



Towards an Inclusive Village: Literacy and Education for People with Disabilities Through the Development of Grape Planting Techniques (*Vitis Vinifera L*) Taman Ayu Village

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Abstract: People with disabilities are identical to people who are disabled, weak, stupid and backward. People with disabilities are no longer seen as problematic people, by providing equal access and being inclusive for everyone in their society (168 169). Equal roles for people with disabilities are an important issue for the government. Recognition of equal rights for groups with disabilities, both in terms of education, employment opportunities and others. Community service activities carried out by Herdiana, et al. in Taman Ayu village, in 2023 became the main basis for empowering people with disabilities and knowledge for people with disabilities, especially in the equality garden by involving groups with disabilities. Taman Ayu Village, Gerung District, West Lombok Regency, West Nusa Tenggara (NTB) in the "Equality Garden" group consisting of 15 people consisting of people with hearing and speech impairments which was carried out in June-December 2024 with the community service implementation team being a collaboration of 3 fields of science, namely agribusiness, accounting and agroecotechnology and involving 3 students from different study programs (fields of science). The purpose of this activity is to provide literacy and education about grape cultivation techniques, improve grape cultivation technique skills, financial management in business through ongoing training and mentoring. The forms of activities include literacy counseling and education for people with disabilities in grape cultivation techniques (*Vitis Vinifera L*), business management training and financial recording management, mentoring and coaching in marketing using digital marketing (marketplace: Facebook, Shopie, Tokopedia) and mentoring in submitting business legality. The hope of this activity is that groups with disabilities have skills in the field of grape cultivation, skills in management and financial recording of businesses so that from this activity a new business can be formed so that the goal of this activity is the independence of the disabled group's business. Collaboration between the service team (academics) and the village in the form of ongoing mentoring and coaching will be carried out until they have an independent business.

Keywords: Disability; Grape cultivation; Inclusive Village; Literacy

Introduction

People with disabilities or the disabled are considered a group of people who do not have the

ability, skills either physically or mentally, even some people consider their existence to be a burden on society and the state (Herdiana et al., 2023). Law Number 8 of 2016 concerning Persons with Disabilities is present by

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giving responsibility to regional governments for the rights of people with disabilities (Ndaumanu, 2020), and people with disabilities have equal rights with normal people in general. Even so, discrimination is still often felt because they are considered dependent.

To live independently, people with disabilities must work to meet their living needs and improve their skills. The lack of job opportunities for people with disabilities makes them prefer to work in the business sector (Geminastiti Purinami et al., 2018). People with disabilities also have the same equal rights as other Indonesian citizens, one of which is the right to receive public services, equal rights with other normal people in working and others (Pramashela & Rachim, 2021). There are many ways to improve skills for people with disabilities, one of which is in the field of agriculture, namely providing special skills and knowledge in the cultivation of grape plants, where grape plants are one of the plants that live in lowland areas. Grape plants are able to survive in the dry season well and with quite high sunlight intensity. The rainfall required by this plant is only 800 mm per year. Therefore, excessive watering can interfere with the fertilization process. The maximum temperature for growth is 31 °C and the minimum temperature is 23 °C with air humidity ranging from 75-80% (Wikipedia, 2024).

Grape cultivation requires expertise and patience to obtain quality results, starting from seed preparation, weeding, irrigation, fertilization, pruning and tree formation, tree and fruit management, pest and disease management to harvesting (Budiyati & Apriyanti, 2015; Rombough, 2002). Equal roles for the disabled must be a concern for the government and society, including the right to education and a decent living, so that they can make a positive contribution to society and the country (Herdiana et al., 2023). Taman Ayu Village is one of the villages in Gerung District with quite a lot of people with disabilities, namely more than 75 people.

