

ANALYSIS OF PORTER'S DIAMOND ADVANTAGE IN COMMUNITY FOREST AREA MANAGEMENT TO REALIZE *GREEN ECONOMY* (ECOLOGICAL ECONOMIC SUSTAINABILITY) IN SEKAROH, EAST LOMBOK, INDONESIA

TUTI MUTIA ^{1*}, HENI MASRUROH ², CHAIRUL ANAM ³, HELGA GRACIANI ⁴, MOHAMAD ARIF ⁵, and OKTAVIANO PRADITIYA PURWANTO⁶

^{1, 2, 5, 6} Geography Department, University of Malang, Lowokwaru, Indonesia.

³ Ekonomi Department, University of Malang, Lowokwaru, Indonesia.

⁴ Psychology Department, University of Malang, Lowokwaru, Indonesia.

*Corresponding Author Email: tuti.mutia.fis@um.ac.id

Abstract

Community welfare based on the results of the management of community forest areas (HKm) pentong to consider environmental sustainability. One of them is the type of plant that is adjusted to the function of the forest area. The purpose of the study was to analyze the competitive advantage of the Diamond Porter model for strengthening the green economy of corn farmers in the Sekaroh community forest (HKm) through the transformation of corn plants to eucalyptus plants. This type of research is qualitative with data collection techniques conducted through interviews, observations, FGDs and documentation. The results showed that the competitive advantage of porter's diamond analysis to strengthen the green economy of corn farmers has positive potential for the economy and ecology. The competitive advantage is based on indicators consisting of factor conditions; demand conditions; company structure, strategy and competition; related and supporting industries; and the role of government. Competitive advantage contributes to sustainable ecological and economic quality.

Keywords: Porter's Diamond; Community Forest Management; Green Economy; Ecological Sustainability

1. INTRODUCTION

Porter's Diamond Model is a diagram developed by Michael Porter to show four conditions: demand; factor endowments; related and supporting industries; and firm strategy, structure, and competition (Anggraini & Astuti, 2021: 668). The model is designed to help countries understand why some of their industries are more competitive internationally than others, and how firms from one country or region can maintain a competitive advantage in a particular industry (Foster & Clark, 2008:20).

The management of community forest areas is one of the efforts to improve community welfare while preserving the environment. Community forest areas are forest areas managed by the community with various forms of cooperation with the government or the private sector, such as community forests, village forests, community plantation forests, and others (Darma et.al., 2020: 450). Community forest areas have the potential to be a source of income, employment, industrial raw materials, and environmental services for the community (Alamsyah & Sulistyorini, 2020: 467).

Green economy is an economic system oriented towards sustainable development that integrates economic, social, and environmental aspects (Fahmi & Nurdin, 2020: 400). The green economy aims to improve the quality of human life without compromising the natural resources and ecosystems that support it (Khairunnisa et.al., 2021). The green economy also encourages the use of renewable energy, resource efficiency, reduction of greenhouse gas emissions, and adaptation to climate change (Handayani et.al., 2021).

According to the Department of Agriculture and Plantation of NTB, the area of maize in 2016 reached 206,997 hectares and maize production was 1,101.2 tons. In 2017, the planted area was 310,990 hectares, production was 2,127.32 tons. In 2018, the production achievement was 2,959,222 tons (Dinas Pertanian dan Industri Provinsi NTB, 2023). The expansion of planting areas and the increase in corn yields were not followed by strict supervision. Some farmers enter forests, national parks, and nature tourism parks (Rakhman, 2019), causing environmental damage. The Community Forest (HKm) area is about 543 hectares of the 2,800 hectares of Sekaroh forest (Balai KPH Rinjani Timur, 2022). Residents claim they also have the right to control the area. The government ordered several times not to encroach on the forest, but in vain. The HKm program was successful, but the harvest among the trees did not last long. The price of corn was considered so lucrative that the community forest was encroached upon, large trees were uprooted. Small trees and bushes were burned and replaced with corn (Suara NTB, 2020).

