

Training of Business Prospects for Ornamental Plants and Superior Fruit Nursing: Study of Development of Self Tourism Village Based on Agricultural Economy

Suparno¹, Ari Saptono¹, Saparuddin M.¹, Dicky Iranto¹, Sri Indah N.¹, Tuty Sariwulan¹, M. Sofwan¹, and Indira Putri¹

¹ Universitas Negeri Jakarta, Indonesia

ARTICLE INFO

Article history:

Received: 18th August 2022

Accepted: 5th February 2023

Published: 1st July 2023

Keywords:

BUMDes, Ornamental Plants,
Superior Fruit, Business Prospects,
Tourist Village.

ABSTRACT

Community Service This training on business prospects for ornamental plants and superior fruit nurseries was carried out in Cisaat village, Sukabumi-Subang sub-district, where some tourist villages have superior ornamental plants and superior fruit that can be cultivated. Utilization of fertile land can be increased so that it becomes a potential agro-business tourism to be developed and become a superior product. This community service also provides business analysis training. The competencies obtained in this community service are 1. Farmers can select and produce superior seeds, 2. Farmers are able to develop nurseries with various media, 3. Farmers can develop nurseries by utilizing agricultural land, 4. Farmers can analyze production costs and business prospects. The method implemented is in the form of training with people who own land but it is not used optimally, as well as ornamental and fruit plant farmers. With training on business prospects, development of superior ornamental and fruit plants. Provision of seeds so that further development can be carried out for farmers. The next hope is that farmers will be able to produce superior ornamental plants and fruit in tourist villages with BumDes.

How to cite: Suparno, Saptono, A., M., S., Iranto, D., N., S. I., Sariwulan, T., Sofwan, M., & Putri, I. (2023). Training of Business Prospects for Ornamental Plants and Superior Fruit Nursing: Study of Development of Self Tourism Village Based on Agricultural Economy. *Jurnal Pemberdayaan Masyarakat Madani (JPMM)*, 7(1), 1-17. <https://doi.org/10.21009/JPMM.007.1.01>.

* Corresponding Author.
suparno@feunj.ac.id (Suparno)

INTRODUCTION

The agricultural sector has an important role in development (Contò, Fiore, Monasterolo, & La Sala, 2014) and the economy both nationally and regionally (Benešová, Novotná, Šánová, & Laputková, 2016); (Juhandi, Irham, & Jamhari, 2016); (Abebaw Degu, 2019). Agricultural development is directed at increasing production to meet food needs, industrial needs, increasing export value, expanding job opportunities and increasing people's income. Agro industry is an important part to be developed in improving the welfare of farmers (Hayden et al., 2018); (Faqih, Elizabeth, & Azahari, 2020); (Masquita Mckeller & Smardon, 2012).

Rural areas that still depend on agriculture as their main livelihood do not provide much income to farmers. This can be seen from the number of farmers who live in poor conditions (Syafiuddin & Mahsyar, 2016); (Lado et al., 2020) and are left behind in access to education and health. This condition if left unchecked in the long term will leave subsistence “cultivators” while still not looking for solutions to advance in agriculture (Johar, 2021); (Wannaprasert & Choenkwan, 2021).

The low income of farmers with land use is closely related. This is in line with the research that has been conducted the Empowerment of Poor Farmer Based on the Utilization of Rural Resources as an Effort to Alleviate Poverty (Waluyo & Yuliati, 2011). Many farmers can rise up and be an inspiration today because of innovation and land empowerment (Mohanty & Chandran, 2018).

Our rich country and international marketing access that enters the MEA (Asean Economic Community) opens opportunities for farmers to rise to become regional development innovation figures. Bangkok can bounce back because of the restructuring of agriculture. This has become an idea to use farmers' vacant land in rural areas with superior crops, generate decent income, plants that are resistant to pests, bear fruit throughout the year and can become a permanent livelihood for farmers.

