

Strategies of Shrimp Exports for Lampung's Sustainable Economic Growth

ABSTRACT

Shrimp exports have a strategic role in supporting sustainable economic growth in Lampung Province, Indonesia. Lampung's geographical advantages such as long coastline and proximity to the Sunda Strait have positioned the province as one of the main shrimp production centers in the country. This study aims to examine the potential of shrimp exports in driving sustainable economic growth in Lampung by analyzing their economic contribution, role in international trade, and long-term development prospects. The research employs a qualitative descriptive approach, using secondary data from government publications, international organizations, and relevant academic literature. The results show that shrimp exports make a significant contribution to Lampung's regional economy. Shrimp dominates Lampung's fishery export commodities and generates multiplier effects for supporting sectors. Lampung's shrimp exports reflect liberal economic principles and economic interdependence, where Lampung benefits from its comparative advantage while importing countries rely on a stable supply of shrimp products. Sustainable shrimp export development requires improved production efficiency, strengthened cold chain systems, market diversification, and environmentally responsible aquaculture practices. In conclusion shrimp exports strategies have strong potential as a long-term strategy to enhance Lampung's economic resilience and support Indonesia's competitiveness in the global seafood market.

Keywords: *Strategies, Potential, Shrimp's Exports, Lampung, Sustainable Economic Growth*

INTRODUCTION

The potential of Lampung marine products like shrimp has become a main commodity and a source of regional income. Lampung's shrimp products are exported to various countries such as Japan, the United States, and European countries. According to data from the Central Statistics Agency (BPS), shrimp exports from Lampung have consistently shown a positive trend over the past five years with export values reaching hundreds of millions of US dollars annually.

Under autonomy regulations, provincial governments have the authority to manage natural resources and develop local potential. This opens opportunities for regions to strengthen economic independence through leading sectors including fisheries. This study aims to analyze the potential and role of shrimp exports as a driver of economic growth in Lampung Province. This research is expected to provide an overview of product potential especially shrimp which is one of the pillars of the regional economy.

This research also aims to expand knowledge regarding the role of shrimp commodities in supporting regional development in Lampung. By presenting data and analysis regarding shrimp production and export levels, this research is expected to serve as an initial reference for researchers who wish to delve deeper into the dynamics of the regional economy based on natural resource potential. This research uses theories that support the analysis of shrimp export potential in regional economic development. First, David Ricardo's Theory of Comparative Advantage states that a region will gain greater economic benefits if it focuses on the production and export of commodities in which it excels. Lampung has great potential in shrimp production due to its strategic geographic factors and supporting fisheries infrastructure. Therefore, shrimp exports are considered to be a major driver in increasing regional competitiveness in the global market. Second, Walt Rostow's Theory of Economic Growth explains that the export sector can be a driving force in the stages of a region's economic growth. In this context, increasing shrimp exports is seen as capable of driving regional income growth, creating jobs, and attracting investment in the fisheries sector and related industries. Third, the theory of Sustainable Development emphasizes the importance of a balance between economic growth, environmental preservation, and social welfare.

RESEARCH METHODS

This research uses a qualitative approach with descriptive analysis. Through this study the researcher aims to examine how shrimp exports have the potential to support sustainable economic growth in Lampung. In this study, the researcher will analyze using selected concepts and theories supported by the facts found. Descriptive analysis aims to explore this issue in greater depth.

Alan Bryman and Bell stated that the term "qualitative research" is used to describe a social research approach in which a problem cannot be solved solely through quantitative data (Bryman & Bell, 2019). Many qualitative researchers are highly critical of this interpretation of qualitative research, as the distinctiveness of qualitative research lies not solely in the absence of numbers. A qualitative approach uses inductive techniques in problem-solving, unlike quantitative approaches, which are deductive. The researcher considers this type of research relevant to explaining the problem at hand, as the issue at hand concerns how shrimp exports can support sustainable economic growth in Lampung. The steps of the qualitative approach used in this research are as follows (Bryman & Bell, 2019):

1. Formulating a general problem;
2. Selecting relevant sites and subjects;
3. Collecting relevant data;
4. Data interpretation;
5. Determining the conceptual framework and relevant theories;
 1. 5a. Specifying the problem formulation;
 2. 5b. Further data collection and data interpretation;
6. Writing findings and conclusions;
3. With these steps, this research will answer the questions raised

RESULT AND DISCUSSION

Lampung Province has demonstrated dynamics in its shrimp export sector reflecting both growth potential and structural vulnerabilities. In 2020, fisheries export volume increased by 5.6%, with shrimp exports reaching 17,487 tons (Lampung Province Communication and Information Office, 2022). Export performance showed monthly fluctuation indicating sensitivity to both internal production conditions and external market forces (Lampung Province Central Statistics Agency, 2020). A sharp decline of 4.93% in August 2020 suggested constraints related to competitiveness and market access, while a strong rebound in October 2020 marked by an 8.22% increase reflected temporary recovery driven by improving global demand, supportive policy measures, and enhanced product quality. In October 2020 the United States, Italy, and China emerged as the principal destinations and the top ten importing countries collectively accounted for more than 70% of the province's total export value. During the 2019–2020 period Lampung contributed approximately 10–12% of Indonesia's total exports ranking third nationally after East Java and Central Java. This position underscores Lampung's importance in supporting Indonesia's export performance and its growing integration into global seafood trade networks.

