

**STRATEGY AND DEVELOPMENT OF THE GAMBIR
INNOVATION SYSTEM FOR THE PEOPLE'S ECONOMY
(Case Study of 50 Cities District)**

Meilisa^{1*}, Firwan Tan²

¹ Faculty of Economics and Business, Universitas Riau

² Faculty of Economics and Business, Universitas Andalas

E-mail: ¹⁾ meilisa@lecturer.unri.ac.id

Abstract

This research seeks to formulate an elaborate diversification strategy for processed Gambir products, aiming to enhance the overall well-being of the community residing in District 50 of West Sumatra City. Employing a descriptive qualitative approach, this study adopts a case study research design, delving into the subject matter comprehensively and extensively through the utilization of diverse data sources. The primary focus lies on conducting a meticulous examination of Gambir farmers and industries within the confines of District 50, West Sumatra, utilizing innovative techniques to bring about the diversification of Gambir products. The data collection process involves keen observation of Gambir farmers and the industrial landscape, encompassing a range of activities within the 50 City Regency of West Sumatra. The introduction of innovation, specifically the diversification of Gambir, is anticipated to yield additional value from the traditionally cultivated crop. Beyond the conventional production of raw and dry Gambir products, this research aims to empower farmers to venture into the production of derivative products. The overarching goal is to foster a sustainable and diversified Gambir industry that not only meets the immediate needs of the farmers but also contributes to the broader economic landscape of District 50, West Sumatra City. By fostering innovation and expanding the product range, this research aspires to create a ripple effect, ultimately resulting in a positive impact on the socio-economic status of Gambir farmers in the target district.

Keywords: *Community Economic Welfare, Product Diversification, Processing Industry, Gambir*

1. INTRODUCTION

For rural communities who are still on the poverty line, the agricultural sector is one of the priorities that can be relied upon in economic recovery. One of the superior and mainstay commodities of plantations in Indonesia is the gambier plant (*Uncaria gambire* Roxb). Gambir is a dry extract taken from the leaves and twigs of the *Uncaria gambir* (hunter) roxb plant, a plantation plant that is often obtained through community plantations as a daily business.

Gambir can be harvested well after it is 2.5 years old, for a period of 2 to 3 times a year and is productive until it is 20 years old or more (Sahat et al., 2019). Apart from that, gambier is a perennial plant that can live a long time if maintained properly. It is estimated that gambier plants can produce 80 years and this is one of the reasons why people are interested in cultivating gambier (Lidar et al., 2019).

Based on data from the Department of Agriculture, 90% of gambier product production in Indonesia comes from West Sumatra, gambier products are exported to Australia, Bangladesh, Hong Kong, India, Malaysia, Nepal, Pakistan, Taiwan, Japan, Saudi Arabia, the Philippines, Thailand and Singapore. India is the country with the largest export volume, while Thailand has the lowest export volume (*kominfo.limapuluhsistemab*). 50 City Regency is the largest gambier producer in West

Sumatra Province. In general, gambier plant production is marketed in the form of latex, dried gambier for the domestic market and export market (Sahat et al., 2019).

The large number of gambier farmers in the 50 City districts makes gambier a source of income to meet the family's living needs. The gambier production business has a positive impact on society because it can improve the economy and absorb local workers. Seeing the role of the Gambir small industry in the 50 City Regency in providing job opportunities to the community is quite large, it has proven that the Gambir small industry is one sector that must continue to be developed. However, fluctuations in the price of gambier in the form of gambier sap or dried gambier are a problem that cannot be avoided by farmers in meeting their daily needs. Therefore, the small gambier industry must implement a diversification strategy for processed gambier products.

Product diversification is a policy in a business strategy to meet consumer interests and needs through product diversity in order to pursue growth, increase sales, profitability and flexibility with the aim of creating new products or services without depending on one type of product alone. Meanwhile, processing is an economic activity that carries out the activity of changing a basic good mechanically, chemically, or by hand so that it becomes a finished good, or an item of less value into an item of higher value, and whose properties are closer to the final user. A variety of products will make consumers believe that their needs can be met. The more diverse the products offered to consumers, the greater the consumer's interest in buying the products offered.