Subang is a district in the province of West Java, Indonesia ([https://en.wikivoyage.org/wiki/Subang West Java](https://en.wikivoyage.org/wiki/Subang_West_Java)). This regency is bordered by the Java Sea in the north, Indramayu Regency in the east, Sumedang Regency in the southeast, West Bandung Regency in the south, and Purwakarta and Karawang Regencies in the west. This agricultural village is suitable to be planted with vegetables and fruits. Agriculture is an attraction because Cisaat village is a cool area, with temperatures around 9-18 degrees Celsius. Pineapple, strawberry, graceful, cabbage, mustard greens to tomatoes are suitable to be planted here. Cisaat village also has the potential to become a place for breeding goats, sheep and dairy cows. Tourists can participate in milking their own cows using traditional methods.

The level of slope and climate seen from the level of land slope, about 80.80% of the Regency area has a slope of 0° - 17°, 10.64% with a slope of 18° - 45° while the rest (8.56% has a slope above 45°. In general, the Regency area Subang has a tropical climate, in 2005 the average annual rainfall was 2,352 mm with a total of 100 rainy days. With such a climate, and supported by fertile land and many rivers, most of the land area of Subang Regency is used for agriculture.

Since most of the population is still mainly farmers and plantation workers, Subang's economy is still largely supported by the agricultural sector. South Subang has many plantation areas, such as rubber in the Northwest and a very large Tea Garden. Subang is famous as one of the pineapple-producing areas. Therefore, with this community service, hopefully it will become a continuous and long-term bridge to make the guided villages independent through "training on business prospects of organizational plant and fruit nursing" with the ideas of Higher Education integrated with the application of their knowledge to the community. Based on the analysis of the situation above, the problems in this activity are formulated as follows:

1. Lack of knowledge of the farming community of BumDes Cisaat Subang in agricultural business in the Tourism area, on aspects of business development and breeding of ornamental plants and fruit.
2. Lack of skills of the BumDes Cisaat Subang farming community in agricultural business in the Tourism area, in the aspect of business development and breeding of ornamental plants and fruit.

LITERATURE REVIEW

A. Superior Seeds of Ornamental Plants and Fruit

Plants are a type of organism (especially plants) that are commonly grown by people (Fernando, 2012); (Schaal, 2019). The notion of plants is often distinguished from plants, although it is not often that plants and plants are used interchangeably. Ornamental plants are plants that people usually grow as decorations. Generally, the meaning of decoration is decoration in the house, or public gardens, because it is planted at home or planted in a garden, automatically the planting size is not too large and lush. Sukabumi is famous for its chrysanthemums whose seeds can penetrate exports to Japan. Ornamental plants consist of flowers and leaf ornamental plants consisting of attractive midribs, stalks, and strands. The potential of plants is also found in fruit plants as healthy foods that are popular with the community and can even be used for medicine. Crops and fruit trees need to be developed as superior and competitive production. This includes standardization of cropping and yields. Seedlings are seeds that have germinated as a means of vegetative reproduction such as stem shoots. Superior seeds are obtained from superior parent plants and plant engineering by experts.

The grafting technique is vegetative propagation by wounding or cutting the parent tree branches and wrapped in planting media to stimulate the formation of roots. In this technique, the terms rootstock and scion are not known. This technique has been known by farmers for a long time and has a higher success rate because of the way the roots grow while they are still on the mother tree.

The advantage of seedling with a graft system is that the production and quality of the fruit will be exactly the same as the parent plant. Media for grafting can use cocopit or coconut coir powder or chopped coconut coir. You can also use a mixture of compost/manure with soil (1:1). If there are

bamboo plants around the garden, the soil under the bamboo that has been mixed with bamboo leaf litter and has rotted can also be used for grafting media.

The timing of grafting should be done at the beginning of the rainy season, so that the grafts will not dry out. In addition, by grafting at the beginning of the rainy season, there will be time to plant the grafts in the same season.

Attaching can be with the rootstock with the polybag held and lifted slightly upwards and then pressed at an angle to the bottom so that the position of the plant and the polybag is tilted outwards, to make it easier to find the position of the stem to be attached and the process of pasting, this movement is also able to drop the dew/water that attached to the leaves, so that more dew/water falls, move the rootstock again by hand. The rootstock is cleaned of dirt/dust by rubbing with the thumb and forefinger of our hand on the part that will be made a tear for grafting. In addition, it can be done by making an incision for a place to attach the eyes of superior fruit parent entres.

