

Science and Technology Women Farmers' Through Grape Cultivation (*Vitis vinifera* L)

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Abstract: Women farmers are a group of women who work as farm laborers and housewives. Low education and minimal skills prevent them from getting better jobs. Developing the quality of women farmers through non-formal education is important to increase knowledge and skills so that they can live better. Grape cultivation by utilizing existing empty land is one of the solution approaches provided to create new businesses among women farmers groups. Community partnership service activities that will be carried out focus on coaching and mentoring women farmers groups through increasing knowledge and technology of grape cultivation. The purpose of this community partnership service activity is to provide education about grape cultivation and propagation of grape plants. The location of the service is in Jurang Are hamlet, Bonder Village, Praya Barat District, Central Lombok Regency-NTB which will be carried out for 1 year from January to December 2024 with 10 KWT DeBoRaTif_Man partners. The output of the service is a national journal accredited by SINTA 4 in the UAJS journal. The result of the Community Partnership Service activity is the formation of cooperation partners who will be assisted until they become independent partners in grape cultivation. This PKM activity consists of counseling and training activities. In the future, partners really hope for the sustainability of this activity so that they can be independent and make the results of this activity into new business opportunities.

Keywords: Farmers; Grape Cultivation; Science and technology; *Vitis vinifera* L.

Introduction

Women farmers are a group of women who work as farm laborers and housewives (Prasekti, 2019). Low education and minimal skills prevent them from getting better jobs. Developing the quality of women farmers through non-formal education is important to increase knowledge and skills so that they can live better. Grape cultivation by utilizing existing empty land is one of the solution approaches provided to create new businesses among women farmers groups. The existence of business opportunities from the utilization of existing resources and can be developed as the basis for this Community Service activity (Afifah & Ilyas, 2021). The purpose of the activity is to provide education about grape cultivation, and the propagation of grape plants and the benefits of this activity are that women farmers

gain knowledge and skills about the benefits of grape plants from upstream to downstream.

Partners in the community service activities are the KWT DeBoRaTif_Man farmer group with 10 members located in Jurang Are Hamlet, Bonder Village. Where this farmer group has been formed for almost 4 years but is not active because the members of the farmer group prefer to become farm laborers, trade and others. Low education and minimal knowledge are factors in this group being unable to be active. The existence of sustainable community service activities will provide something new and enthusiasm to be active again (Roseland, 2000). The beginning of the formation of this KWT was the desire of the group to sell and be able to produce agricultural products that can help the family economy, but over time this group seemed to be in a coma that did not have any activities.

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Agriculture is one of the potentials that can be developed by humans to ensure their survival (Andayani et al., 2022), one of which is plants included in Horticulture is one of the potential agricultural sub-sectors in providing a large contribution to economic development and playing an important role in sources of farmer income, trade, and absorption of labor. Horticultural plant commodities in Indonesia can be divided into four large groups, namely fruit plants, vegetable plants, biopharmaceutical plants, and ornamental plants (Herdiana et al., 2023). One of them is grape plants, in grape cultivation, the community needs to be assisted in efforts to develop the potential of the regions they have (Herdiana et al., 2024; Sari et al., 2023).

Red grapes and black grapes are commodities whose development is still limited because grapes are a perishable food commodity. Changes in the ripening or aging process in red and black grapes increase the vulnerability of commodities to mechanical damage, rottenness, and disease attacks (Umar & Sibua, 2022). Grape plants are indeed a type of fruit that requires care (Syamara, 2023). Women farmers are women who work as farmers or farm laborers to help with family income. The Women Farmers Group is a forum for the community, especially women, to manage and express various thoughts in the field of agriculture and as a means of gaining knowledge and insight for group members, so that group activities are expected to be creative and follow developments.

Method

Community Partnership Service is carried out for 8 months, namely from January to December 2024 in Jurang Are Hamlet, Bonder Village, Praya Barat District, Central Lombok Regency-NTB.

The community service activities are carried out by a community service team consisting of 3 lecturers and 3 students. The stages of community service activities carried out are as follows:

Entrepreneurial Partnership Service Community Partnership Service is carried out for 8 months, namely from January to December 2024 in Jurang Are Hamlet, Bonder Village, Praya Barat District, Central Lombok Regency-NTB.