The village's attention to their existence is proven by the formation of an inclusive village which was inaugurated by the Regent of West Lombok in 2022 with the hope that the disabled can live better, get the same rights as other normal people without any differences. The Equality Garden Group is a group formed from the results of the inclusive village program consisting of 15 people with non-physical disabilities, namely speech impairments. Spread across 4 hamlets, namely Gunung Malang hamlet, Peseng hamlet, Bongor hamlet and Taman hamlet. The Equality Garden is a group business that has been empowered by the previous year's service team for grape cultivation.

Previous activities were in the form of counseling and training in making livestock waste fertilizer, handing over grape seedlings planted in the equality garden, but based on a study of the results of previous

activities to partners, this has not been running because group members do not have expertise in grape care and there is no ongoing assistance from the village after the activity ends (Herdiana et al., 2023). Currently, partners really need direct and ongoing assistance to be able to develop their business (Herdiana & Hermawan, 2020). Through PKM activities, partners will be given literacy and sustainable-based education in the form of training in grape cultivation techniques (grape plant nursery techniques, grape plant propagation techniques, care to harvesting techniques), management training (business management training and financial records) and training in making fertilizer from livestock waste. The results of PKM are expected to have a positive impact on partners in improving skills and economic independence.

Partner problems based on the results of previous community service activity studies that have been carried out with partners, there are the following problems: grape plants that have been planted in the equality garden are not maintained; there is no centralized and ongoing assistance; partners do not have special skills in grape cultivation; partners do not have the ability in business management and financial records; partners do not have the physical ability to run a business independently; and partners are dependent on the business.

The objectives of PKM activities are as follows: provide literacy and education to partners in sustainable grape cultivation techniques; improve skills and knowledge in the field of grape cultivation techniques (grape cultivation technique training, seedling propagation training); provide business management training (financial record training; and provide ongoing assistance.

Method

The method of implementing community service stages includes 5 stages of implementation, including the following:

Socialization

The socialization stage is carried out at the beginning of the activity by coordinating with the village and village community at the activity location (Prihanta & Purwanti, 2022). This socialization activity is an activity to provide information on the implementation plan for activities which are expected to become the forerunner of partners in carrying out activities. The process and form of community service activities are explained transparently by involving related elements.

Training

The second stage carried out in this community service activity is to provide training related to the work plan for the community service activities that will be carried out. The training carried out is training in grape cultivation techniques, training in financial management and recording, training in making organic fertilizer using livestock waste. The training provided is expected to be able to improve the skills or abilities of partners in running and developing businesses.

Application of technology

The technology applied in this activity is technology that can be used sustainably in the efforts of disability groups and later this disability group will be able to run their own businesses (Aldriansyah, 2020). The application of technology includes: grape cultivation techniques, maintenance and care; making organic fertilizer from livestock waste; and good business management and financial recording techniques so that they can be applied in business applications.

Mentoring and Evaluation

The mentoring carried out is in the form of mentoring the care and maintenance of grape plants, mentoring businesses using social media, mentoring the submission of business legality and mentoring in business development while still providing guidance to partners. Partners will continue to be controlled in running their businesses. During the community service activities, partners will continue to be monitored and evaluated to what extent their business has developed and conduct a study of the development of skills or skills obtained from this activity

Sustainability of the program

To achieve the goals of the community service team and the village in realizing an inclusive village, it is hoped that the 2nd year will receive funding again as a real manifestation of the sustainability of the activity. In the following year, follow-up plans include conducting ongoing training and mentoring in the field of digital marketing-based grape business, marketing and promotion training. Partners will be assisted in developing their business by registering partners in various events such as exhibitions both on and off Lombok Island and even to the international market, registering partners in the UNIZAR Incubator to be

coached in making product labels, packaging and others as well as assisting partners in submitting HAKI, Business Patents, Halal Permits, PIRT and other required legalities.

Result and Discussion

Community partnership service activities are carried out in collaboration with the disabled community through a garden business group, namely the equality garden group with Mohidin as the chairman. The grape plantation business run by the disabled group is part of a village program that wants a place for disabled community groups specifically for the mute group so that they have a place to do business and get the same rights as other people (Kale, 2020). The grape plantation group consists of 15 people. Some of the results of the activities that have been achieved include:

Socialization Activities for the Implementation of Community Partnership Service

The implementation of activities is carried out to provide information to the community, especially the disabled group. The socialization activity was carried out on Saturday, July 6, 2024. This activity was carried out in the village office hall, in addition, after the activity, coordination was carried out with the village, namely the Head of Taman Ayu Village, namely Tajudin, S.Sosl.