B. Business Prospects for Ornamental Plants and Fruits

The prospects in the ornamental plant business can be said to be very bright and profitable (Gabellini & Scaramuzzi, 2022). Where through the ornamental plant business can bring bombastic profits (Akintoye, Adejumo, Aina, & Adebayo, 2018); (Hinson, Paudel, & Velástegui, 2012). Businesses that deal with processed ornamental plants have very good prospects in the future. Ornamental Plants Business requires knowledge, strategic locations, selection of ornamental plants, preparing planting media, promotion and marketing, as well as fruit plants.

Business Analysis in managing the ornamental plant and superior fruit business is an understanding of production. In this community service, fixed costs, variable costs, profit and loss analysis in managing ornamental and fruit plants are presented (Çelik & Arisoy, 2014). In addition, business prospects are also introduced in analyzing the opportunities and challenges that ornamental and fruit growers may face (Pölling et al., 2017). Production costs can be defined as all expenditures by the company to obtain the factors of production and materials used to create the goods/services produced (Tovar, Jara-Díaz, & Trujillo, 2003); (Hinson et al., 2012); (Stoenoiu & Cristea, 2018).

Production costs incurred by the company can be divided into two types of costs, namely: 1) Explicit costs are company expenses in the form of payments in money (checks) to obtain production factors and raw materials needed by the company. , for example the cost of electricity, telephone, water, labor wages, and employee salaries. This cost is the opportunity cost, 2) The implicit cost is the estimated expenditure on the factors of production owned by the company itself. Fixed costs are costs incurred to obtain production factors that are fixed in number, such as rental costs, buying machines, setting up factories, while variable costs are costs incurred to obtain factors of production, the amount can be changed depending on the units produced, such as costs of raw materials, labor, etc. work.

Some concepts related to short-run production costs are as follows: Total Fixed Cost, Total Variable

Cost, Total Cost, Marginal Cost, Average Fixed Cost, Average Variable Cost, Average Cost. When compared to revenue, revenue minus costs is the profit for ornamental and fruit growers.

MATERIALS AND METHODS

The method implemented in this community service is in the form of training (Afzal & Hussain, 2020); (Martin, Kolomitro, & Lam, 2014). Communities who own land can use it to be more productive without reducing staple crops. Yards and vacant land in the village can be managed and optimized through agricultural empowerment programs. The provision of nursery training in multiplying superior seeds can be done through grafting, sticking, planting, and maintaining them. Farmers are also given an analysis and development of thinking about ornamental and fruit plants that have high market demand, and are able to be developed in tourist village areas. The provision of equipment and seeds at the end of the training session gave hope that farmers would be able to maintain and develop as superior products for independent tourism villages. To encourage farmers' businesses to manage agriculture in tourist villages, this training was also conducted with a joint discussion on the analysis of agricultural business prospects for the welfare of farmers. The types of activities that will be carried out in this series of community service activities include:

- a. Identification and targeting of participants
- b. Identification of needs
- c. Implementation of training
- d. Activity evaluation.

This activity was organized by the proposing team due to the lack of skills of the Cisaat Subang Tourism Bumdes farming community related to optimizing quality tourism area resources as regional superior products. In other aspects, the community needs to be encouraged to have the courage to make good efforts in entrepreneurship. Take advantage of the opportunities of the tourist area. The process of implementing Community Service is carried out as follows in Figure 1.

The target of implementing community service activities for developing agricultural-based tourism villages in this study are farmers in the tourist village area of Subang- Answers. Based on the analysis of activities with village officials, it was agreed that the activity participants would be provided by the village. For the implementation of community service activities, partner institutions make an analysis of the needs of facilities and infrastructure, as well as the process so that activities can be carried out smoothly. Tourist village farmers with extensive land in the Subang area, represented and selected by village officials to be able to provide results of community service training in developing ornamental plants and superior fruit. The hope is that eco-tourism agriculture is able to grow, develop, be independent, and have superior products from a typical area by the tourist village of Subang, West Java.