Apart from that, this diversification will also have a big influence in improving community welfare and overcoming the obstacles that exist in Gambir's small industrial businesses. Welfare is the point where society is in a prosperous condition. A person will feel that his life is prosperous if his needs are met and he feels happy. He also avoided poverty and danger. Thus, there needs to be a strategy that is focused on developing processed gambier products.

This research is in line with research conducted by (Sugianto, 2019), entitled "Diversification of Processed Mangrove Products Can Improve the Welfare of Indramayu Coastal Communities". The results of this research created 5 (five) superior products, namely: pidada syrup, pidada dodol, mangrove soy sauce, mangrove tea and mangrove body scrub. Five of these products are sourced from three mangrove species, namely *Sonneratia* species, *Pueraria Phasealoides*, *Acanthus*, *Xylocarpus Granatum*.

Research on the diversification of processed products to improve people's welfare has been discussed by several previous researchers, but few have discussed this problem with processed gambir products. This research aims to find out how the development of diversification of processed gambier products has contributed to improving community welfare in Regency 50, City of West Sumatra, and to find out what obstacles and solutions to diversifying processed gambier products have contributed to improving community welfare in Regency 50, City of West Sumatra.

2. LITERATURE REVIEW

Research conducted by (Sahat et al., 2019) states that the added value obtained from processing dried gambier sap can increase industrial development and marketing potential for gambier in Indonesia. In line with this, research conducted by (Munawarah et al., 2022) states that the development of diversification of processed Gambir products can

improve the welfare of the people in Pakpak Bharat Regency. Research conducted by (Evalia et al., 2012) states that the development of agrotecnoparks can increase the added value of gambier products by increasing technological innovation for processing gambier into various processed products with guaranteed quality.

Product differentiation has a significant influence on the diaspora remittance performance of commercial banks in Kenya, where diversification can be used as a strategy to achieve sustainable competitive advantage for companies (Mutegi et al., 2023). In addition, product differentiation, price and positioning have a positive and significant effect on purchasing decisions (Sarita et al., 2022). In the telecommunications industry, product quality differentiation plays a role in telecommunications operator collusion, as it is conducive to the realization and maintenance of collusion (Ramiz, 2019). In the car rental industry, differentiation strategies, such as unique product features and trustworthy services, can improve the performance of car rental businesses (Kombo & Nyangosi, 2022).

2.1. Theoretical framework

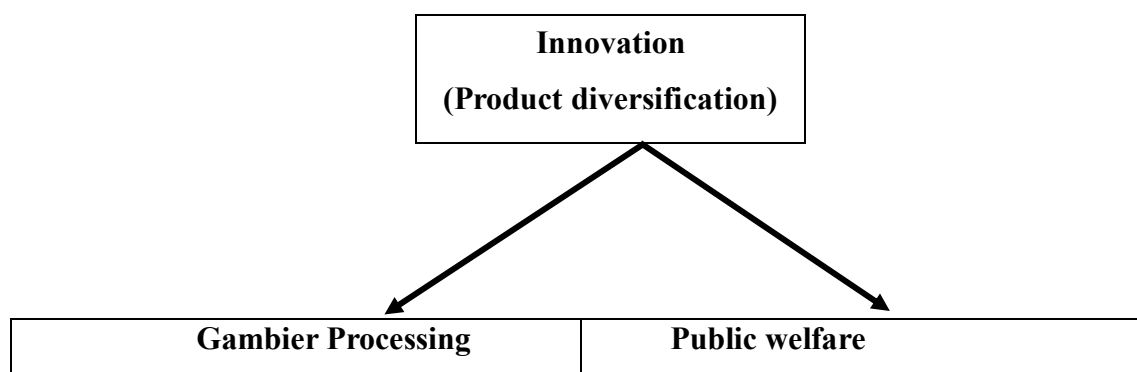


Figure 1. Framework

3. RESEARCH METHODS

This research uses a qualitative descriptive approach. Descriptive research is a research method that focuses on problems or phenomena that existed at the time the research was carried out as well as accurate or actual problems carried out in the field. This field research was conducted in 50 districts of West Sumatra Province. The data sources in this research consist of primary data in the form of observations and secondary data, namely literature studies and documentation. Data analysis consists of data reduction, data presentation, drawing conclusions and data presentation.