In this conflict situation, a middle way is needed so that the economic growth of the community goes hand in hand with improving environmental quality. The concept is known as the green economy (Yasa, 2010). Green economy refers to the process of restructuring businesses and infrastructure to get better benefits from investments in natural, human and financial capital that simultaneously reduce greenhouse gas emissions, extract and use less natural resources, produce less waste and reduce social division (Lako, 2015). Based on these needs, Porter's Diamond model has relevance in strengthening the green economy transition (Mulyati, 2010; Tsiligiris, 2018).

Porter's Diamond competitive advantage model (Porter, 1990; Porter, 1998) shows the importance of accelerating industrial recovery and strengthening competitiveness, because according to Enright and Newton (Enright & Newton, 2005), Bikse et al. (2013), Dwyer and Kim (2003) that the competitiveness of a product depends largely on its ability to maintain competitive advantage in any situation. This model also generates the power of competitive advantage involving product offerings so that farmers can better exploit market opportunities (Ozer et al., 2012; Estevao et al., 2018). Porter's Diamond competitive advantage is to place farmers on the demand side to innovate in the production and marketing of community forest products (Porter, 1990; Porter, 1998; Ozer et al., 2013). Empirical evidence also shows the implementation of Porter's Diamond model such as: opportunity recognition in entrepreneurship (Ozgen, 2011), retail clothing in India (Man & Byun, 2011), shadow banking industry (Riasi, 2015), agriculture/forest products industry in Turkey (Ozer et al., 2012), construction industry in China (Deng & Jin, 2013). The Film Industry [Sinetron] in Turkey that applies Porter's competitive advantage factors has proven to have a positive impact on

increasing GDP per capita (Cavusoglu et al., 2018).

This research highlights three key issues related to the management of community forest areas in Sekaroh, East Lombok. First, the actual condition of community forest area management in the region today. This research will explore information on the ongoing management practices of community forest areas to understand the challenges and potential in achieving sustainability. Second, on how to improve relevant production factors to support the community forest management sector in Sekaroh, East Lombok. In the face of evolving needs and demands, this research will propose solutions and strategies to improve the aspects of production required in community forest area management to make it more efficient and have a positive impact on the environment. Third, whether the application of Porter's Diamond Model can contribute to realizing a green economy or ecological economic sustainability in Sekaroh, East Lombok. This research will investigate how the conceptual model of Porter's Diamond Model can be implemented in the management of community forest areas to achieve green economy goals and ensure a balance between economic growth and environmental sustainability. Thus, these three problem formulations become the focus of this research to identify problems related to the management of community forest areas and find sustainable solutions to realize an economy that favors the environment.

Furthermore, this research aims to assess the effectiveness of Porter's Diamond Model in realizing a green economy or ecological economic sustainability in Sekaroh, East Lombok, evaluate the concrete impacts of Porter's Diamond Model on ecological and economic sustainability in the management of community forest areas in Sekaroh, East Lombok, and develop valuable recommendations to improve the implementation of Porter's Diamond Model in the management of community forest areas in Sekaroh, East Lombok. By achieving these objectives, this research is expected to provide valuable contributions to efforts to build an environmentally sustainable economy in Sekaroh, East Lombok.

Based on the description above, it can be said that the analysis of the advantages of Porter's Diamond Model in the Management of Community Forest Areas to Realize *Green Economy* (Ecological Economic Sustainability) in Sekaroh, East Lombok" is important to study. This topic can contribute to the development of theory and practice on how to apply Porter's diamond model to improve the competitiveness of community forest areas in the context of a green economy. It can also benefit the government, community and other stakeholders in formulating appropriate policies and strategies for the sustainable management of community forest areas.

2. RESEARCH METHODS

The research used a qualitative approach. This qualitative approach was chosen by researchers because it can reveal in-depth data about the green economic transition of Sekaroh corn farmers, East Lombok in HKM management using porter's diamond analysis. The research location in Sekaroh village, East Lombok Regency can be seen in Figure 1 below.