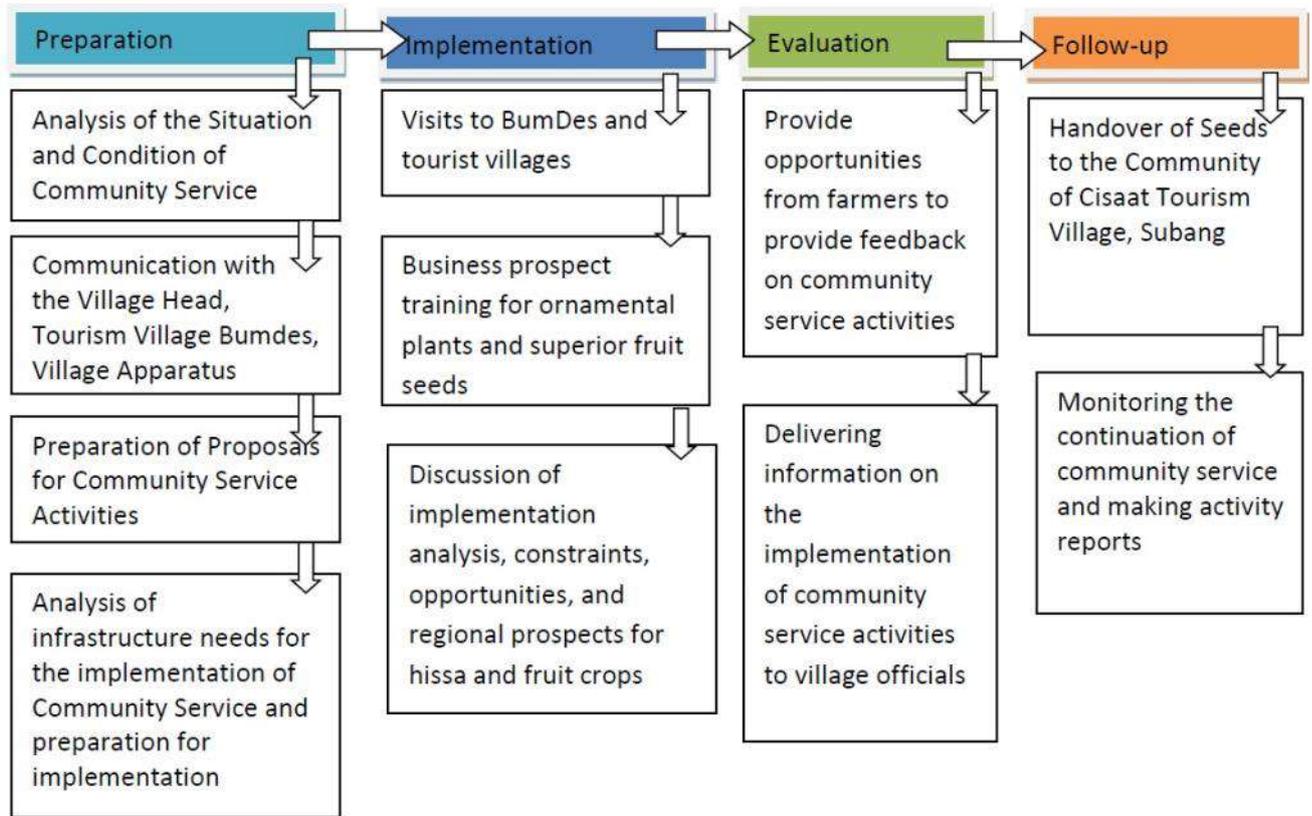


Figure 1. The process of implementing community service. Training on business prospects for superior ornamental plants and fruit breeding in tourism village development.

