The role of farmer groups in the development of dryland farming in Ketos Village, Paranggupito Subdistrict, Wonogiri Regency

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Abstract. Farmer groups are play an important role in solving the farmers' problems, especially about their farming activities. This study aims to find out the role of farmer groups in the development of dry land farming in Ketos Village using qualitative descriptive methods. The results showed that Ketos Village farmer groups conducted activities such as farmer deliberation, farmers group gathering, agricultural counselling, and gotong-royong. Based on these activities, Ketos Village farmer group is able to act as a learning class, production unit, and cooperation. Farmer group as a learning class is a farmer group as place that provides information needed by its members related to the issue of farming activities. Farmer group as a production unit means that farmer groups play a role in the provision of agricultural facilities and tools, especially subsidized seeds, and fertilizers. Farmer groups as a medium of cooperation is not only between internal groups but also for external. Then this role is able to help farmers' activities in solving problems in dry land.

1. Introduction
Development in the agricultural sector is very important in everyday life since it would improve the welfare of farmers and their families. The term of development efforts is closely related to development of human resources, especially farmers, because they take care the plant and animal growth in farming activities [1]. In addition to that, future agricultural development must focus on the empowering of farmers to become independent. Independent in here is that farmer should transform their self to be more can efficient, modern, and competitive. For that, it is necessary to improve them in terms of knowledge, skills, and attitude regarding farming activities. Therefore, there is a need for cooperation between farmers to have better understanding of the agricultural development.

Humans need as social creature, need an intensive interaction in group of people to adapt and socialize. Almost of all the time in everyday life, human spent his/her life through the interaction and socialization [2]. For sure, being a farmers also cannot be separated from the presence of the other farmers in a farmer groups. Previously, Peraturan Menteri Pertanian [3] explains that farmer group is groups of farmers/breeders/planters which established due to the common of interests, environmental
conditions (social, economic, resource) and familiarity to improve and develop members’ businesses. Farmer groups is an agricultural development effort as a forum to facilitate agricultural products and provide a solid platform in the countryside. This group also a place to strengthen cooperation among farmers in to overcome various threats, challenges, obstacles, and disturbances in the agricultural sector.

Earlier study by Balai Litbang [4] revealed that more than 65% of the Wonogiri Regency area is very vulnerable to drought. This condition causes Wonogiri Regency to be threatened with a clean water crisis during the dry season. One of the most drought-affected sub-districts is Paranggupito District which located 55 Km from the center of Wonogiri Regency. Paranggupito District consists of eight villages, and all are affected by drought. The Regional Disaster Management Agency (BPBD) of Wonogiri Regency formed three villages into Destana or Desa Tangguh Bencana with a primary classification. The three villages are Ketos Village, Johunut Village and Gendayaan Village. The grant of this statuse by BPBD in Wonogiri is because of that three villages categorized as high priority of drought vulnerability [5].

Water drought finally affects the agricultural sector. The consequences of the drought itself cause damage to crop, even the most severe ones can lead to crop failure, ultimately affecting the productivity of farmers. Therefore, there needs to be a special priority in tackling the availability of water in Ketos Village. One thing that can be done to overcome or prevent water drought in the agricultural sector is cooperation between farmers. The role of farmer groups in Ketos Village, Paranggupito District, Wonogiri Regency is more focused on the approach of each farmer in overcoming the problem, especially the problem of water drought. In addition, the existence of farmer group institutions can facilitate problem solving and facilitate coordination of each Ketos Village farmer and extension worker. Therefore, it is hoped that the process of information transfer and adoption of innovations will run smoothly which in turn will be able to improve the performance of farmers and be able to assist farmers in overcoming problems related to drought and water shortages in their farming businesses.

The existence of farmer groups at least helps farmers in overcoming agricultural problems in dry land. This can be seen from the association held by farmer groups every ‘selapanan’ or every 35 days to discuss the problems faced by farmers. In addition, the strategy adopted by Ketos Village farmers in overcoming this drought problem is to plant short-lived crops and dry land commodities. The types of plants planted are cassava and ‘segreng’ rice varieties so that when entering the dry season, it does not really need a lot of water.

Based on this background, research on the role of farmer groups in the development of farming in dry land is important to do. This aims to determine the role of farmer groups in the development of farming in the dry land of Ketos Village.