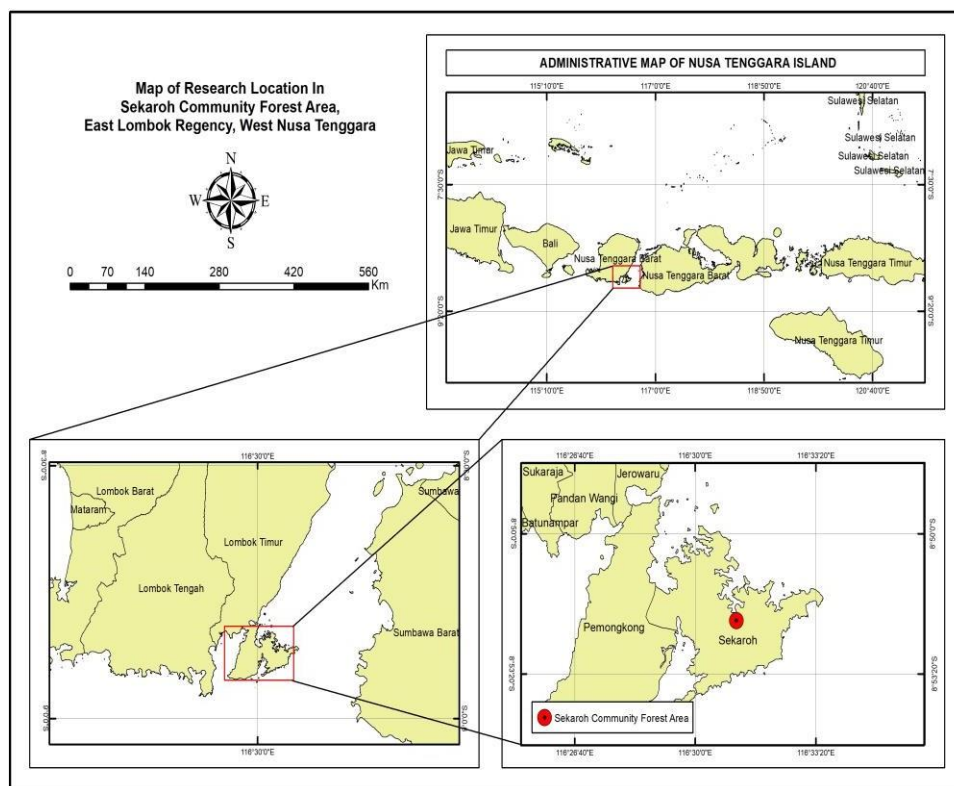


Figure 1: Research Location

- The data in this study consisted of two
1. Primary data is data obtained directly from research subjects using measurement tools or data collection tools directly on the subject as the source of the data being sought. Primary data is obtained from interviews and observations conducted by researchers. In this study, the data collected comes from interviews with informants and also through direct observations at the research location, as well as research documentation and others. With interviews and observations at the research location that will be carried out later, it will be able to provide convenience for researchers in collecting data related to porter's diamond competitive advantage for strengthening the green economy of Sekaroh corn farmers.
 2. Secondary data is obtained from official documents owned by the KPH Rinjani Timur as the HKM Sekaroh management institution.

Data collection techniques included interviews, documentation and FGDs. Interviews were conducted with informants including the Head of the KPH Rinjani Timur Management Unit, Sekaroh corn farmers and the head of Sekaroh Village. Data analysis used data reduction, data presentation and conclusion drawing. In the process of data analysis, some information from the transformation that has been carried out on eucalyptus planting in corn crop areas is integrated with the competitive advantage of Porter's diamond. Indicators in Porter's diamond analysis are *Determinants of competitive advantages*, Demand Conditions, Firm Structure, Strategy, and Rivalry, Related and Supporting Industries, and Government.

3. RESULTS AND DISCUSSION

Competitive advantage or competitiveness is an effort to achieve prosperity through strategic choices. Achieving HKm Sekaroh results that can compete effectively based on environmental quality and economic strengthening, must be produced competitively based on porter's diamond analysis:

1. Determinants of Competitive Advantages

Porter's Diamond concept states that "competitive advantage is created and sustained through highly localized processes." In addition, Porter also explains that differences in the structure, values, culture and economic institutions of a country or region affect its competitiveness along with traditional notions of resources and factor prices.

The Sekaroh HKm object illustrates the inevitable consequences of the biological nature of crop production, especially maize, which of course is closely linked to the possibility of disasters, such as degraded environmental quality. The following is information from field observations at HKm Sekaroh, which is presented based on several determinants according to the research conceptual framework determined earlier.