3.1. Condition of Gambir Agroindustry in 50 Cities Regency

One of the cases raised was the Tangai Raya Business, which is a gambier processing business located in Nagari Lubuak Alai, Kapur IX District, which received assistance from the Minister of Cooperatives for the 2003 Fiscal Year. The assistance provided was worth IDR. 1,200,000,000 consisting of buildings, gambier processing machines and working capital.

The series of gambier production usually carried out by gambier farmers starts from harvesting gambier leaves and twigs, transporting gambier leaves and twigs to the factory. The process of processing gambier leaves and twigs into gambier is still on a micro and small scale. This stage is a crucial stage in gambier processing, because it determines the quality and quantity of sap that comes out of the leaves and twigs. The series of gambier production processes consists of several stages, namely boiling the leaves, extracting gambier sap, settling and draining the water, molding, and drying. The dried gambier is then packed in sacks and sold to collecting traders (Munawarah et al., 2022).

Product development through diversification in an effort to increase sales volume and profitability, where the factory must be able to provide added value from gambier, so that the products sold are not only in the form of dried gambier but also in the form of derivative products. by increasing the added value, it will be able to increase productivity, selling prices, superiority and the gambier commodity market (Wijaya & Karneli, 2017)

Figure 1 explains the gambier purification process. The added value of processing gambier into catechin ($C_{15}H_{14}O_6$) with a certificate from the Industrial Research and Development Agency No. 426/U/ II/2008, thus providing a ratio of added value from gambier.

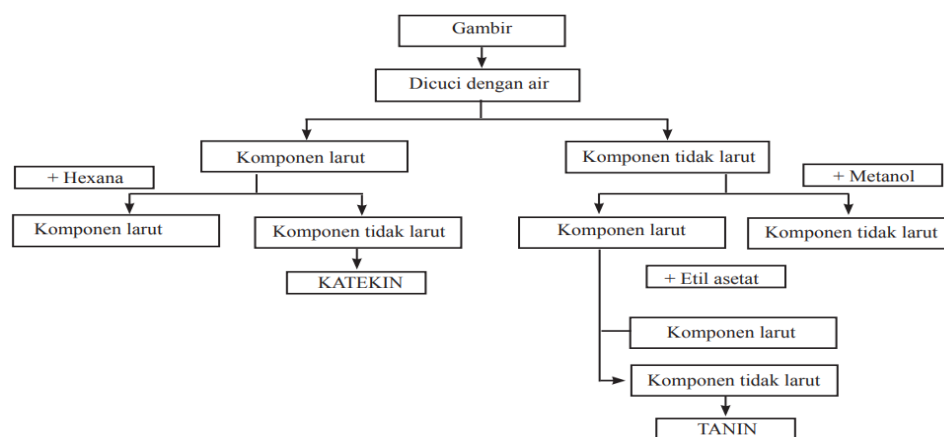


Figure 2. Gambir Purification Process

With further processing stages, gambier will provide more benefits and advantages. Benefits and advantages can be achieved through processing gambier into various processed products, namely processing gambier into catechins and tannins. Catechins are used in making various kinds of medicines, such as liver disease medicines, throat lozenges, stomach ache medicines, toothache medicines, medicines for Alzheimer's disease, anti-cancer drugs, toothpaste, and so on in the pharmaceutical industry (Putri, 2019). Catechins are also used in making various cosmetic products, such as anti-aging cream, anti-acne cream, anti-dandruff, cosmetics for treating damaged hair, bath soap, and so on (Nasution et al., 2015). In the food industry, catechin is used as an ingredient in making health drinks (brand katevit). Meanwhile, catechin is used as an ingredient for dyeing wool and silk fabrics in the natural dye industry. Tannin is also widely used in various downstream industrial activities, such as the leather industry, textile industry, pharmaceutical industry, metal industry, laboratories and adhesives industry (Anggriawan & Indrawati, 2013).