2. Methods
This study uses a qualitative approach, which is used to examine objects naturally, where the researcher acts as a key instrument in this research process. The data obtained came from interviews, observations, images result or notes in the field. Usually, research reports are presented in the form of a narrative description [6]. Purposive sampling (deliberately) carried out the method of determining the location of the study. The research location was carried out in Ketos Village, Paranggupito District, Wonogiri Regency. The reason for choosing this location is that Ketos Village is a village that is affected by drought, especially in farming activities.

Respondents in this study were Ketos Village farmers, farmer group leaders, Gapoktan leaders and field extension workers. The types and sources of data used in this study were primary and secondary data. Primary data were obtained from direct interviews with respondents. Secondary data were obtained from government agencies and related institutions, the Ketos Village Government, Extension, and Implementing Agency for Paranggupito District. The data collection of this research was done through interviews, observations, and FGDs.
3. Results and discussion

3.1. Ketos Village farmer group activities

3.1.1. Farmers’ deliberation. The farmer's meeting is a routine activity carried out by farmer groups in Ketos Village. The meetings held by farmer groups are held once a month or once every ‘selapanan’ days. The time for the farmer consultation is at night day, because at the night it is easier for all group members to gather, since in the daytime farmers are busy with their farming activities.

The existence of these activities is expected to foster kinship among fellow group members. In addition, the existence of deliberation can strengthen the relationship between fellow members. Farmer meetings can also be a place to exchange ideas in farming activities between members then farmers can make it easier to overcome their problems in farming activities. These meetings were held periodically in each farmer’s house. For meal and drink during the meeting, it will be serve from their crowdfunding.

3.1.2. Farmers group gathering. Farmer group gathering is an activity that is always carried out by farmer groups in Ketos Village. This group gathering usually takes place at the same time as the farmer's meeting. The social gathering activity is carried out to fill group activities when it is not entering the planting season, so that members are enthusiastic to come to the farmer's meeting. This social gathering activity is not mandatory for members and without coercion. So that the members are allowed not to join the social gathering but still attend the farmer's meeting. The “arisan” of called rotary saving, is activity which considered to be able to help the farmer regarding the capital problems and personal needs of farmers.

3.1.3. Agricultural counseling. Cooperation between farmer groups and extension workers is needed to empower their members. Extension activities are often carried out by extension workers with a group approach. These activities are usually carried out on an urgent or necessary basis, so the farmer groups invite extension workers or PPLs to provide counseling or socialization. In addition to requests from the community, extension activities are also activities that are usually requested directly by PPL because they have to provide information to farmers. Extension activities are carried out when entering the planting season, because at that time it is considered effective and can help farmers to face or overcome the problems they will face later. In addition, when entering the planting season, there is not only one problem faced by farmers, but farmers face quite complex problems ranging from the dose of fertilizer to be applied, suitable drugs and others. Earlier study by Effendy and Apriyani [7] suggest that groups can also be used as media for extension workers or other resource persons to provide counseling or guidance to members. In addition, by holding counseling will make farmers overcome their problems.

3.1.4. Gotong royong. Gotong royong is an activity carried out between members of farmer groups. These activities help each other when other farmers either need assistance, during the planting season or harvest season. This is in accordance with the opinion of Latifarruhma et al. [8] that farmers who are members of farmer groups can have high linkages and togetherness between other members because they will know each other and work well together, so that if there are problems and obstacles, they can be resolved jointly between the members of the group. Therefore, that inevitably creates a high sense of solidarity. This activity is usually carried out alternately, because most people uphold the value of togetherness and kinship. The bond of solidarity between farmers is very strong, imagine if there is no good relationship between one farmer and another, then the relationship will not be good. Gotong royong activities are usually carried out by farmers voluntarily, but some are given reward, usually in the form of breakfast or just lunch. In addition, in order to strengthen and develop their farmer groups, the farmers whose lands are held in gotong royong pay money to the farmer groups. All members for the sake of the farmer groups have agreed this.
3.2. The role of farmer groups in farming development in dry land

3.2.1. Learning class. Based on the activities of farmer groups that have been carried out, among others, farmer consultations and counseling activities. Farmer groups act as learning classes, namely farmer groups in Ketos Village as a forum or place that provides information needed by their members related to farming activities. Farmer groups in Ketos Village in providing information are very beneficial for their members, because members get the information they need. Receiving information by farmer groups in Ketos Village is not only between the chairman or administrator and members, but members can also provide information to each other.