Extension activities

Extension activities were carried out on Saturday. Extension activities were carried out with the theme of the activity being "Towards an Inclusive Village: Literacy and Education for People with Disabilities Through the Development of Grape Plant Techniques (*Vitis Vinifera L*) in Taman Ayu Village.

Implementation of Grape Seedling Grafting Training Activities

One type of technology application from this activity is that partners can have skills and perseverance in grape seedling grafting techniques where it is expected that this activity can provide positive results for the sustainability of partner businesses (Kasruddin, 2022). Grape seedling training is accompanied by technical personnel who master good grafting methods and methods.



(a)



(b)



(c)



(d)

Figure 1. Documentation of community service activities: (a) Implementation of extension activities; (b) Participants who took part in the counseling activities; (c) Practice the technique of grafting grape (*vitis vinifera* L) seedlings; and (d) Business and financial management training.

Grape Seedling Submission Phase 1

Grape seedlings given to partners in phase 1 amounted to 40 trees because the grape plants given were grape seedlings that were ready to be planted and the remaining grape bits will be handed over after the equality garden has been rearranged and is ready to be planted (Copeland, 2022). The types of Grape plants given are imported Grape plants with various varieties.

Implementation of Management Training Activities

Financial and financial recording to run a good business, knowledge and skills in financial management are very necessary. In this activity, partners are given basic training in financial management and good financial recording techniques. Separating daily expenses, capital, daily income and others. In this activity, partners are given basic theory and education on how to do good financial recording. The obstacle faced in this activity is that the participants cannot write so they must be accompanied by their companions.

Handover of Business Equipment

Business infrastructure is important for partners, in partnership service activities the community service

team provides several cultivation equipment used in grape cultivation. It is hoped that the equipment provided can be useful for partners in developing their businesses.



Figure 2. Grape seedling handover

Technology and Innovation Products (Hard and Soft)

The technology products that will be produced from this activity are in the form of grape seedlings and grapes and even diversification of quality products produced by partners to be commercialized at competitive prices.



Figure 3. Handing over grape cultivation equipment to the disabled

Application of Technology and Innovation to the Community (Relevance and Community Participation)

The application of technology and innovation to the community carried out in the first stage is in the form of grape plant grafting technology (Loupit et al., 2023), grape plant maintenance and care techniques. This activity can have a positive impact on the disabled group, namely increasing knowledge and skills in the field of grape cultivation. Currently, the public's interest in utilizing home gardens with various types of plants, both vegetables and fruits, is a new business opportunity. The relatively easy growth of grape plants has led to an increase in interest in this type of fruit variety (Frioni et al., 2021; Khan et al., 2020). Several activities in the community service carried out with partners show that partners are very active in participating in what is given. They are very enthusiastic about realizing business independence. Partners actively participate in the care of the grape plants that have been given and have started trying to learn for themselves for grafting.

Impact (Benefit And Productivity)

The benefits of this activity are to provide education to partners in the field of agriculture, namely the application of technology in grape cultivation (Dressler & Paunovic, 2021). Increasing the skills or abilities of partners in developing new businesses. This activity is expected to expand new businesses that can be applied by partners to realize independence

Conclusion

Based on the results of the implementation of community partnership empowerment activities, 80% of the activities have been carried out, including literacy counseling and education on grape cultivation techniques, training on grafting techniques and grape cultivation, training on financial management and financial records, handover of grape seedlings and cultivation tools. 20% of activities will be carried out in the next stage where the activities to be carried out include fertilizer making training activities, partner assistance in creating social media accounts and promised external publications. All partner activities participate actively and really hope for ongoing assistance and guidance.

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