RESULT AND DISCUSSION

The stages in implementing the solutions offered to overcome the problems of partners in community service are carried out by researchers to obtain data and processes, How can community service in Subang, West Java be efficient and effective. The results of the discussion and analysis of the research location data became the basis for the description of the activities of the proposing team. In this community service, obligations are also arranged in the service program between service implementers and partners, partner participation in activities, as well as the implementation process and its continuation. This activity is stated in the MOU between the Faculty of Economics, UNJ and the Head of Cisaat Village, Subang as partners. The expected achievement targets in this activity are: 1). Farmers can select and produce superior seeds, 2). Farmers can develop nurseries by grafting, 3). Farmers can develop nurseries by sticking, 4). Farmers are motivated to rise up as innovative and independent farmers with guava as a superior crop, 5). Farmers can analyze production costs and business prospects. Banner for the implementation of community service in the tourist village of Subang - West Java, 2022 Community service activities began with coordination with “Bumdes Mitra”, as shown in Figure 2.

Conducted communication with Mr. Head of Cisaat Village, Ciater, Subang. The initial analysis was carried out on the needs of the Ciater Subang community, which became the Community Service Partner Tourism Village of the Jakarta State Economics Faculty. Potentials that can be developed include agriculture that stretches across Subang. On the other hand, people are being chased to fulfill their needs by not daring to take the risk of starting a business.

Researchers conducted an initial analysis of the online market, obtained information that the ornamental plant business in the Subang area is still small. There are only a few large Orchids with areas very far from tourist areas. There are still many ornamental plants in demand, in certain plants per month there are up to thousands sold. The search was followed by fruit plants which eventually became the choice of this Community Service activity to give the community the courage to take business opportunities in ornamental and fruit plants. Discussion with village officials discussing productive community service in the tourist village of Subang , West Java, as shown in Figure 3.

The implementation of the activity was delivered in a practical way about the opportunities for ornamental plants and fruit that can be produced in Subang. It was explained where farmers get ornamental plant seeds, how to manage them simply and market opportunities. The economic aspects presented include the price of seeds, operational costs, selling age, online markets where to sell them, to an analysis of business profits that farmers may get in 1 year. Figure 4 provides Material for business prospects of superior ornamental plants and fruit in the tourist village of Subang, West Java.



Figure 2.

Banner for the implementation of community service in the tourist village of Subang - West Java, 2022 Community service activities began with coordination with "Bumdes Mitra".



Figure 3.
Discussion with village officials discussing productive community service in the tourist village of Subang - West Java, 2022



Figure 4.

Material for business prospects of superior ornamental plants and fruit in the tourist village of Subang - West Java, 2022 .

Farmers can choose for ornamental plants or fruit, because the available agricultural land opportunities meet the criteria for fertile areas with good temperatures. This was analyzed by the community service implementer, that the products of tourism in agriculture have not yet appeared. On the other hand, many tourists buy souvenirs when returning from tourism in Subang in the form of agricultural products in the area along the road to Jakarta. The hope is that farmers will be able to produce these products in the long term, and supply other areas. Visits and discussions with farmer groups in the tourist village of Subang, West Java, as shown in Figure 5.

Community service activities are carried out with practical discussions. In several sessions, farmers shared their experiences in managing agriculture and land. Community service implementers responded by opening the internet for effective steps in ornamental plants and fruit on the economic aspect. So that the implementation of community service is a collaborative effort of community service providers who master the economic aspects in the courage to open up opportunities and businesses, as well as provide an analysis of the benefits for farmers without reducing agricultural production that is usually carried out. The response from the farmers was very good and there were complementary aspects such as good land management in the Subang area and overcoming the obstacles. And community service implementers open up farmers' insight that agricultural products, there are still opportunities to enter the digital market. In fact, the demand is very large per year.

After the training activities, this community service activity was followed by a final discussion with the Village Head. Briefly convey the community's desire for expected agricultural products, as well as skills in managing ornamental plants. It was agreed that a nursery that could be continued by the community in trying to plant and develop was crystal guava. Discuss with village officials as shown in Figure 6.

At the end of this activity, crystal guava seeds were handed over to the people of Subang, West Java, to BumDes. tourist area. It is hoped that in the next community service session it will develop and bear fruit, the community service will be improved in aspects of product processing, marketing, packaging, quality improvement, or other aspects that help agricultural entrepreneurs rise independently in tourist areas. The process of handing over Superior Fruit Seeds in the Tourism Village of Subang, West Java, as shown in Figure 7.



