

# THE ECONOMIC CAPACITY INCREASING OF FARMERS' HOUSEHOLDS THROUGH THE BUSINESS PROSPECTS PROGRAM OF ORNAMENTAL PLANTS AND FERTILIZER BOKASHI PLUS IN GAMPONG REULEUT TIMU, MUARA BATU DISTRICT, NORTH ACEH

Mawardati<sup>1</sup>, Jamilah<sup>2</sup>, Muliana<sup>3</sup>, Emmia Tambarta<sup>4</sup>

<sup>1,2,3,4</sup> Lecturer of Agriculture Faculty Malikussaleh University - Lhokseumawe

Correspondency email: [emmia.tambarta@unimal.ac.id](mailto:emmia.tambarta@unimal.ac.id)

## ABSTRACT

Agriculture Faculty of UNIMAL is one of the leading faculties in the field of agriculture and fisheries development in Sumatra. The idea of introducing ornamental plant business prospects was based on the COVID-19 pandemic, which dealt a tremendous blow to the economy of the community around the UNIMAL Faculty of Agriculture. The majority of the people around the institution have house rentals for UNIMAL students. The COVID-19 pandemic condition in Aceh forced UNIMAL to change the offline education system to an online system according to the direction of the Ministry of Education and Culture. This is done to prevent the spread of the COVID-19 virus. In the online system, students carry out the learning process from their home region so they are not in the environment around UNIMAL. This has a direct impact on the people of East Reuleut as a provider of rental houses. The solution that the team recommends is to turn into small and medium entrepreneurs who can generate additional income. The group of mothers can take advantage of their hobby, namely planting and collecting ornamental plants into an ornamental plant business that has great opportunities to be developed. The next solution is that housewives around Reuleut Timur can use agricultural waste around them to be processed into bokashi plus fertilizer. Agricultural waste can damage the nutrient balance of the soil and invite pests and diseases in the surrounding area. The location of this activity is in Reuleut Timur Village, Muara Batu District, North Aceh Luaran Regency which is produced in the form of OJS-based service journals, online publications in mass media, and ornamental plant products and bokashi plus fertilizer which are ready to be marketed. The outputs of this service are articles in the IRPITAGE service journal Vol 1 (2) December 2021, news on activities on the fp.unimal.ac.id website, SPK (Cooperation Agreement) with partners and ornamental plant and fertilizer products.

**Keywords:** bokashi fertilizer, business prospek, ornamental plants.

## INTRODUCTION

Agriculture Faculty Malikussaleh University (UNIMAL) is one of the leading faculty in the field of agriculture and fisheries development in Sumatra which was established on December 29, 1989 through the Decree of the Minister of Education & Culture of the Republic of Indonesia Number 0584/0/1989. The Faculty of Agriculture has a campus located on Jalan Medan-Banda Aceh, Cot Teungku Nie Reuleut, Muara Batu District, North Aceh Regency, Aceh Province. The vision of the Agriculture Faculty of UNIMAL is "to become a research-based superior agricultural higher education institution in the development of national standard science and technology by 2020. The missions of the Agriculture Faculty of UNIMAL are: (1) to provide education, research and community service in the field of Agriculture with a global perspective based on faith and piety, (2) develop and apply science and technology in agriculture based on superior research.

As one of the efforts to realize the agency's vision and mission, the academics of the Agriculture Faculty of UNIMAL through PNB program have an aim of increasing the capacity of

housewives in the East Reulet area. This capacity increase was carried out by holding training on the introduction of ornamental plant business prospects and the manufacture of bokashi plus fertilizer. The idea of introducing ornamental plant business prospects was based on the condition of the Corona Virus Disease (COVID-19) Pandemic which dealt a tremendous blow to the economy of the community around the UNIMAL Faculty of Agriculture. The majority of the people around the institution have house rentals for UNIMAL students. The COVID-19 pandemic condition in Aceh forced UNIMAL to change the offline education system to an online system according to the direction of the Ministry of Education and Culture. This is done to prevent the spread of the COVID-19 virus. In the online system, students carry out the learning process from their home region so they are not in the environment around UNIMAL. This has a direct impact on the people of East Reulet as a provider of rental houses. People who have to experience financial constraints due to the Covid 19 Pandemic.