Increasing the added value of gambier into catechins and tannins can be done on a medium to large scale. Until now, the industry for processing gambier into catechins and tannins is still very small. Thus, there are still many opportunities that can be achieved by entrepreneurs and investors if they are interested in investing their capital in the industrial sector of processing gambier into catechin and tannin.

There are two classifications traded in international trade, namely raw gambier and processed gambier. The development of Indonesian gambier exports, both raw and processed gambier, still has the potential to be developed. It can be concluded that increasing the added value of a commodity can increase income in many agribusiness sectors:

Industrial Backward , Forward Linkages and Market Power for Agroindustry in 50 Cities Districts

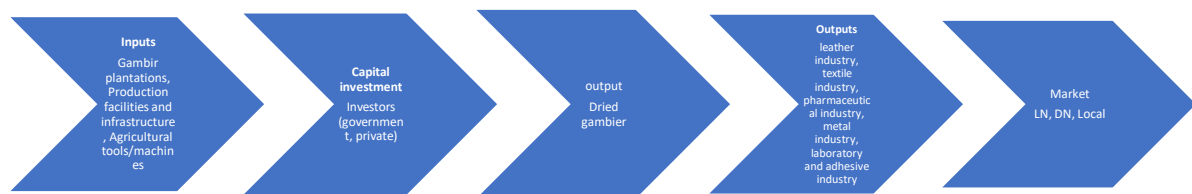


Figure 3. Industrial Backward, Forward Linkages and Market Power for Agroindustry in 50 Cities Districts

Integrated Investment Policy for Agroindustry in 50 Cities Districts

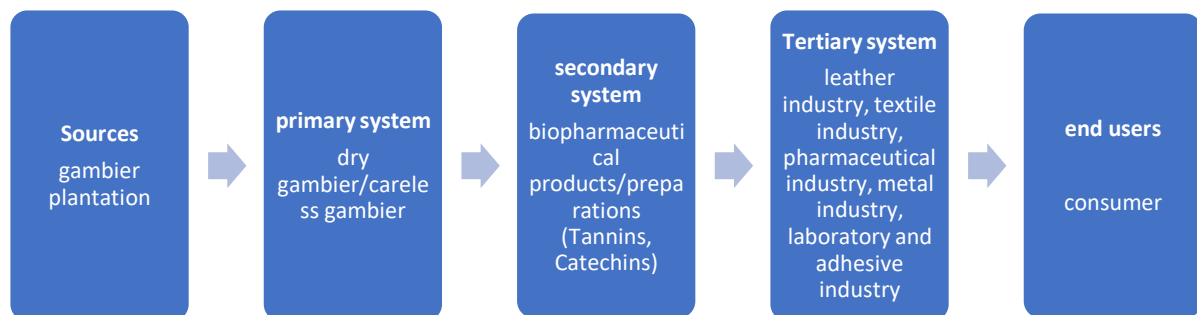


Figure 4. Integrated Investment Policy for Agroindustry in 50 Cities Districts

4. RESULTS AND DISCUSSION

Development of Diversification of Gambier Processed Products to Improve Community Welfare in the 50 Cities Regency, through product diversification in an effort to increase sales volume in the 50 Cities Regency, including creating a strategy in order to realize the company's core objectives in accordance with the position or circumstances at that time. However, the most important thing is that the company hopes that sales will always increase so that it will provide satisfactory profits.

One of the diversification strategies implemented is to increase innovation. Because basically gambier is only made and processed as usual, but due to new innovations,

gambier can be processed into catechins and tannins. With the development of this product, apart from being able to increase income or profits for businesses, it will most likely have an impact on increasing employment opportunities.

4.1. SWOT analysis of Gambir commodities in 50 Cities Regency

To increase the added value of gambier commodities into derivative and other processed products, a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is needed to see strengths, weaknesses, opportunities and threats to describe the gambier agro-industry development strategy. The following table describes the SWOT condition of gambier commodities in 50 Cities districts.

