

Women and Agricultural Institutions in Limited Land Settlements

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Abstract. The involvement of women in the agricultural sector in actual conditions is more adapted to the needs of agricultural activities. Improving the welfare of women farmers can be done through agricultural institutions, one of which is agricultural institutions in the form of Women Farmers Groups or in Indonesian is called Kelompok Wanita Tani (KWT). Women's empowerment through women farmers group institutions has the aim of increasing efforts to play the role of women farmers in the agricultural process. This study aims to further analyze the role of women in agricultural institutions in limited land settlements. This research is located in Benteng Village, Ciampea District, Bogor Regency. This study uses a qualitative method through interviews with KWT Srikandi in Benteng Village and is supported by literature studies. The results of this study indicate that the role of women in agricultural institutions in limited land settlements plays a very significant role

Keywords: Agricultural institution, KWT, Women's role

1 Introduction

Indonesia is a country that has abundant natural resources. These resources consist of water resources, land, forest, sea, and other biodiversity which are spread from Sabang to Merauke. These resources can be used as capital for the implementation of Indonesia's development if managed properly. One of the resources that is still contributing to Indonesia's economic growth is the agricultural sector. Because it is a contributor to employment in a fairly large number than other sectors in the economy (Nadziroh 2020).

The role of agricultural institutions, including farmers' institutions, will determine the success of agricultural development. Institutional farmers in rural areas contribute to the acceleration of the socio-economic development of farmers; accessibility to agricultural information; accessibility to capital, infrastructure, and markets; and adoption of agricultural innovations. In addition, the existence of farmer institutions will make it easier for the government and other stakeholders to facilitate and provide reinforcement to farmers (Anantanyu 2011).

In rural areas, the agricultural sector is the main source of income for the family economy. Income is the main problem of daily family life, because income determines the fulfillment of the needs of family life. Winarti (1994) states that income is all receipts of a person or group in the form of money or goods, both from their own sources and from the results of other parties which are valued with money or services that apply within a certain period of time. Furthermore, it is stated that family income is influenced by education, number of family members, number of working families, and husband's income.

The economic process cannot be separated from the involvement of women. This involvement has been seen from the past, either directly or indirectly. Women generally have dual roles, namely as workers or housewives and breadwinners. As a housewife, you are required to be able to complete family work. As breadwinners, women are also required to work in order to earn income to meet the daily needs of the family. The involvement of women in the agricultural sector is due to the fact that women in the household are very responsive in providing their family's food needs (Bertham et al. 2011).

The contribution of women's income to the family economy is the share of income contributed by women from the total family income (Arwani 2002). The contribution of women's income as farmers referred to here is the income contributed by female farmer workers from the total amount of family income obtained from various sources of income for other family members. The income women earn will be very useful in helping the family economy (Bertham et al. 2011).

One of the villages where women are still actively involved in the agricultural sector is Benteng Village, Ciampea District, Bogor Regency, West Java. Benteng Village has an area of 281.87 ha with a population of 7,374 people. Benteng Village is directly adjacent to several other villages. To the north it is bordered by Rancang Bungur Village, to the south by Bojong Rangkas Village and Cibanteng Village, to the east by the Dramaga IPB Campus, and to the west by Ciampea Village.

The Women Farmers Group (KWT) is a forum for women to contribute in advancing the agricultural sector in the village. This group is a form of association of female farmers to accommodate the appreciation of women farmers. The existence of KWT "Srikandi" in Benteng Village, Ciampea District, Bogor is expected to provide opportunities for women to channel their abilities in agriculture. In addition, the existence of KWT provides opportunities for women to act as initiators, movers and also liaison with the government or companies.

2 Theoretical Approach

2.1 Land settlement limited

Land is one of the resources that enter into an important aspect of life. Soil is a habitat for many creatures, as a medium, and as a container for plant growth. Therefore, the land needs to be protected and its management must also be careful to be able to maintain the land. Land has a meaning that is almost similar to land, but the meaning is broader. Land resources are the physical environment consisting of climate, typography, soil hydrology, and vegetation which to some extent affect the ability to use land (FAO, 1976).