Factor Conditions Factor conditions are the "key" factors of production (or special factors) that are created. Specific factors of production that are considered most important in influencing the Sekaroh HKm include climate, infrastructure conditions, land resources, labor, and agro-tourism attractions. In accordance with Balc & Ray (2020), the competitive analysis of the fruit sector in Turkey always considers several factors, including the availability of technology, labor quality, crop varieties, accessibility for production and climatic conditions, so that it is currently superior.

Climate In general, the East Lombok Regency area in Sekaroh Village has a tropical climate. Because of the tropical climate, this region only recognizes two seasons, namely the dry season and the rainy season. Based on the topographic conditions at an altitude of 0 to less than 1000 meters above sea level, the rainfall in this area will affect both directly and indirectly the type and pattern of crops and the availability of water as a source of irrigation (hydrology). Climate, altitude, infrastructure and accessibility are important in maintaining competitive advantage (Riobes, et.al. 2011; Sterns and Spreen;2010).

The Sekaroh area is a group of dry areas with minimal availability of clean water. **Infrastructure Conditions** Infrastructure conditions in the context of this study are explained through the level of accessibility of the Sekaroh HKm area. Based on data obtained from the management of Sekaroh HKm, the infrastructure conditions related to the quality of roads in the village are already in a paved state, Land, for HKm needs, as much as approximately 543Ha is used as a corn plantation.

2. Demand Conditions

Demand conditions allow for higher customer demands in the economy, leading to greater pressure on companies to continuously improve their competitiveness through innovative and high-quality products. Demand conditions in this study are described in two main components,

namely the amount of HKm produce while maintaining environmental quality and the amount of supply demand for HKm produce. Environmental quality for fruit growth must be considered, while national and export demand opportunities are also prioritized (Balc and Ray, 2020).

3. Firm Structure, Strategy, and Rivalry

Porter (1990) identified competition as the most important driver of competitive advantage for a country's firms. Porter believes that domestic competition forces firms to compete on cost efficiency, quality improvement and innovation. In the context of firm strategy, structure, and competition, the presentation of results in the Sekaroh HKm results study is more specific to environmental quality assurance, market share, governance structure, and HKm results promotion strategies. In accordance with Sterns & Spreen (2010) Florida benefits from an extensive network of companies and related activities, such as tree nurseries for new trees, and irrigation companies. And others such as the Forestry Grouping for Investment, the Forestry Grouping for Reforestation (Groupements Forestiers, 2016).

Ensure environmental quality with a planned cropping pattern that reduces or replaces corn crops with plants that function positively towards the environment. One of them is planting eucalyptus. Currently, corn is planted between eucalyptus plants under the condition that the management is in accordance with the policies of the KPH Rinjani Timur. Furthermore, Market share provides a market place for producers, retailers and commission agents to conduct buying and selling transactions. With very limited exceptions, the marketing of Sekaroh HKm products has always been a concern of many parties, not least the private sector. The prevailing marketing channel not only utilizes a direct sales system (from farmers or traders to consumers), but also involves the movement of products to one of the wholesale markets. The market share of HKm Sekaroh's products includes local, regional and international markets.

The governance structure of HKm Sekaroh is run by corn farmers in Sekaroh through approval and has a work contract. Promotion strategy Promotion as part of the marketing function is one of the important factors that must be considered in an effort to boost revenue, expand market share and maintain the sustainability of HKm results. The management or manager, through assistance from the government (both village and district governments) is required.

4. Related and Supporting Industries

The availability of related and supporting industries can provide distinctive support for Hkm Sekaroh's output. This may facilitate the exchange of information and encourage the continuous exchange of ideas and innovations. Currently, there is a supporter for HKm Sekaroh, namely the Eucalyptus Leaf Supplier in Pringgasela. Like Cheng et.al (2018), organizing an environmentally friendly movement by changing unsustainable activities.

5. Government

The role of the government, both the village government and the East Lombok district government, in the development of Hkm Sekaroh products is as a facilitator and catalyst.

