's and men's needs, experiences, and aspirations.

The IndoGreen research aims to fill a data and information gap on gender and agriculture, particularly in Pagar Alam City, South Sumatra, Indonesia. This technical working paper provides information on the roles of women in agricultural sector in Pagar Alam, including: (i) preferences and criteria in selecting agricultural commodities; (ii) role division in farming activities; (iii) decision making process at the household level; and (iv) willingness to adopt technology. This document provides information about issues of access, participation, and control. The findings of this research are expected to support the Pagar Alam Government in planning farmer capacity building to promote gender equality in agricultural development. Data provided in this paper is based on a 2019 study in which farmers and their spouses were interviewed and asked the same questions.

2. Farmers' Preference and Criteria for Commodity Selection

Coffee, vegetable, and avocado are three primary commodities preferred by men farmers, while women farmers prefer vegetable, coffee, and rice. Men and women farmers choose commodities based on six main criteria: high marketability, quick harvest, land and climate suitability, high selling price, harvested-annually crops, and low maintenance.

Table 1. Farmers' primary commodity priority ranking

Men		Women		
Rank	Commodity	Rank	Commodity	
1	Coffee	1	Vegetable	
2	Vegetable	2	Coffee	
3	Avocado	3	Rice	
4	Jackfruit	4	Avocado	
5	Clove	5	Tangerine	
6	Pepper	6	Clove	
7	Orange	7	Lemongrass	

Table 2. Farmers' commodity selection criteria scores

No	Men		Women		
	Criteria	Percentage (%)	Criteria	Percentage (%)	
1	High marketability	26	High marketability	24	
2	Quick to harvest	16	Quick to harvest	15	
3	Land and climate suitability	14	Land and climate suitability	22	
4	High selling price	12	High selling price	11	
5	Annually harvested crops	10	Annually harvested crops	9	
6	Low maintenance	5	Low maintenance	5	
7	Seedling availability	4	Seedling availability	6	
8	Household consumption	3	Household consumption	5	
9	Shade plant	2	Shade plant	3	
10	Potential to save (investment)	1	Potential to save (investment)	0	
11	Preventing erosion	4	Low costs	1	
12	Farming knowledge	2			
13	Multipurpose crops	1			
	Total	100	Total	100	

Based on their preferred commodities, men farmers prefer tree that produce continuously or can be harvested annually (Criterion 5), such as coffee, avocado, jackfruit, clove, pepper, and orange. Vegetables are prevalent among both men and women farmers because they are easy to market, quick to harvest, and suitable to land and climate. Pagar Alam is currently the main vegetable producer in South Sumatra, with a market that reaches Palembang, the Province's capital located approximately 282 kilometres away or 7 hours by road.

While criterion 8 (household consumption) is not the most popular, it appears to be essential for women farmers who prefer rice as their primary commodity (Rank 3).

Economic criteria such as high marketability, high selling price, and potential to save/invest are chosen by both men and women farmers. Women farmers add low cost to the list of criteria, whereas men farmers include more criteria

Husband

■ Husband & Wife

commodity selection such as preventing erosion, farming knowledge, and multipurpose crop farming (agroforestry).

3. Role division in farming activities

The following data was collected from 377 farmers (husbands and wives) in Pagar Alam, including 276 coffee farmers (73%), 44 irrigated rice farmers (12%), and 57 others who mostly plant vegetables (15%). Respondents were asked about their participation, and responsibilities in 16 farming activities, ranging from land preparation, management, and maintenance to loan application and training participation (Figure 1).

The majority of coffee farming (Figure 1a) are conducted by and become the responsibility of husbands. Harvesting and weeding are two activities that involve and fall under the purview of wives, as stated by more than 5% respondents.