Figure 5. Visits and discussions with farmer groups in the tourist village of Subang, West Java, 2022.



Figure 6.
Discuss with village officials, 2022 Discuss with village officials, 2022.



Figure 7.
The process of handing over Superior Fruit Seeds in the Tourism Village of Subang,
West Java, 2022.

CONCLUSION AND RECOMMENDATION

The implementation of this activity took place smoothly through training in ornamental plant and fruit nurseries as superior products of Tourism Village agriculture. Participants are farmers who on average have land, so they are able to utilize their less productive land with ornamental plants and superior fruit. Farmers are taught the analysis of ornamental plants and fruit so that they dare to take risks in economic business opportunities. Accompanied by a simple delivery of ornamental plants and fruit nurseries. At the end of the session, fruit seeds were given to be developed in the Tourism Village as a center for souvenirs from the Subang area.

After this training activity, it is necessary to monitor the fruit seeds provided, training on an ongoing basis so that it can help the independence of farmers in the Tourism Village well. Various developments and capacity building for ornamental and fruit plant farmers can be carried out continuously and programmed. It is hoped that in the next community service, fruit and ornamental plants have developed, so that they can continue to the marketing aspect and improve their quality in the online market.

REFERENCE

- Abebaw Degu, A. (2019). The Causal Linkage Between Agriculture, Industry and Service Sectors in Ethiopian Economy. *American Journal of Theoretical and Applied Business*, 5(3), 59. <https://doi.org/10.11648/j.ajtab.20190503.13>
- Afzal, A., & Hussain, N. (2020). The Impact of Community Service Learning on the Social Skills of Students. *Journal of Education and Educational Development*, 7(1), 55. <https://doi.org/10.22555/joed.v7i1.2988>
- Akintoye, H. A., Adejumo, L., Aina, O. O., & Adebayo, A. G. A. (2018). Profitability of Ornamental Plants Production in Southwest . *Conference of Horticultural Society of Nigeria (Hortson)*, (November).
- Benešová, I., Novotná, Z., Šánová, P., & Laputková, A. (2016). Economic comparison of agricultural sector of eurasian countries - is there any potential for development through economic cooperation? *Agris On-Line Papers in Economics and Informatics*, 8(2), 19–31. <https://doi.org/10.7160/aol.2016.080202>
- Çelik, Y., & Arisoy, H. (2014). Competitive analysis of outdoor ornamental plants sector: a case study of Konya province, Turkey. *Journal of Horticultural Research*, 21(2), 5–16. <https://doi.org/10.2478/johr-2013-0016>
- Contò, F., Fiore, M., Monasterolo, I., & La Sala, P. (2014). The agriculture's role for sustainable and inclusive development. *Management Theory and Studies for Rural Business and Infrastructure Development*, 36(4), 766–774. <https://doi.org/10.15544/mts.2014.071>