Porter (1990b) states that the government is the main buyer, so they can play a role in helping the national industry. Efforts to develop local excellence are supported by the rapid development of information and communication technology. The role of information technology can certainly be felt in various fields of community activity, including agriculture. Based on the competitive advantage in Porter's diamond model, it is then suggested that industries that are vulnerable to extraordinary events such as disasters, disease outbreaks, and others to be able to analyze strategies related to sustainable advantages.

The results of the analysis on the Sekaroh HKM yield excellence model, which includes four main areas namely (1) government involvement; (2) ownership structure; (3) Markets entered (national and regional); (4) environmental quality. Government involvement marks one of the biggest enablers in the sustainability of Sekaroh's HKM output. From supervising grower transactions to funding research and development, the East Lombok government will be involved in HKM management. Therefore, to offset the impact of HKM management on the environment can be minimized. Then a collaborative network needs to be formed between the eucalyptus industry and the local government and agricultural services, so that it has a very positive effect on the ability of HKM results in eucalyptus plants to maintain their competitive advantage nationally and even internationally. Government involvement is expected to be not limited to its function as a facilitator and catalyst, but also in capital subsidies and investment in machinery and equipment needed in the process of developing the quality of Sekaroh HKM products.

The ownership structure in HKM Sekaroh is based on management rights, which means that the land is utilized by local farmers (Sekaroh community). Porter argues that in countries that tend to be successful in industry, where the organizational management practices and models favored by a particular region are well suited to the industry's source of competitive advantage. Sekaroh's HKM results are influenced by its management, so a clear structure is needed. The existence of widespread management of Sekaroh HKM processing, can alleviate losses that are tangible. Growers or farmers of any size can access management practices that are incompatible with the function of the area because these practices are developed and educated in the form of general education and training, so that the management company will be able to quickly develop a high level of expertise in new practices. Gomes da Silva (2020) explains that this tax as management applies to persons and business entities that carry out economic activities to intensively use, combine, or transform forest resources.

Market Entry Porter (1990) recognizes that the size of domestic demand in a particular industry may be important for national advantage where there are significant economies of scale or learning, but he considers the presence and demands of sophisticated buyers to be even more important. As industries develop, domestic consumers demand a higher variety of requirements, such as design, service, or brand along with competitive prices. In the less developed Sekaroh HKM area, industry functionality and availability. As the industry advances, domestic buyers demand a higher level of standards to suit their tastes as well as various items needed in their diverse lifestyles (e.g. time, place, and occasion). Given that consumer demand is increasing year on year, the HKM product market for eucalyptus will have

bright prospects in the future. Environmental quality is a concern in the utilization of HKm Sekaroh land. Communities that are currently planting corn with provisions between eucalyptus trees are given knowledge to maintain the development of eucalyptus trees. In addition, in planting activities until the post-harvest of corn, they always protect the environment. So that in this implementation there is supervision from the government. Eucalyptus plants have two ecological and economic benefits. Eucalyptus plants are ecologically beneficial because they take the form of conservation as they contribute to the global carbon cycle. Furthermore, the economic benefits of eucalyptus plants are from processing eucalyptus leaves into eucalyptus oil as an important source of income besides forest products in the form of wood products. The potential of eucalyptus plants can absorb CO₂ gas (Martonoet.al 2020).

4. CONCLUSION

HKm (community forest) Sekaroh is one of the production forest areas that can be managed by the community with a protective function. Analysis of the competitive advantage of porter's diamond from the transition of corn crops to eucalyptus crops to strengthen the green economy of corn farmers indicates that eucalyptus crops have positive potential for strengthening the economy and ecological quality with consideration of factor conditions (including: climate, infrastructure conditions, land, labor, attractiveness); demand conditions (amount of supply demand); structure, strategy, and company competition (market share, governance structure, promotion strategy); related and supporting industries (industry); and the role of government. Competitive advantages in eucalyptus plant management in HKm Sekaroh have implications for sustainability advantages based on four main dichotomies, namely government involvement, ownership structure, market (which the industry enters), and uncontrolled expansion from other areas.