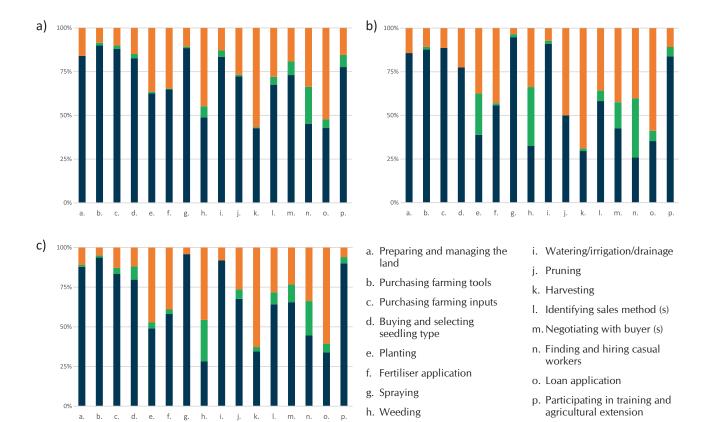


Figure 1. Husband and wife roles in farming activities: coffee farming (a), rice farming (b), and vegetable farming (c)

25% of respondents say husbands and wives work together to plant, fertilise, weed, prun, and harvest crops, as well as negotiate with buyers. No less than half (50%) of farmer pairs stated that they applied for a loan together.

Women's participation and responsibilities in irrigated rice farming (Figure 1b), both in pairs and individually, are higher than in coffee and vegetable farming (Figure 1c). Individual responsibilities for women in planting, weeding, and selecting and hiring casual workers are relatively high. Women's participation and responsibilities in vegetable farming (Figure 1c) are closely similar to those in irrigated rice farming. This is most likely because the loan application process requires approval from the farmer's spouse.

In general, men farmers are more involved in and responsible for land preparation and management, the purchase of tools and farming inputs, and participation in agricultural training.

4. Farming decision-making and household expenditures

Household decision-making is divided into two categories: farming management and household financial management. There are 36% of 377 respondents are involved in food crop farming, 97% in commercial farming, and 40% in livestock farming. Household financial management is analysed based on decision makers on major and incidental household expenses (i.e., educational costs or the purchase of motorised vehicles) and daily household expenditures.

Farming business management decisions are generally made collectively by farmers pairs at the household level, with some respondents involving external parties (Figure 2). External parties are usually involved when farmers do not

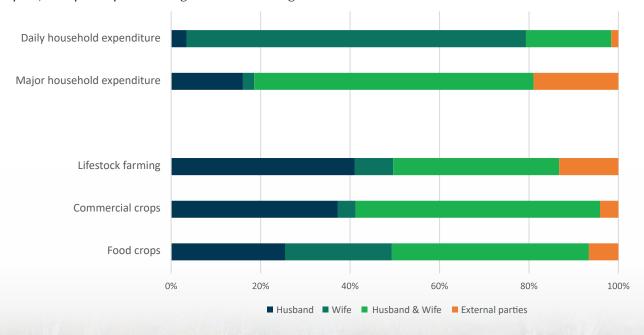


Figure 2. Decision makers in farming activities and household expenditure

own their land or manage others' through a profitsharing system. The figure indicates that major household expenditure involves decision-making by external parties, whereas daily activities are mostly decided by women/wives. In this case, decisions are made by those who contribute more to their responsibility. Men/husbands contribute more to farming activities, while women/wives make greater contribution to daily household expenditure (Figure 3). However, men/husbands have more decision-making power than most women, as illustrated in Figure 4. Women are most likely less free to express their opinions due to hesitation and lack of confidence, as well as cultural factors.

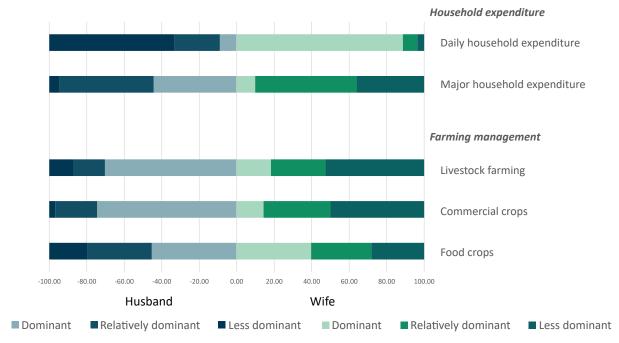


Figure 3. Decision-making contributions

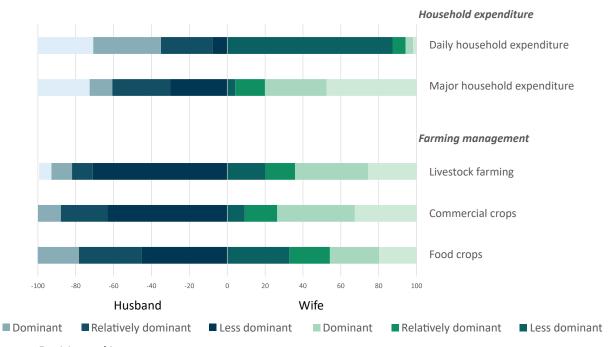


Figure 4. Decision-making power



Photo: World Agroforestry/Isnurdiansyah

5. Technology Adoption

The farmer's growth expectations are typically accompanied by a willingness to experiment with advanced technology or tools. Farmers who are willing to take risks, even if they may fail, have a better opportunity of benefitting from the innovations implemented, and innovative farmers usually become pioneers and role models. Figure