The basic definition of settlement in Law No. 1 of 2011 is part of a residential environment consisting of more than one housing unit that has infrastructure, facilities, public utilities, and

has supporting activities for other functions in urban or rural areas. According to Koestoer (1995) the boundaries of settlements are closely related to the concept of the environment and spatial planning. Settlement is an area of land that is used as a residential or residential environment and a place for activities that support life and is part of the environment outside the protected area, both in the form of urban and rural areas. Parwata (2004) states that a settlement is a place for human habitation that has been carefully prepared and shows a clear purpose, so as to provide comfort to its inhabitants. According to Law no. 4 of 1992, Settlement is part of the environment outside of the protected area, both in the form of urban and rural areas that function as a residential environment or residential environment and a place for activities that support livelihoods and livelihoods. Settlement environment units are residential areas in various shapes and sizes with structured land and space arrangements, infrastructure and environmental facilities.

2.2 Farmer Institutions Development in Agricultural

Institutions are the sum total of idealized patterns, organizations, and activities centered around basic needs such as family life, state, religion and obtaining food, clothing, and enjoyment and shelter. An institution always aims to meet various human needs so that the institution has a function. In addition, the institution is a concept that blends with structure, meaning that it does not only involve patterns of activity that are born from a social perspective to meet human needs, but also organizational patterns to implement them (Roucek and Warren, 1984). Institutions are the sum total of ideal patterns, organizations, and activities centered around basic needs. An agricultural institution that is formed always aims to meet the various needs of farmers so that the institution has a function (Anantanyu 2011). Institutional is a concept that is integrated with structure, meaning that it does not only involve patterns of activity that are born from a social perspective to meet human needs, but also organizational patterns to implement them.

Institutional farmers referred to here are farmers' institutions located in the locality area (local institutions), in the form of membership organizations (membership organizations) or cooperatives (cooperatives), namely farmers who are members of cooperative groups (Uphoff, 1986). This institution includes a broad definition, which includes not only the definition of farmer organization, but also the 'role of the game' or the rules of behavior that determine patterns of action and social relations, including social unity, which is a concrete form of social activity. that institution. In the management of production factors, production processes, up to the processing of results, farmers' institutions are needed. Agricultural business activities will be successful if farmers have adequate capacity. To be able to achieve optimal productivity and efficiency, farmers must run a collective business. For this purpose, an understanding of an institution at the farmer level is needed. Traditionally, farming community institutions have developed from generation to generation, but the challenges of the times demand an institution that is more suitable to meet the needs of farming communities. This effective farmer institution is expected to be able to support agricultural development (Anantanyu 2011).

2.3 The Role of Women in Agriculture

In today's era, the high level of economic growth causes women to actively participate in economic activities. Her desire to work led to the dual role of women in the family. Basically, women have two roles. The first is being a housewife who carries out her functions in the

domestic sphere such as cooking and washing which indirectly generates income. Second, the position as a breadwinner, both principal and additional (Putri and Anzari 2021).

Agricultural activities cannot be separated from the role of women to provide food for their families. Today the role of women in farming is very large, as can be seen from the establishment of farmer groups consisting of women. The role of women in farming includes food crop agriculture, plantations and horticultural crops (Bertham et al. 2011).

Women in rural areas in agricultural production play a key position. Women play a role in almost all stages of the cultivation process such as preparing seeds, nurseries, planting, harvesting to marketing. The involvement of women in the agricultural sector is caused because they have a sense of responsibility towards the family. The existence of the role of women in agriculture will actually make agriculture in Indonesia advanced and carried out well. According to Roosganda (2007) in Putri and Anzari (2021) in agricultural development, empowerment of women farmers is a more applicable transformation process to be able to capture various changes in the allocation of economic resources, distribution of benefits, and accumulation in an effort to increase and actualize women's potential so that more capable of being independent and working, alleviating the limitations of education and skills, alleviating women from oppression due to discrimination from their social environment.