Farmer groups in Ketos Village hold regular member meetings every month. From the farmer group meeting, the needs of members were discussed, so that learning needs could be known which would later be used for materials or materials for the implementation of counseling and training activities later. In addition, the regular meetings of this farmer group also help farmers’ problems. Farmer groups in Ketos Village in the implementation provide the opportunity for each member to express their wishes, opinions and problems. The opportunity is given when the meeting every month is accommodated with social gathering activities. Then it is followed by a discussion of what is the problem of members, then find a solution. So basically, in the group there needs to be openness between members. The role of farmer groups as learning classes brings benefits to its members.

3.2.2. Production unit. Based on the activities of farmer groups in Ketos Village that have been carried out, namely social gathering activities. The Ketos Village farmer group has a role as a production unit; the production unit here is the farmer group plays a role in providing agricultural facilities and tools. The main problem that is a problem for farmers in Ketos Village is related to capital for the purchase of fertilizers or medicines. Because the Ketos Village area is dry land, so farmers really need a decent amount of capital to want to plant, while drought conditions are difficult to predict and the planting season in Ketos which only happens once a year causes farmers to have to look for capital in their farming activities.

Farmer groups in Ketos Village play a role in helping their members to capitalize. The capital obtained by the farmer groups comes from members' monthly cash contributions. As a result, farmers borrow money to buy fertilizer or other things to support farmers' farming activities. After that, in returning the loan, the farmer can pay in installments or pay when the harvest arrives.

Farmer groups always strive to support the smooth running of their members' farming activities. As for the smooth running of farming activities, it is determined from the beginning of land processing activities carried out until the end of post-harvest, for farming activities the availability of production facilities is the beginning of the sustainability of activities. The production facilities needed by farmers include seeds, workers, agricultural tools, fertilizers, pesticides, and arable land. If the agricultural production facilities are not sufficient, it will hamper farming activities. Provision of production facilities is also not only land processing and plant care but also during harvest and post-harvest. Even though in its continuity the provision of facilities by the group does not provide freebies but only as a provider in order to make it easier for group members to obtain production facilities that will be used. The role of farmer groups to seek to provide production facilities and farming results is also very necessary to help group members who do not have these facilities.

3.2.3. Cooperation. Ketos Village farmers who are members of farmer groups have high attachment and togetherness between members. It can be seen that the farmers know each other and work well together so that if there are problems and obstacles they face, they can be resolved together. The application of the role of farmer groups as a vehicle for maximum cooperation will provide an increase in the ability of farmer groups to overcome problems in farming activities.

The existence of a system of cooperation between members of farmer groups can simplify and speed up the process and processing of land, planting seeds, and harvesting. The existence of gotong royong of members can make it easier to do farming without using a large enough capital. The vehicle for
cooperation, namely gotong royong, can reduce farm expenses. Gotong royong that is usually carried out by farmer groups in Ketos Village includes tandur (planting), pest and weed eradication and harvesting.

The role of farmer groups as a vehicle for cooperation in Ketos Village is not only between internal groups but also related to external farmer groups. The cooperation is expected to help the operation of farmer groups. Cooperation carried out within the internal group for example helping each other between members such as cooperation or others. This activity can also foster an attitude of togetherness among members, so that the operation of farmer groups will be easier later. In addition, collaboration is also carried out with external groups. Cooperation with external groups is not only to expand information but also to procure facilities that support farming activities from group members or can help programs held by groups.

4. Conclusion
Ketos Village farmer groups carry out various activities in running their farmer groups, namely farmer consultations, social gatherings, agricultural counseling, and gotong royong. From the various activities carried out by farmer groups, various roles have emerged, including: 1) Farmer groups as learning classes, namely farmer groups being a forum or place that provides information needed by its members related to farming activities. 2) Farmer groups as a production unit, here the farmer groups play a role in providing agricultural facilities and equipment, especially subsidized seeds, and fertilizers. 3) Farmer groups as a vehicle for cooperation not only between internal groups but also with external farmer groups.

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