People are not allowed to carry out mass gathering activities, do not use masks and work in large groups. This change will certainly have an impact on working conditions which further limit the office work system. At this time, there were also many housewives who experienced financial constraints due to the loss of work from the heads of families. Business opportunities Ornamental plants have become a social phenomenon in Acehnese society recently. Various age groups try to get to know ornamental plants for personal satisfaction. But basically, ornamental plants have a high enough economic value to be developed. This is something that is not widely known by the people of Aceh. Ornamental plants are plants that have a certain beauty and attractiveness value. In addition, it also has economic value for indoor and outdoor decoration purposes. Because it has an economic meaning, then ornamental plants can be turned into a business that promises big profits. World Types of ornamental plants are not limited to ornamental plants that live in pots, but also include cut flowers, cacti, bonsai, hydroponic plants and tabor flowers. In addition, the variety is also very much found in Aceh. If you can take advantage of the large variety of plants and combine them with the right technology, it is not impossible that the ornamental plant business will be able to match the vegetable and fruit business which is still at the top level.

Not just introducing business prospects, the academics of Agriculture Faculty of UNIMAL also aim to assist housewives in East Reulet in the direct practice of making bokahsi fertilizer. This idea is based on the habit of using chemical fertilizers on a large scale in the community. This is in line with research by Musnamar (2003) which states that various businesses tend to use artificial fertilizers excessively which will have an impact on decreasing soil productivity and the types of plants being traded. The level of organic matter in the soil decreases over time.

Today, ornamental plants have become a social phenomenon in Acehnese society. Various age groups try to get to know ornamental plants for personal satisfaction. But basically, ornamental plants have a high enough economic value to be developed. This is something that is not widely known by the people of Aceh. Ornamental plants are plants that have a certain beauty and attractiveness value. In addition, it also has economic value for indoor and outdoor decoration purposes. Because it has an economic meaning, then ornamental plants can be turned into a business that promises big profits. World Types of ornamental plants are not limited to ornamental plants that live in pots, but also include cut flowers, cacti, bonsai, hydroponic plants and tabor flowers. In addition, the variety is also very much found in Aceh. If you can take advantage of the large variety of plants and combine them with the right technology, it is not impossible that the ornamental plant business will be able to match the vegetable and fruit business which is still at the top level.

Not stopping at introducing business prospects, academics of Agriculture Faculty of UNIMAL also aim to assist housewives in East Reulet in the direct practice of making bokashi fertilizer. This idea is based on the habit of using chemical fertilizers on a large scale in the community. This is in line with research by Musnamar (2003) which states that various businesses tend to use artificial fertilizers excessively which will have an impact on decreasing soil productivity and the types of plants being traded. The level of organic matter in the soil decreases over time. The use of bokashi fertilizer can be an alternative to overcome soil nutrient recession conditions. Bokashi plus fertilizer is the manufacture of bokashi fertilizer using agricultural waste such as straw and cocopeat. Bokashi fertilizer can also be an alternative solution to the problem of agricultural waste such as straw and coconut coir which are abundant, and not used. This agricultural waste often causes problems with the emergence of pest and disease attacks on plants in the surrounding planting area.

This program is expected to be able to increase sources of income and help overcome environmental problems that exist around the UNIMAL Faculty of Agriculture, which consists of: (1) the regulation of the online learning system due to the Corona Virus Disease (COVID-19) Pandemic which dealt a tremendous blow to the the economy of the community around the UNIMAL Faculty of Agriculture as a provider of rental housing for students, (1) many people have lost their jobs because companies are experiencing financial constraints due to the Covid 19 Pandemic so that many housewives are experiencing financial constraints due to the loss of jobs from their heads. family, (3) the lack of knowledge of housewives in East Reulet about the business prospects that can be run, (4) the habit of using chemical fertilizers on a large scale in the community, (5) the existence of agricultural waste such as straw which is abundant but not utilized in the Reuleut environment East. The objectives of this activity are: (a) to provide information regarding things that must be done for the ornamental plant business in North Aceh, (2) to become a place for soft skill training for housewives in the environment around campus in the field of making bokashi fertilizer in order to save costs. production.

## IMPLEMENTATION METHOD

The location for community service is taken around the UNIMAL Faculty of Agriculture, namely Gampong Reulet Timur, North Aceh Regency. The determination of this location is because the Faculty of Agriculture, Malikussaleh University is located in North Aceh Regency, so with this program it is expected to be able to make a direct contribution to the problems that exist in the environment around the agency. To explore the problems that exist in the community, the team held in-depth interviews with the community. In this phase, the Team listens to community problems.