Table 1.
SWOT Analysis of Gambir in 50 Cities Regency

Strength
Availability material standard gambier
Processing post harvest simple
Farmers' experience in processing gambier has been quite long
The existence of cooperatives and farmer groups
Producer foreign exchange
Regional government policy in encouraging the cultivation of gambier plants
The existence of cooperatives and farmer groups
Weaknesses
There is no local government policy to encourage the gambier agro-industry
Lack of ability managerial farmer
The quality of human resources for coaching gambier processing is still low
Lack of information regarding appropriate technology for processing gambier
The flow of microcredit assistance funds for small businesses is limited
Lack of budget to support the Gambir agro-industry
Lack of infrastructure to support the gambier agro-industry
Limited market information
The quality of gambier in 50 Kota Regency does not meet export standards
Opportunities
There are many derivative products from gambier
There is demand for processed gambier products
There is no gambier refining industry in the 50 City Districts

There is no processing industry for gambier derivative products

The role of academics in improving the image of processed gambier

The role of academics in socializing the benefits of the gambier agro-industry

The role of academics in collaborating with relevant stakeholders

Technological developments in supporting the Gambir agro-industry

There is regional autonomy

Good international trade cooperation relations as export opportunities

Threats

Lack of guarantees of economic and political stability so that investors are not interested in investing capital

Social/cultural behavior in society that makes investors not interested in investing capital

The entry of imported products that have dominated the market

There are demands for high quality standards in global trade

Competition from fellow gambier traders both in the surrounding area and other countries. There is competition between processed gambier products and other plantation products.

Following alternative strategies generated from SWOT matrix (Strengths Weaknesses Opportunities Threats):

4.1.1. SO Strategy (Strengths-Opportunities)

a. Building agrotechnopark in business development agro-industry and improvement mark plus gambier

Develop superiority comparative become superiority competitive from source Power gambier is objective from this program. so that give guidelines for agro industry in formulation internal policies and strategies face obstacles and obstacles in development agro industry gambier. Competitive advantage arises from the creation of derivative products that can be produced from gambier. So the gambier sold is no longer in the form of raw gambier but in the form of a product that has added value.

b. Building cooperation with industries that use gambier raw materials

Bringing gambier farmers together with industrial entrepreneurs who need gambier raw materials is an activity that can be carried out. In this case, the acting mediator is the Plantation Service. A written agreement that regulates the rights and obligations of each party must be formed in this collaboration. So, farmers get certainty that their harvest will be accommodated at a reasonable price according to the agreement and the industry gets

certainty of continuity of supply from farmers at a fixed price, in accordance with the agreement, which is the aim of this collaboration.

c. Development of an agro-industry to process gambier commodities into various processed products.

The added value obtained from processed gambier products such as catechins and tannins will have a higher selling value than processed raw gambier. Catechins and tannins are raw materials for cosmetic and pharmaceutical products. With the development of this gambier derivative product industry, it will be profitable for farmers, entrepreneurs and the Limapuluh Kota Regency. Such as medicine for liver disease, throat lozenges, medicine for stomach ache, medicine for toothache, medicine for Alzheimer's disease, anti-cancer medicine, toothpaste, and so on in the pharmaceutical industry (Putri, 2019) . in making various cosmetic products, such as anti-aging cream, anti-acne cream, anti-dandruff, cosmetics for treating damaged hair, bath soap, and so on (Nasution et al., 2015) . in the food industry, for example as an ingredient in health drinks (Katevit brand).

d. Promote technological innovation and institutional innovation to speed up the process of delivering and adopting technology to farmers

Currently, there is no technological innovation in gambier processing in the 50 City Districts, because this is an important strategy that must be developed. The Agricultural Research and Development Agency in West Sumatra can socialize the technology produced so that it can be applied and utilized for the development of the gambier agro-industry in 50 Cities Regency, because West Sumatra has great agricultural researchers and academics, so it is hoped that these researchers and academics can contribute to the creation Technological innovation in processing gambier into various derivative products.