5 represents farmer responses to an offer to try out new equipment, farming inputs, or agricultural land management methods.

Most women farmers (48%) prefer to wait for feedback from others before experimenting with the innovation, while men farmers (42%) prefer to be the first to try. Only a few men (less than 5%) decide not to try at all or join the last group of farmers to try, whereas women farmers dominate both categories.

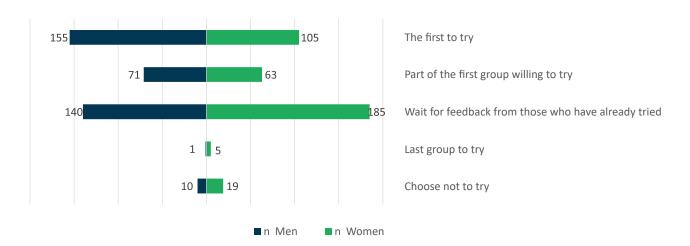


Figure 5. Farmers' willingness to experiment with agricultural innovation

6. Summary

- Men and women farmers focus on economic criteria when selecting agricultural commodities to cultivate, such as high market availability, high selling price, potential for savings/investment, and low costs.
 Low maintenance, as well as climate and suitability are also important considerations.
- Women farmers prefer vegetables as their primary commodity to cultivate, while men farmers prefer coffee. Men farmers tend to cultivate trees which producing an annual harvest, while women farmers prefer quickharvest crops.
- Men engage in most of farming activities, such as land preparation, purchase of farming tools and inputs, crop maintenance, and

- training. Women are rarely involved in coffee farming, although they are more involved in harvesting and weeding in all farming activities.
- Decisions on farming activities and major household expenditure are generally made collectively (husbands and wives), while major expenditure are mostly the husbands' responsibility. External parties are usually involved in major expenditure decisionmaking process.
- In terms of innovation, men farmers are more inclined to experiment with new knowledge and technology, while women farmers wait for feedback from other who have already tried them.



Photos: World Agroforestry/Isnurdiansyah

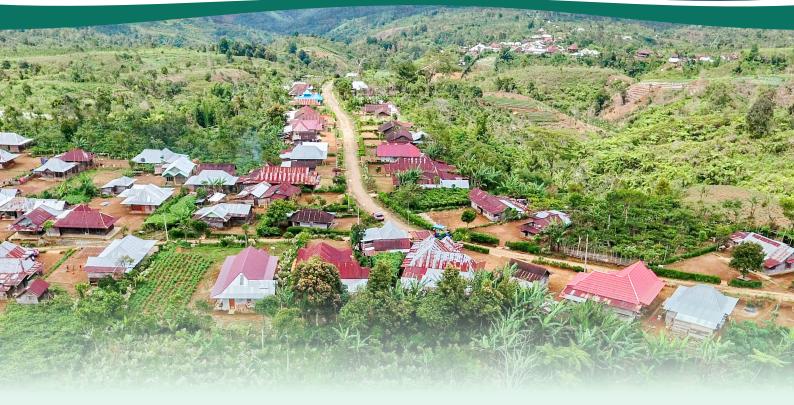


Photo: World Agroforestry/Mohamad Nugraha

Recommendation

- To close gender gap in Pagar Alam, it is important to ensure that women farmers have the equal access to training as men. This can be achieved by considering tailoring training to women's daily schedules, who are typically responsible for more household affairs. Given that many agricultural decisions are made collectively, improving women farmers' knowledge of agricultural management can help them enhance their capacity to share their perspectives in decision-making process.
- Capacity building for women farmers in financial management or financial literacy can help to boost agricultural development. Since women are playing a key role in daily household financial management, understanding financial management in agriculture will definitely strengthen the ability to develop more professional farming businesses.

Citation

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