3 Method

This study uses a qualitative method. According to Suparlan (1994; 6-7) in Gunawan (2013), it is explained that qualitative research focuses its attention on general principles that underlie the manifestation of symptom units that exist in human life, or patterns. Social and cultural phenomena are analyzed using the culture of the community concerned in order to get an idea of the prevailing pattern, then the pattern is reanalyzed using an objective theory. The data collected in this study consisted of primary data and secondary data. Primary data is data that comes from the original source and is not in the form of a file. This data is sought through sources or respondents, namely people who are used as objects of research or people who are used as a means of obtaining information or data (Narimawati, 2008) in (Pratiwi, 2017). So in this case, primary data was obtained by interviewing the Srikandi Women Farmer Group in Benteng Village. While secondary data is a data source that does not directly provide data to data collectors (Sugiyono, 2008: 402) in (Pratiwi, 2017). Secondary data is data that supports the needs of primary data. In this study, secondary data was obtained from literature review sourced from books, scientific articles, and previous researchers.

The research was conducted on 16-22 May 2002. It was conducted in Benteng Village, Ciampea District, Bogor Regency, West Java. The selection of informants who will be interviewees uses a *purposive sampling technique* with the criteria of active members of the Srikandi Women Farmers Group and already married and willing to participate in the research. According to Lenaini (2021) purposive sampling is a non-random sampling method, where the researcher ensures the citation of illustrations through a method of determining a special identity that is suitable for the purpose of the study so that it is expected to respond to the research case. This method has several advantages, including:

- 1) The sample is selected according to the research objectives
- 2) This method is easy to implement
- 3) The selected sample is usually a person or person who is easily found or around.

However, this method also has drawbacks. The following are some of the drawbacks when using this method:

- 1) There is no guarantee that the number of samples used is representative in terms of numbers.
- 2) Not as good as random sampling
- 3) Not including random sampling procedures.
- 4) Generalization cannot be used

4 Results and Discussions

4.1 Narrow Land Use in Benteng Village

Areas in Benteng Village tend to be concentrated for housing which causes land conversion. Many people think that without large and sufficient land, they will not be able to farm or grow vegetables. Especially people who live in residential areas, they will find it difficult to find a large area for planting. However, the people of Benteng Village continue to use limited land to empower their narrow land to grow organic vegetables as their family's food needs independently. From the results of field visits to Benteng Village, there are types of plants that can be planted in the yards of each house, namely vegetables, fruits, ornamental plants, and so on, all of which can support daily needs and the rest can be sold.

In the village of Benteng itself, they apply hydroponic farming technology on a small scale that is adapted to a limited land area. Hydroponics is a method of growing crops using planting media other than soil, such as pumice, gravel, sand, coconut fiber, pieces of wood or foam. This is done because the function of the soil as a supporter of plant roots and intermediary nutrient solution can be replaced by flowing or adding nutrients, water and oxygen through the media.

The existence of limited land resources in Benteng village provides an opportunity to utilize and develop land/space as intensive and modern agriculture for urban farming communities which at the same time supports the development of green open spaces in the residential area. Utilization of yard land through hydroponic vegetables and the application of green houses to support family food security, can help their own kitchen needs.



Fig. 1. The outside of the hydroponic installation greenhouse at Benteng Village



Fig. 2. The inside of the hydroponic installation greenhouse at Benteng Village

The use of narrow land for intensive agriculture is the use/optimization of open land, such as abandoned land that is not managed by the owner. In addition, there is also a productive green open space (RTH) by utilizing/optimizing the yield of residential yards, both food and non-food commodities. In addition to the use of green open space and abandoned land, there is also the use of the roof/building for garden farming, vegetable and ornamental plant commodity development.



Fig. 3. The use of abandoned land in Benteng Village

4.2 The Role of Women in Land Utilization in Benteng Village

Land use that has been carried out in Benteng Village cannot be separated from the role of the community, especially from women in this village itself. The existence of a sense of caring encourages women in Benteng Village to participate in the maximum use of land in Benteng Village. Women in Benteng Village themselves participate directly in agricultural activities that are in the use of this land. In unifying this determination, women in Benteng Village formed the Women Farmers Group (KWT), known as KWT Srikandi.