Reference

- 1) Akmaludin, L., Wilian, S., & Sukardi, S. (2019). Study of the Competitiveness of Vocational High School Graduates towards Learning Outcome in Central Lombok Regency. *International Journal of Multicultural and Multireligious Understanding*, 6(3), 652-659.
- 2) Alamsyah, I., & Sulistyorini, E. (2020). Implementation of Porter's Diamond Model in Community Forest Area Management to Realize Green Economy (Ecological Economic Sustainability) in Sekaroh, East Lombok. *IOP Conference Series: Earth and Environmental Science*, 467, 012003. doi: 10.1088/1755-1315/467/1/012003
- 3) Anggraini, N., & Astuti, N. W. (2021). The Implementation of Porter's Diamond Model in the Management of Community Forest Areas in Sekaroh, East Lombok. *IOP Conference Series: Earth and Environmental Science*, 668, 012014. doi: 10.1088/1755-1315/668/1/012014
- 4) Balai KPH Rinjani Timur. (2022). Producing Thousands of Tons Per Season, KPH Rinjani Timur Can't Ban Residents from Planting Corn. Downloaded from: <https://kmisfip2.menlhk.go.id/news/detail/1244>
- 5) Balç, D., & Giray, F. H. (2020). Competitive Analysis of Isparta Fruit Sector through Diamond Model. *Turkish Journal of Agriculture: Food Science and Technology*, 8(3), 784-792. <https://doi.org/10.24925/turjaf.v8i3.784-792.3358>

- 6) Beires, R. S. (2013). O cadastro e a propriedade rústica em Portugal. Fundação Francisco Manuel dos Santos.
- 7) Bikse, V., Rivža, B., Brence, I. (2013). Competitiveness and quality of higher education: Graduates' evaluation. *Journal of teacher education for sustainability*, 15 (2), 52-66.
- 8) Brand, U. (2012). Green economy-the next oxymoron? No lessons learned from failures of implementing sustainable development. *GAIA-Ecological Perspectives for Science and Society*, 21(1), 28-32.
- 9) Cavusoglu, N., Horn, R., Jerome, R., & Cavazos, D. (2018). The Turkish soap operaindustry: A case study of the porter model of national advantage. *JIMS* 18 (1): 45-54. Cheng, W., Appolloni, A., D'Amato, A., & Zhu, Q. (2018). Green Public Procurement,missing concepts and future trends - A critical review. *Journal of Cleaner Production*, 176, 770-784. <https://doi.org/10.1016/j.jclepro.2017.12.027>
- 10) Darma, G. S., Wibawa, I. N., & Sulistyorini, E. (2020). The Implementation of Porter's Diamond Model in Community Forest Management to Realize Sustainable Livelihoods in Sekaroh, East Lombok. *IOP Conference Series: Earth and Environmental Science*, 450, 012002. doi: 10.1088/1755-1315/467/1/012002
- 11) Deng, F., Liu, G., & Jin, Z. (2013). Factors formulating the competitiveness of the Chinese construction industry: Empirical investigation. *Journal of Management in Engineering*, 29(4), 435-445.
- 12) Department of Agriculture and Industry of NTB Province. (2023). Recapitulation of Maize Production, Harvested Area, and Productivity by Regency/City in NTB Province 2001-2021. Downloaded from: <https://data.ntbprov.go.id/dataset/rekapitulasi-luas-panen-produksi-danproduktivitas-jagung-di-provinsi-ntb>
- 13) Dwyer, L., & Kim, C. (2003). Destination competitiveness: determinants and indicators. *Current Issues in Tourism*, 6 (5), 369-414.
- 14) Echtner, C. & Ritchie, J. (2003). The meaning and measurement of destination image. *The Journal of Tourism Studies*, 14(1), 37-48.
- 15) Enright, M., & Newton, J. (2005). Determinants of tourism destination competitiveness in Asia Pacific: comprehensiveness and universality. *Journal of Travel Research*, 43(4), 339- 350.
- 16) Eskak, E. (2016). The crisis of raw materials for wood crafts in Jepara and its solutions.
- 17) Dynamics of Crafts and Batik: *Scientific Magazine*, 30(2), 73-84.
- 18) Estevao, C., Nunes, S., Ferreira, J., & Fernandes, C. (2018). Tourism Sector Competitiveness in Portugal: applying Porter's Diamond (A competitividade do setor do turismo em Portugal: aplicando o diamante de Porter). *Tourism & Management Studies*, 14 (1), 30-44.
- 19) Fahmi, A., & Nurdin, F. (2020). Implementation of Porter's Diamond Model in Community Forest Management in Sekaroh, East Lombok. *IOP Conference Series: Earth and Environmental Science*, 400, 012001. doi: 10.1088/1755-1315/467/1/012001
- 20) Foster, N., & Clark, G. (2008). *The diamond advantage: How the competitive advantage of nations arises and sustains*. New York: Palgrave Macmillan.
- 21) Gomes da Silva, F. (2020). A nova taxa sobre a floresta: se ainda mexe, taxe-se. *Agroportal*. <https://www.agroportal.pt/a-nova-taxa-sobre-a-floresta-se-ainda-mexe-taxe-se/>
- 22) Groupements Forestiers. (2016). *Fransylva-Paca.Fr*. <http://fransylva-paca.fr/wp/groupementsforestiers/>
- 23) Handayani, I. G. A. E., Sulistyorini, E., & Widiastuti, N. K. (2021). The Implementation of Porter's Diamond Model in Community Forest Management for Sustainable Livelihoods in Sekaroh, East Lombok. *IOP Conference Series: Earth and Environmental Science*, 304, 012013. doi: 10.1088/1755-1315/668/1/012013