The implementation methodology is designed for mentors in the form of a participatory approach and refers to the adult learning process (adult-learning), which consists of: (1) Providing information related to business prospects and ornamental plant cultivation techniques, (2) Providing information related to business prospects and manufacturing techniques. bokashi fertilizer, (3) assignment or business idea search practice, looking at market prospects, selecting market segmentation, and calculating business profits, (4) Assisting in the practice of ornamental plants and making bokashi plus fertilizer.

1. Business prospects for ornamental plants and bokashi fertilizer:
  - a. Presentation of the business prospects of ornamental plants and bokashi fertilizer
2. Ornamental Plant Cultivation Techniques

- a. Growing media
- b. Planting Seeds
- c. Maintenance: watering with a sprayer 2-3 times a day.
3. Bokashi Fertilizer Making Technique
  - a) Tools and Materials: Rice straw/coconut husk (cocopeat) that has been mashed 25 kg, fine bran 5Kg, Burnt husk 5Kg, EM4 Liter, Plastic cover
  - b) How to Make Bokashi Fertilizer Bokashi Fertilizer:
    1. The ingredients (cocopeat), manure, husk charcoal, and bran are mixed in a plastic cover and mixed until evenly distributed.
    2. EM4 is poured slowly into the mixture of organic materials evenly until the water content in the mixture reaches 30%
    3. If the mixture is clenched with a hand, the water does not drip and if it is released it will fall and continue to clot
    4. The mixture is stacked in a dry area with a minimum height of 15-30 cm
    5. Then, this mixture of materials is covered with a plastic cover for 3-4 days
    6. In order for the fermentation process to run well, pay attention to the temperature not exceeding 50oC, if the temperature is more than 50oC lower the temperature by turning the mixture over
    7. High temperatures can cause bokashi fertilizer to be damaged because there will be a decay process
    8. After 4-7 days the bokashi is ready to ferment and is ready as organic fertilizer.

This program is expected to continue and can make a real contribution to the problems of the community around the campus. The Reulet Timu community who work as housewives or farmers' wives can play an active role in participating in this program to increase their capacity.

## RESULTS, DISCUSSION, AND IMPACT

The service activity starts from the process of compiling an implementing team consisting of Dr. Ir. Mawardati (Lecturer of Agribusiness Study Program), M.Si, Dr. Jamilah, S.P. (Agribusiness Study Program Lecturer), M.P Dr. Ir. Muliana, M.P (Lecturer of Agroecotechnology Study Program), Emmia Tambarta Kembaren, S.P, M.Si (Lecturer of Agribusiness Study Program). The team then carried out the preparation of the service proposal on June 5, 2021. For more details regarding the implementation schedule, see the following table:

Table 1. Shedule Activity

No	Activity	Month					
		6	7	8	9	10	11
1	Preparation of TEAM implementing community service						
2	Preparation and submission of service proposals						
3	Team coordination while waiting for the service proposal selection process						
4	Preparation of Activities (Print Letters, Coordination with Gampong Reulet Timu, Rent tools, buy materials, etc.)						
5	Implementation of Service Activities						
6	Preparation and Submit Journal Articles						



7	Preparation of Activity Reports						
---	---------------------------------	--	--	--	--	--	--

Program are carried out around the UNIMAL Faculty of Agriculture, namely Gampong Reulet Timur, North Aceh Regency. The determination of this location is because the Faculty of Agriculture, Malikussaleh University is located in North Aceh Regency, so with this service activity it is expected to be able to make a direct contribution to the problems that exist in the environment around the agency. The program are divided into three stages, namely mentoring ornamental plant business prospects, how to cultivate ornamental plants and making bokashi fertilizer.

The team provides information related to the business prospects of ornamental plants to the community to try to shift the paradigm that ornamental plants have no economic value. At the beginning of the training session, the speaker explained that ornamental plants are a combination of various types of horticultural plants which part or all of them can be used to create beauty, beauty and comfort in a closed or open space. Floriculture is a horticultural commodity that has high economic value and has very bright prospects as an alternative.