4.1.2. WO Strategy (Weaknesses-Opportunities)

a. Create a policy that regulates the gambier trade system

When the price of gambier falls, farmers can still sell to the Gambir Marketing Buffer Agency (BPPG) at a still high price, which is the aim of forming the Gambir Marketing Buffer Agency (BPPG). The institution or body appointed by the regional government is expected to be able to support the marketing of Gambir, whose members consist of elements of Cooperatives, State-Owned Enterprises and Private Enterprises.

b. Facilitate access to capital for gambier businesses

Increasing access to capital institutions is an activity that the Plantation Service can carry out to help farmers, namely providing credit assistance to gambier farmers who meet the applicable terms and conditions and recommending it to banks.

c. Utilizing science and technology with the participation of academics in creating processed gambier and improving the quality of gambier in 50 Cities Districts

Creating a good image that can be imparted to related parties is one of the abilities that academics have. This can be done through seminars and workshops, as well as publishing existing research.

4.1.3. ST Strategy (Strengths-Threats)

a. Strengthen cooperation and coordination between farmers, plantation services and other parties involved in the gambier agro-industry in facing competition

In spurring the development of small and medium-sized gambier agro-industry businesses, harmonious coordination can be carried out through coordination with regional economic and promotion services, coordination with the Agricultural Research and Development Agency in the form of coaching, counseling and training in managing gambier produce

b. Improving the Integrated Quality Management Program (PMMT) for gambier and its processed products

This strategy is important considering that free market challenges demand better quality standards. Therefore, quality development is carried out not only in the production process, but also at the harvest and post-harvest stages, the implementation of which is in accordance with established technical instructions. An integrated quality management system for plantation products starts from land preparation, procurement and distribution of production facilities, production processes to distribution and marketing.

4.1.4. WT Strategy (Weaknesses-Threats)

- a. Create a policy that regulates entry permits for investors who wish to invest capital either from within or outside the country so that investors feel comfortable investing. Regional governments can make pro-investment policies and commitments to open up opportunities for regions to promote and attract investors. Semi-private institutions that collaborate with government officials in providing services, convenience, accessibility and potential information needed by prospective business investors, by implementing one stop service (OSS) can be recruited as a form of investment promotion and marketing. So that entrepreneurs and potential investors can get clear certainty regarding the licensing applications needed to conduct business or invest in the 50 City Districts.
- b. Increasing the expertise of human resources (educational level of people) in order to be able to develop farmers and at the same time to produce gambier that is high quality and in accordance with global standards. Human resources need special attention as an effort to drive the development of the gambier industry. Efforts to increase the knowledge and skills of both farmers and officers through increasing knowledge and counseling, especially on the application of appropriate technology packages. Formal education can be provided to prepare farmers' human resources, while formal and non-formal education can be provided to plantation officials in an effort to improve quality.
- c. Academics are more focused on conducting research related to the use of gambier and the creation of derivative products from gambier, such as in the manufacture of various cosmetic and pharmaceutical products, so that they can be implemented in the gambier industry. So that gambier is sold not only in the form of raw gambier, and socializing it to gambier farmers in the form of community service.
- d. Building infrastructure that supports the gambier agro-industry so that investors are interested in investing their capital in the 50 City Regency.

- e. Build entertainment facilities such as entertainment venues that attract investors to invest their capital in the 50 City Districts.
- f. The people of the 50 Cities Regency must be able to open themselves up and mix with new cultures so that investors are interested in investing their capital in the 50 Cities Regency.