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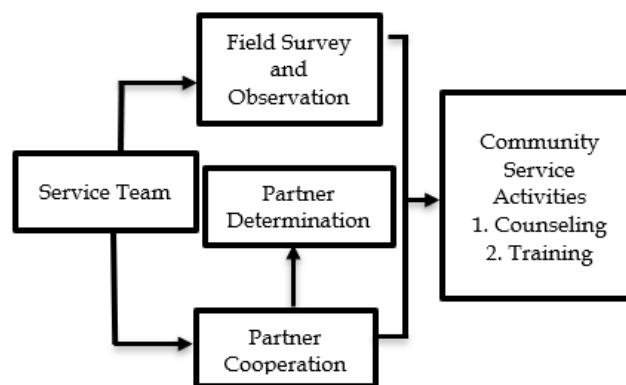


Figure 1. Stages of implementing community service

Result and Discussion

Community Partnership Service activities are very positively responded by partners, this can be seen from the contribution of partners during the activity (PKM). The activities carried out include the following.

Extension Activities

Extension activities are carried out with the aim of partners having additional information and knowledge related to grape cultivation techniques, types and benefits of grape plants that can increase the partner's economy. In this activity, the PKM team collaborates with the Village Head and Partners in its implementation, this aims to provide non-formal education for partners in grape cultivation techniques.



Figure 2. Documentation of Extension Implementation



Figure 3. Training Implementation Documentation

Training Activities

The training activities carried out aim to provide direct knowledge related to the method of planting grape seedlings, grafting and making good planting media for grape seedlings. The training activities were attended by all KWT members and were very enthusiastic in implementing them until the end of the activity.



Figure 4. Documentation of Handover of Grape Seedlings

Grape Seedling Handover

Partners really hope for the continuation of the activity and in the future this PKM activity can be a new business opportunity for partners. For the sustainability of the activity, it is hoped that all aspects will contribute

significantly, both the government, villages and implementers of community service activities. Collaboration between all parties continues to realize the hopes of partners, namely having an independent business through grape cultivation.

Mitra is a farmer group that has a legal institution but is not operational due to lack of capital, skills or expertise in the field of grape cultivation, low education and in addition 9 out of 10 members are only farm laborers.

Women farmers generally participate in food security activities in terms of availability, access, and utilization of food. Women farmers play a strategic role in meeting household food and nutritional needs. Women farmers in Eastern culture select food ingredients, manage them, process them, and provide them for household members (Sari et al., 2020). Women farmers in Bonder village have low education and do not have skills. So they do not have the quality and ability to work better. The existence of pre-service activities or field observation results, the main problems faced by partners are as follows: lack of capital; low education; no skills; and lack of knowledge about agricultural midwifery businesses. Based on the problems faced by partners, the problem-solving approach that will be carried out in Community Partnership Service (PKM) activities is: counseling, counseling activities can provide education for partners regarding business descriptions, one of which is by utilizing land for grape cultivation.

Grapes are special plants, grape planting can also grow productively in areas with hot climates (Rogiers et al., 2022). Indonesia is a tropical country that has quite hot daily temperatures, especially in lowland areas, daily temperatures range from 25 to 35 degrees Celsius. Planting grapes in hot areas requires careful planning and care to ensure that the plants grow well and produce high-quality fruit (Amarullah et al., 2023). Several important factors that must be considered when planting grapes in hot areas, including choosing the right variety, efficient watering, and good pest and disease control; and training, the training activities that will be carried out are to provide direct knowledge to partners related to the technical aspects of planting and cultivating grapes and methods for propagating grape trees. Grape plant propagation training activities provide skills and knowledge to partners so that they are able to cultivate grapes correctly (Gouveia, 2022).

Conclusion

During the PKM activity, Mitra was very enthusiastic and actively participated during the activity from beginning to end. The extension and training activities provided became the gateway to implementing the knowledge provided. In the future, Mitra hopes that there will be sustainability until Mitra is independent in cultivating grapes and is known as a horticultural plant destination village, expecting continuous assistance and making a good grape cultivation module to be used as a reference. It is hoped that in the future Unizar can be part of the development of partner businesses in realizing the goal of creating new business opportunities through grape cultivation and making Bonder village a fostered village that always receives assistance and others. Gratitude is also expressed to the Bonder village community, especially the community at the Community Service location who have helped organize this activity.

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