Figure 2. Team explains the prospects for the ornamental plant business in Aceh

Ornamental plant business activities can be a good alternative for increasing the economy. The development of ornamental plant business activities will be able to increase consumer income, demands for environmental beauty, development of the tourism industry, construction of housing complexes, hotels and even offices. The growing use of ornamental plants, domestic market demand in recent years has increased quite sharply, causing the ornamental plant production sector in various regions to be more active and view this as an opportunity to meet needs. In order to increase the percentage value of ornamental plants, it is necessary to improve cultivation through the application of innovative technology.

The team also explained that this activity was an effort to realize the agency's vision and mission, the UNIMAL Faculty of Agriculture Study Program academics through a service program with PNBP funding sources had the aim of increasing the capacity of housewives in the East Reulet area. This capacity building was carried out by conducting training to introduce business prospects for ornamental plants and the manufacture of bokashi plus fertilizer. The idea of introducing ornamental plant business prospects was based on the condition of the Corona Virus Disease (COVID-19) Pandemic which dealt a tremendous blow to the economy of the community around the UNIMAL Faculty of Agriculture. The majority of the people around the institution have house rentals for UNIMAL students. The COVID-19 pandemic condition in Aceh forced UNIMAL to change the offline education system to an online system according to the direction of the Ministry of Education and Culture. This is done to prevent the spread of the COVID-19 virus.

In the online system, students carry out the learning process from their home region so they are not in the environment around UNIMAL. This has a direct impact on the people of East Reulet as a provider of rental houses. People who have to experience financial constraints due to the Covid 19 Pandemic. People are not allowed to carry out mass gathering activities, do not use masks and work in large groups. This change will certainly have an impact on working conditions which further limit the office work system. At this time, there were also many housewives who experienced financial constraints due to the loss of work from the heads of families. Business opportunities.

The participants of this program consisting of housewives in the area around campus can actively develop their hobbies in the field of maintaining and cultivating ornamental plants in order to provide additional income. As we know that ornamental plants are currently a social phenomenon in Acehese society. Various age groups try to get to know ornamental plants for personal satisfaction. But basically, ornamental plants have a high enough economic value to be developed. This is something that is not widely known by the people of Aceh. Ornamental plants are plants that have a certain beauty and attractiveness value. In addition, it also has economic value for indoor and outdoor decoration purposes. Because it has an economic meaning, then ornamental plants can be turned into a business that promises big profits.

The second stage of the service activity is the guidance of the ornamental plant cultivation process. At this stage, the community is taught how to cultivate ornamental plants, namely the explanation and demonstration process (a) preparation of planting media, (b) ornamental plant seeds (cutting and grafting methods), (c) ornamental plant maintenance (fertilizing and controlling plant pests and diseases with insecticides). The third stage is the mentoring process for making bokashi fertilizer carried out by the team using a direct practice method. In this phase, service participants are asked to participate in the process of making bokashi fertilizer. At the beginning of the session, the team said that human activities can cause environmental problems, if in carrying out these activities, they do not pay attention to proper resource management and use environmentally friendly materials, one of which is activities in the agricultural sector. The continuous use of synthetic chemical fertilizers or pesticides will produce residues that have the potential to pollute if they exceed threshold value. Fine directly or indirectly we will be affected by the bad effects, especially if agricultural products are also exposed to pollutants. Likewise, in urban areas, environmental problems are increasingly complex because the activities of the citizens are increasingly diverse. As consumers of agricultural products, city dwellers should be aware of the dangers that come from products that may be contaminated with hazardous materials.



Figure 3. Assistance in making bokashi fertilizer

Today, environmental problems have become a global (worldwide) issue, after almost all elements of society are aware of the dangers posed by environmental damage. Now people are

becoming wiser in choosing food that is safe for health and environmentally friendly. A healthy lifestyle with the slogan "Back to Nature" has become a new trend in all aspects of life, including agriculture. Organic farming is a way of growing crops naturally with an emphasis on environmental protection and the preservation of sustainable soil and water sources. Organic farming uses natural fertilizers and pesticides instead of synthetics to protect the soil, air, plants and animals. Thus, if we eat food that comes from organic plants, we can live a healthier life because it is protected from harmful toxins.