KWT Srikandi itself has been active since November 2021. This KWT was successfully formed thanks to the support of the Field Agricultural Extension Officer (PPL). This PPL is a form of assistance and support from the local Agriculture Service for the determination of women in Benteng Village. With the invitation from PPL and support from the government through the provision of facilities, it finally succeeded in increasing the enthusiasm of women farmers in Benteng Village in using the existing land.

Women in this village through KWT Srikandi act as initiators and movers in land use. Anxiety about the lack of land and reduced income made KWT Srikandi devise a new strategy in agriculture in Benteng Village. Through the various training they received, KWT Srikandi carried out several activities to utilize the existing land in Cibanteng Village. First, KWT Srikandi seeks to manage abandoned lands in their area. One of the lands they manage is land owned by residents who do not live in this village. KWT Srikandi as the initiator and mover takes care of licensing to the owner and invites local women to move and plant various kitchen needs. KWT Srikandi chooses various types of vegetables to be planted so that women as housewives feel helped by their agricultural products later.

Second, KWT Srikandi routinely provides counseling to its members with assistance from PPL facilitated by the Department of Agriculture. With this KWT Srikandi succeeded in inviting and encouraging every woman in Benteng Village to use her home yard to plant various kinds of agricultural products ranging from vegetables, chilies, fruits and so on. With this implementation, each family in Benteng Village is expected to be able to independently meet their food needs and become one of the sources of additional income for their family.

Third, KWT Srikandi initiated agriculture without excessive chemical pesticides in Benteng Village. As previously explained, the reduced land has resulted in minimal production. With the existence of agriculture without chemical pesticides, KWT Srikandi proves that plantation products are of higher quality and increases the price of these agricultural products. The success of KWT Srikandi is one of the examples and references in the use of narrow land in Benteng Village.

Not only that, KWT Srikandi also initiated the formation of a waste bank. With the existence of a waste bank, the community is targeted to reduce indiscriminate disposal and burning of waste. If these indiscriminate waste disposal and burning activities can be overcome, then land pollution can also be minimized. In the end, in the absence of pollution itself, the land becomes more fertile and produces high-quality products.

In addition to being the initiators and movers in the use of existing land, women through KWT Srikandi become direct liaisons between farming communities and the Department of Agriculture, educational institutions, and companies. The inclusion of KWT Srikandi in one of the Farmer Group Associations (Gapoktan) in Ciampea District is one of the first steps in bridging the aspirations of the village community to various parties. In addition to bridging aspirations, the joining of KWT Srikandi into the Gapoktan makes farmers' rights easier to obtain so that narrow agricultural land can still be utilized properly and can support agriculture that meets the needs of Benteng Village farmers. The opportunity to channel this aspiration was used by KWT Srikandi to promote the establishment of a hydroponic installation in Benteng Village.

“Currently KWT Srikandi has succeeded in establishing 3 hydroponic installations which are a form of support from the government which also cooperates with educational institutions such as IPB. These installations include the Green House of LPPM IPB, the Green House of Serving Lecturers, and the CSR Green House of Bank Jabar Banten (BJB) which is one of the KKN projects.” (Asih, Benteng Village, 18/5/2022)

Not only carrying out the establishment of the hydroponic installation itself, KWT Srikandi also plays an active role in every agricultural activity in it, from planting to harvesting. This hydroponic installation is also planted with various vegetables and other kitchen needs which are more in demand by buyers around the Benteng Village itself.

5 Conclusion

The community in Benteng Village strives to maximize the use of narrow land. Taking into account the interests of the community and the desired target, hydroponic cultivation of plants by utilizing the urban area's home page which is not too wide is one of the choices made.

Apart from that, the community also utilizes narrow land by maximizing Green Open Space (RTH) and abandoned land in their own area. Another way to do this is by creating a plantation sub-sector by utilizing the roof/building for the development of vegetable and ornamental plant commodities.

In the process of utilizing this narrow land, women in Benteng Village through KWT Srikandi act as initiators and drivers of various utilization activities ranging from hydroponic farming, utilization of green open space and abandoned land, agricultural implementation with minimal chemical pesticides, and waste banks.

Not only that, women in this village also act as liaisons between the farming community and the government, educational institutions, and surrounding companies through forums in farmer group associations that KWT Srikandi himself participates in.

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