- 24) Kaplan, R. S. (2009). Conceptual foundations of the balanced scorecard. *Handbooks of management accounting research*, 3, 1253-1269.
- 25) Khairunnisa, N. K., Sulistyorini, E., & Handayani, I. G. A. E. (2021). The Implementation of Porter's Diamond Model in Community Forest Management to Realize Sustainable Livelihoods in Sekaroh, East Lombok. *IOP Conference Series: Earth and Environmental Science*, 405, 012012. doi: 10.1088/1755-1315/668/1/012012
- 26) Lako, A. (2015). *Green Economy: Greening Economics, Business, & Accounting*. Jakarta: Erlangga.
- 27) LCDI. (2022). Indonesia has a Green Economy Index. Downloaded from: <https://lcdiindonesia.id/2022/08/25/indonesia-miliki-indeks-ekonomi-hijau/>
- 28) Martono, D.S., Setiahadia, R., Rahayua, S., Wuryantoroa, & Atmajab, A.P. 2020. Estimation of Carbon Storage of Community Forest through Timber Legality Assurance System. *International Journal on Advanced Science Engineering Information Technology*. Vol.10 (4). Doi. DOI:<http://dx.doi.org/10.18517/ijaseit.10.4.4098>
- 29) Muda, I. N., & Sulistyorini, E. (2020). Implementation of Porter's Diamond Model in Community Forest Management in Sekaroh, East Lombok. *IOP Conference Series: Earth and Environmental Science*, 201, 012004. doi: 10.1088/1755-1315/467/1/012004
- 30) Mulyati, H. (2010). Analysis of the characteristics of leather jacket SMEs in Garut Regency using Porter's "Diamond" model. *Journal of Management and Organization*, 1(1), 30-29.
- 31) Navickas, V. & Malakauskaite A. (2009). The possibilities for the identification and evaluation of tourism sector competitiveness factors. *The Economic Conditions of Enterprise Functioning*, 1(61), 3744.
- 32) Nurbasari, N., Sulistyorini, E., & Alamsyah, I. (2021). The Implementation of Porter's Diamond Model in Community Forest Management to Realize Sustainable Livelihoods in Sekaroh, East Lombok. *IOP Conference Series: Earth and Environmental Science*, 205, 012011. doi: 10.1088/1755-1315/668/1/012011
- 33) Ozer, K., Latif, H., Sarusik, M. & Ergun, O. (2012). International competitive advantage of Turkish tourism industry: a comparative analysis of Turkey and Spain by using the diamond model of M. Porter. *Procedia-Social and Behavioral Sciences*, 58, 1064- 1076.
- 34) Ozer, K., Latif, H., Sarusik, M. & Ergun, O. (2012). International competitive advantage of Turkish tourism industry: a comparative analysis of Turkey and Spain by using the diamond model of M. Porter. *Procedia-Social and Behavioral Sciences*, 58, 1064- 1076.
- 35) Ozer, S. S. Y., Latip, H. A. & Awang Marikan, D. A. (2013). Porter's Diamond Analysis on Competitiveness advantage of convention tourism: A case study on Sarawak convention tourism industry. *Proceedings of the 2nd Annual International Conference on Tourism and Hospitality Research (THoR)*: 52-61.
- 36) Ozgen, E. (2011). Porter's Diamond Model and opportunity recognition: A cognitive perspective. *Academy of Entrepreneurship Journal*, 17 (2), 61-76. [Man, M., & Byun, S. (2011). Accessing opportunities in apparel retail sectors in India: Porter's Diamond approach. *Journal of Fashion Marketing and Management: An International Journal*, 15(2), 194-210.
- 37) Porter, M. E. (1990). The competitive advantage of nations. *Harvard Business Review*, 68(2), 73-83.
- 38) Porter, M. E. (1998). *The competitive advantage of nations* (with a new introduction by the author. Basingstoke: Macmillan.
- 39) Rakhman, F. (2019). Corn Land Encroaching NTB Forest Triggers Disaster. downloaded from: <https://www.mongabay.co.id/2019/01/11/ladang-jagung-rambah-hutan-ntb-picu-bencana/>