Government programs on environmentally friendly have a good meaning for the benefit of public health and saving the environment in particular. In handling the processing of agricultural waste originating from leftover fodder, especially forage, fecal and urine waste, this can be used as raw material in the manufacture of solid and liquid organic fertilizers, for the needs of agricultural crops. The purpose of making bokashi is 1) to utilize waste from livestock and agriculture as organic fertilizer for agricultural crops, 2) To address the scarcity of chemical fertilizers (an-organic) which is often an obstacle during the growing season, 3) Can save the environment from disease transmission in the growing season. during the rainy season. Its use is that it can produce vegetable crops or beans, rice, corn, sweet potatoes that are free from chemical contamination (residual).

Bokashi fertilizer is "fermented organic matter". Bokashi is the result of fermentation or fermentation of organic materials such as husks, sawdust, straw, animal manure or manure, and other organic materials. These ingredients are fermented with the help of microorganism activator to speed up the process. There are also those who interpret that bokashi is short for Organic Ingredients Rich in Biological Sources. Bokashi is a compost produced from the fermentation process or organic matter fermentation with EM4 technology (Effective Microorganisms 4). The advantage of using EM4 technology is that organic fertilizer (compost) can be produced in a relatively short time compared to conventional methods. EM4 itself contains *Azotobacter* sp., *Lactobacillus* sp., yeast, photosynthetic bacteria and cellulose-decomposing fungi. Materials for making bokashi can be obtained easily around farmland, such as straw, grass, legumes, husks, manure or sawdust. However, the best material used for making bokashi is bran because it contains nutrients that are very good for microorganisms.

This service activity is expected to continue and can make a real contribution to the problems of the community around the campus. The Reulet Timu community who work as housewives or farmers' wives can play an active role in participating in this program to increase their capacity. The response of the service participants to this activity is as follows:

Table 2. Contents of the Questionnaire on the Satisfaction of the Service Participants.

Pertanyaan	Ya	Tidak
Apakah anda merasa bahwa kegiatan ini bermanfaat bagi anda	10	0
Apakah anda lebih memahami tentang bisnis tanaman hias setelah mengikuti acara ini , Jika tidak apa alasannya	10	0
Apakah anda lebih memahami tentang pembuatan pupuk bokashi setelah mengikuti acara ini , Jika tidak apa alasannya	10	0
Apakah anda merasa kegiatan ini harus dilanjutkan di masa yang akan datang, Jika tidak apa alasannya	10	0
Apakah Anda tertarik untuk mendalami bisnis tanaman hias	10	0



Apakah Anda tertarik untuk mendalami proses pembuatan pupuk bokashi	10	0
---	----	---

Based on the questionnaire distributed during the training, it can be seen that the service participants felt that this activity was very beneficial for them. 10 out of 10 participants answered that they were very interested in the training and assistance during the service period. They continued to ask questions and take notes using the ATK prepared in the seminar kit. All people in Reuleut Timu Village work as farmers, so that the manufacture of fertilizer will certainly be a very suitable thing to be carried out in this area. This is because the training in making bokashi fertilizer will certainly help the community in the problem of fertilizer shortages that always occur when the planting season arrives.

### CONCLUSION

The service activity starts from the process of compiling an implementing team consisting of Dr. Ir. Mawardati (Lecturer of Agribusiness Study Program), M.Si, Dr. Jamilah, S.P. (Agribusiness Study Program Lecturer), M.P Dr. Ir. Muliana, M.P (Lecturer of Agroecotechnology Study Program), Emmia Tambarta Kembaren, S.P, M.Si (Lecturer of Agribusiness Study Program). The team then carried out the preparation of a service proposal on June 5, 2021. Ornamental plant business activities can be a fairly good alternative for increasing the economy. The development of ornamental plant business activities will be able to increase consumer income, demands for environmental beauty, development of the tourism industry, construction of housing complexes, hotels and even offices. The output of this service is in the form of articles in the devotional journal IRPITAGE Vol 1 (2) December 2021, news on activities on the fp.unimal.ac.id website, SPK (Cooperation Agreement) with partners and ornamental plant and fertilizer products.

Bokashi fertilizer, like other compost fertilizers, can be used to increase the organic matter content in hard soils such as podzolic soils so as to increase soil aeration and reduce soil bulk density. The addition of bokashi fertilizer based on rice husk charcoal can increase the liquid limit and plastic limit of latosol soil, but there is an increase in the plasticity index. The addition of rice husk charcoal bokashi also affects the shear strength of the soil and increases the maximum plant height. All people in Reuleut Timu Village work as farmers, so that the manufacture of fertilizer will certainly be a very suitable thing to be carried out in this area. This is because the training in making bokashi fertilizer will certainly help the community in the problem of fertilizer shortages that always occur when the planting season arrives.