5. CONCLUSION

In summary, innovating (diversifying gambier) can enhance the value of gambier, enabling farmers to produce not only raw or dried gambier but also derivative products. Key considerations include: 1. Supportive regional government policies through local regulations (Perda) to bolster gambier agro-industry development. 2. Amplifying the involvement of academia to enhance farmer skillsets in gambier processing through improved human resource development. 3. Advancing technological innovation for gambier processing, with academic input crucial for enhancing processing technology. 4. Collaborating with research and development (R&D) institutions to enhance processing technology and providing training programs for technology adoption and gambier quality improvement. 5. Formulating regional regulations and bolstering regional government commitment to boost investment. 6. Establishing an integrated service bureau for investment licensing and regional promotion. 7. Instituting a business unit to regulate gambier pricing, oversee farmers' harvests, and enforce regulations against adulteration. 8. Enhancing infrastructure to attract investment in the gambier agro-industry in 50 Kota District. 9. Offering entertainment amenities to attract investors to the gambier agro-industry in 50 city districts. 10. Facilitating and supporting stakeholders from upstream to downstream, covering gambier cultivation, processing technology, and mutually beneficial trade systems. 11. Encouraging cultural openness among residents of the 50 Cities Regency to attract investor interest.

REFERENCES

- Anggriawan, & Indrawati, T. (2013). *The Role of Gambir Commodities in the Economy of Fifty Cities Regency, West Sumatra Province* . 21 , 1–21.
- Evalia, NA, Sa'id, G., & Suryana, RN (2012). Strategy for Agro-Industry Development and Increasing Added Value of Gambir in Fifty Cities Regency, West Sumatra. *Journal of Management & Agribusiness* , 9 (3), 173–182.
- Kombo, D. A., & Nyangosi, R. (2022). Assessing the Influence of Product Quality Differentiation Strategies on Performance of Car Hire Businesses in Kisii Town, Kenya. *East African Journal of Business and Economics* , 5 (1), 211–219. <https://doi.org/10.37284/eajbe.5.1.713>
- Lidar, S., Wulantika, T., & Surtinah. (2019). Exploration of gambier germplasm in Koto Kampar Hulu District, Kampar Regency. *Agricultural Scientific Journal* , 1 (2), 185–195. <https://journal.unilak.ac.id/index.php/jip/article/view/1490>
- Munawarah, D., Batubara, C., & Nauton, J. (2022). *Diversification of Gambir Processed Products to Improve Community Welfare in Pakpak Bharat Regency from an Islamic Economic Perspective* . 2 (1), 161–169.

- Mutegi, H.K., Njeru, P., & Mwit, E. (2023). To Assess the Influence of Product Differentiation Strategy on the Performance of Commercial Banks' Diaspora Remittances in Kenya. *European Journal of Business and Management Research* , 8 (2), 255–261. <https://doi.org/10.24018/ejbmr.2023.8.2.1868>
- Nasution, AH, Winandi, R., & Baga, LM (2015). *GAMBIR MARKETING SYSTEM IN WEST SUMATRA (Case in Kapur IX District, Limapuluh Kota Regency)* . 12 (1), 1–10.
- Putri, SM (2019). *People's Gambir Business in Fifty Cities, West Sumatra 1833-1930 Minangkabau Nature and Fifty Cities* .
- Ramiz, A. (2019). *Interna tional Journal of Information Systems in the Service Sector* . 11 (3).
- Sahat, D., Manalu, T., & Armyanti, T. (2019). *Analysis of the Added Value of Gambir in Indonesia (A Literature Review)* . 2 (1), 46–67.
- Sarita, MC, Febriyantor, MT, Zulkifli, Z., Suleman, D., Saputra, F., & Suyoto, YT (2022). The Influence of Product Differentiation, Price and Positioning on Purchasing Decisions at Niceso Stores in South Tangerang. *Privileged Social Sciences Journal* , 2 (4), 12–17. <https://doi.org/10.55942/pssj.v2i4.177>
- Sugianto, S. (2019). Diversification of Processed Mangrove Products Can Improve the Welfare of Indramayu Coastal Communities. *Mangifera Edu* , 4 (1), 73–79. <https://doi.org/10.31943/mangiferaedu.v4i1.557>
- Wijaya, YE, & Karneli, O. (2017). Overall Consumer Satisfaction is Defined as an Effective Statement About Emotional Reactions to Experiences with Products and Services, Which is Influenced by Consumer Satisfaction with the Product and by the Information Used to Choose Pros. *Online Journal of Students of the Faculty of Social and Political Sciences, University of Riau* , 4 (2), 1–15. <https://www.neliti.com/publications/133365/>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).