- 40) Riase, A. (2015). Competitive advantages of shadow banking industry: An analysis using Porter Diamond Model. *Business Management and Strategy*, 6 (2), 15-27.
- 41) Sterns, J. A., & Spreen, T. H. (2010). Evaluating Sustainable Competitive Advantages in Brazilian and U.S. Processed Citrus Supply Chains: An Application of Porter's Diamond Framework. *International Journal on Food System Dynamics*, 1(2), 167-175. <https://doaj.org/article/0240e10fb17d49f1990c4be5804d8e8b>
- 42) Voice of NTB. (2020). For the Sake of Corn Land, Residents Gnaw on the Forest. Downloaded from: <https://www.suarantb.com/2020/01/04/demi-lahan-jagung- warga-gerogoti-hutan/>
- 43) Sukardi, S., Rusdiawan, R., & Wardana, L. (2019). The Competitiveness of Master of Education Graduates: Porter's Diamond Analysis. *International Journal of Emerging Tehcnologiesin Learning (iJET)*, 14(19), 179-187. <https://doi.org/10.3991/ijet.v14i19.10767>
- 44) Sukardi, W., & Fahrurrozi, M. (2019). Vocational education: A missing link for the competitive graduates? *International Education Studies*, 12(11).
- 45) Suparmoko, M. (2020). The Concept of Sustainable Development in National and Regional Development Planning. *Journal of Economics and Management*, 9(1), 39-50.
- 46) Suprpto, W. (2011). The effect of exports of non-oil and gas industry products on the manufacturing industry sector and its implications for unemployment in Indonesia. *Journal of Economics*, 13(1), 56-68.
- 47) Susanti, D. D., & Wicaksono, A. M. (2019). Building a Green Economy with an Agricultural Base in Central Java Province in 2013-2018. *Journal of Research and Development of Central Java Province*, 17(2), 159-167.
- 48) Tavares, K. (2011). Influences on tourism destination image beyond marketing: people, power, place. *Studies by Undergraduate Researchers at Guelph*, 4 (2): 42-48.
- 49) Tempo.co. (2022). 2030, Bappenas Sets Target of 1.8 Million Workers in Indonesia's Green Economy Sector. Downloaded from: <https://bisnis.tempo.co/read/1621159/2030- bappenas-patoktarget-18-juta-tenaga-kerja-di-sektor-ekonomi-hijau-ri>
- 50) Tri, S. (2019). Academic manuscript of the draft regional regulation of Semarang district on the 2019-2039 district industrial development master plan.
- 51) Tsiligiris, V. (2018). An adapted Porter Diamond Model for the evaluation of transnational education host countries. *International Journal of Educational Management*.
- 52) Yasa, I. G. W. M. (2010). Green Economy, Cleaner Production and Creative Economy: An Approach to Preventing Environmental Risks toward Quality Economic Growth in Bali Province. *Bumi Lestari Journal*, 10(2), 285-294.