- Faqih, A., Elizabeth, R., & Azahari, D. H. (2020). The increasing of competitiveness of agro-industry products through institutional empowerment to support the achievement of sustainable agricultural development. *International Journal of Energy Economics and Policy*, *10*(5), 663–671. <https://doi.org/10.32479/ijeep.10376>
- Fernando, W. G. D. (2012). Plants: An international scientific open access journal to publish all facets of plants, their functions and interactions with the environment and other living organisms. *Plants*, *1*(1), 1–5. <https://doi.org/10.3390/plants1010001>
- Gabellini, S., & Scaramuzzi, S. (2022). Evolving Consumption Trends, Marketing Strategies, and Governance Settings in Ornamental Horticulture: A Grey Literature Review. *Horticulturae*, *8*(3). <https://doi.org/10.3390/horticulturae8030234>
- Hayden, J., Rocker, S., Phillips, H., Heins, B., Smith, A., & Delate, K. (2018). The importance of social support and communities of practice: Farmer perceptions of the challenges and opportunities of integrated crop-livestock systems on organically managed farms in the Northern U.S. *Sustainability (Switzerland)*, *10*(12), 1–27. <https://doi.org/10.3390/su10124606>
- Hinson, R. A., Paudel, K. P., & Velástegui, M. (2012). Understanding Ornamental Plant Market Shares to Rewholesaler, Retailer, and Landscaper Channels. *Journal of Agricultural and Applied Economics*, *44*(2), 173–189. <https://doi.org/10.1017/s1074070800000250>
- Johar, V. (2021). Socio-economic and Environmental Assets Sustainability by Agroforestry Systems: A Review. *International Journal of Agriculture Environment and Biotechnology*, *14*(4). <https://doi.org/10.30954/0974-1712.04.2021.6>
- Juhandi, D., Irham, I., & Jamhari, J. (2016). Contribution of Agricultural Sector Towards Regional Income Inequality of Sumatera Economic Corridor. *Ilmu Pertanian (Agricultural Science)*, *1*(1), 019. <https://doi.org/10.22146/ipas.9256>
- Lado, K., Sube, L., Daniel, J., Lako, W., Stephen, C., Lumori, G., ... Kheiralla, A. H. (2020). Diversity and distribution of medicinal plants in the republic of South Sudan. *World Journal of Advanced Research and Reviews*, *2020*(01), 2581–9615. <https://doi.org/10.30574/wjarr>
- Martin, B. O., Kolomitro, K., & Lam, T. C. M. (2014). Training Methods: A Review and Analysis. *Human Resource Development Review*, *13*(1), 11–35. <https://doi.org/10.1177/1534484313497947>
- Masquita Mckeller, M. M., & Smardon, R. C. (2012). The Potential of Small-Scale Agro-Industry as a Sustainable Livelihood Strategy in a Caribbean Archipelago Province of Colombia. *Journal of Sustainable Development*, *5*(3). <https://doi.org/10.5539/jsd.v5n3p16>
- Mohanty, P., & Chandran, A. (2018). Poverty Alleviation and Women Empowerment through Tourism Development – an Explorative Study of Model Ventures. *Atna - Journal of Tourism Studies*, *13*(1), 59–74. <https://doi.org/10.12727/ajts.19.5>
- Pölling, B., Prados, M. J., Torquati, B. M., Giacch, G., Recasens, X., Paffarini, C., ... Lorleberg, W. (2017). Business models in urban farming: A comparative analysis of case studies from Spain,

- Italy and Germany. *Moravian Geographical Reports*, 25(3), 166–180. <https://doi.org/10.1515/mgr-2017-0015>
- Schaal, B. (2019). Plants and people: Our shared history and future. *Plants People Planet*, 1(1), 14–19. <https://doi.org/10.1002/ppp3.12>
- Stoenoiu, C. E., & Cristea, C. (2018). Comparative analysis for estimating production costs. *MATEC Web of Conferences*, 184, 1–6. <https://doi.org/10.1051/mateconf/201818404004>
- Syafiuddin, S., & Mahsyar, A. (2016). Condition and Characteristics of Poor Farmer Households in the Perspective of Participatory Local Social Development in Jeneponto Regency , South Sulawesi , Indonesia. *European Journal of Social Science*, 51(1), 133–140.
- Tovar, B., Jara-Díaz, S., & Trujillo, L. (2003). Production and cost functions and their application to the port sector : a literature survey. *World Bank Policy Research Working Paper 3123*, (3123), 1–32. Retrieved from <http://documents.worldbank.org/curated/en/635851468778198532/Production-and-cost-functions-and-their-application-to-the-port-sector-a-literature-survey>
- Waluyo, D. E., & Yuliati, U. (2011). EMPOWERING RURAL WOMEN ' S ROLE MODEL IN. *Humanity*, 6(2), 81–89. Retrieved from <http://ejournal.umm.ac.id/index.php/humanity/article/view/1390>
- Wannaprasert, P., & Choenkwan, S. (2021). Impacts of the covid-19 pandemic on ginger production: Supply chains, labor, and food security in northeast thailand. *Forest and Society*, 5(1), 120–135. <https://doi.org/10.24259/fs.v5i1.11897>