### OUTCOMES

The outputs generated from the activity of Increasing the Economic Capacity of Farmer Households through the Bokashi Plus Business Prospect Assistance Program in Gampong Reuleut Timu, Muara Batu District, North Aceh Regency can be seen in the following table:

Table 3. Outcomes

No.	Outcomes Type	Publication Type	Status	Description
1	Required Outcomes	Scientific publications in OJS-based service journals	<i>Accepted</i>	<i>J. IRPITAGE Vol 1 (2) December 2021</i>



2	Required Outcomes	Publication of activities in print or online media	<i>Published</i>	<a href="https://fp.unimal.ac.id/281-dosen-pertanian-lakukan-pelatihan-pembuatan-pupuk-bokashi-dan-pengenalan-prospek-bisnis-tanaman-hias-di-gampong-releut-timu-kecamatan-muara-batu-kabupaten-aceh-utara">https://fp.unimal.ac.id/281-dosen-pertanian-lakukan-pelatihan-pembuatan-pupuk-bokashi-dan-pengenalan-prospek-bisnis-tanaman-hias-di-gampong-releut-timu-kecamatan-muara-batu-kabupaten-aceh-utara</a>
3	Required Outcomes	Letter of Cooperation Agreement with Partners	Signed	SPK with Geuchik Gampong
4	Additional Outcomes	Product	Product	Ornamental Plants and

### GRATITUDE

Team would like to say thank you to Malikussaleh University and LPPM Community as a funder of thid program so that team could provide knowledge and assistance to the community to change the paradigm of job seekers into job creators.

### REFERENCES

- Aryani, R., & Khaddafi, M. (2021). The Effect Of Financial Knowledge And Personal Net Income On The Financial Behavior Of Malikussaleh University Employees With Locus Of Control As Moderating Variables. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAAS)*, 1(1), 1-13.
- Damanhur, D., Ichsan, I., Hasibuan, A. F. H., Alifah, S. R., & Sari, D. N. (2021). Empowering Msmes Through The Use Of Digital Marketing In Improving Halal Products And Tourism In The City Of Lhokseumawe. *Irpitage Journal*, 1(1), 35-42.
- Fadli, Suryadi, Tambarta, E., 2020. Arabica Coffee Marketing Constraints During the Covid 19 Pandemic In Central Aceh. *J. farm business* 6, 115–122.
- Ilham, R. N., Erlina, K. A. F., Silalahi, A. S., Saputra, J., & Albra, W. (2019). Investigation of the bitcoin effects on the country revenues via virtual tax transactions for purchasing management. *Int. J Sup. Chain. Mgt Vol*, 8(6), 737.
- Ilham, R. (2019). N et all (2019). Investigation of the Bitcoin Effects on the Country Revenues via Virtual Tax Transactions for Purchasing Management. *International Journal of Suplly Chain Management*, 8(6).
- Karim, Abubakar. 2012. Local Economy Through the Revitalization of People's Coffee Gardens in the Gayo Highlands. *J Economics of Development Vol* (3).
- Khaddafi, M., Ilham, R. N., Fuadi, F., Marzuki, M., & Juanda, R. (2021). Development Of Communities Of Traders And Private Households In Realizing Independent Welfare Through The Movement Of Love To Saving Share (Germas) In Gampong Blang Pulo As A Example Of Gampong Investment. *Irpitage Journal*, 1(1), 29-34.
- Likdanawati, L., Hamdiah, H., & Mellita, C. P. (2021). Empowerment Of Coastal Women Community Of Gampong Pusong Lama Through Innovation Of Marine Processed Products. *Irpitage Journal*, 1(1), 43-50.

*The Economic Capacity Increasing of Farmers' Households Through The Business Prospects Program Of Ornamental Plants And Fertilizer Bokashi Plus in Gampong Reuleut Timu, Muara Batu District, North Aceh*

DOI: <https://doi.org/10.54443/irpitage.v2i1.119>

---

Tambarta, Emmia. 2016. Analysis of Added-Value And Strategic Development of Gayo Coffee Products in Bener Meriah Aceh. IJSR Vol (5).

Valerio, A., Parton, B. & Robb, A. 2014. Entrepreneurship education and training programs around the world: Dimensions for success. Washington, D.C. : The World Bank