Export volatility intensified in 2021 when fish and shrimp exports declined by 31.37% followed by a substantial recovery in September with an increase of 41.22%. This rebound was primarily supported by rising demand from China, the United States, and Italy, with China becoming the largest export destination in terms of value (Lampung Province Central Statistics Agency, 2021). In 2022, fish and shrimp exports experienced a further contraction of 24.18%, although there is a surge of 28.59% in December showing seasonal

recovery and renewed import demand. By the third quarter of 2022, the total value of shrimp exports reached IDR 1.26 trillion; this represented an 11.2% year-on-year decline because of reduced export shipment frequency and weakening demand in major destination countries (BKIPM Lampung Province, 2022). High inflation in the United States where the Consumer Price Index rose to 8.2% and core inflation reached 6.6% in September 2022 suppressed consumer purchasing power and limited shrimp imports from Lampung (U.S. Department of Labor, 2022). These conditions led to excess inventories at shrimp processing facilities prompting exporters to increase shipment volumes per consignment.

The downward trend perform throughout 2023 with fish and shrimp exports declining in several months including a peak contraction of 38.99% in May, although recovered to 15.58% in December (Lampung Province Central Statistics Agency, 2023). India and the United States became the leading export destinations at the end of the year followed by the Netherlands, South Korea, and China showing market diversification despite there is export pressure. At the national level Indonesia's shrimp exports declined from 2023 to September 2024 falling to USD 1.73 billion in 2023 or 19.8% lower than in 2022 because of the imposition of countervailing duties and anti-dumping measures in the United States market which recorded a 9.1% decline despite remaining Indonesia's primary export destination (Ministry of Maritime Affairs and Fisheries, 2024). In 2024, Lampung Province recorded fishery product exports valued at IDR 936.11 billion with shrimp exports totaling 1,048.66 tons and valued at IDR 136.66 billion destined for the United States and Japan. The emergence of Timor Leste as a new export destination indicates potential opportunities for market expansion amid challenges in traditional export markets (BPPMHKP; Antara News, 2024).

Perspective of Liberalism Theory

Lampung's engagement with multiple shrimp-importing countries through trade cooperation, technology transfer, quality standard enhancement, and human resource development reflects a pattern of international economic interaction that aligns closely with the liberalist tradition in international relations which views economic cooperation as a foundation for mutual gains and international stability which emphasizes free trade as a mechanism that nations can use to increase welfare by allowing market forces and specialization to operate without excessive state intervention (Smith, 1776). This idea was further added by David Ricardo through the *theory of comparative advantage* which argues that when a country lacks absolute superiority it can still benefit from

international trade by specializing in goods with lower opportunity costs (Ricardo, 1817). In Lampung, comparative advantage is shown by its abundant coastal resources, favorable tropical climate, and competitive labor costs enabling efficient shrimp production at a lower relative cost. This specialization reinforces Lampung's role within the global shrimp trade that shows the implementation of classical liberal trade theory at the subnational level. The dynamics of Lampung's shrimp exports can also be understood through the view of neoliberal institutionalism through the concept of complex interdependence. States and non-state actors are also interconnected through various channels of economic exchange reducing the likelihood of conflict and increasing incentives for cooperation (Keohane & Nye, 1977).

Organizations such as the Food and Agriculture Organization (FAO) and the World Trade Organization (WTO) establish rules, standards, and dispute settlement mechanisms that facilitate stable and predictable international trade. These institutions reduce transaction costs, enhance transparency, and build trust among trading partners. Compliance with international food safety standards, traceability requirements, and sanitary regulations enables Lampung's shrimp products to remain competitive in global markets in highly regulated destinations such as the United States, Japan, and the European Union. Lampung has long been recognized as one of Indonesia's shrimp production centers with shrimp ponds covering more than 21,000 hectares and contributing approximately 20% of national shrimp output (Lampung Province Maritime Affairs and Fisheries Office, 2020). The cultivation of high-value species such as whiteleg shrimp (*Litopenaeus vannamei*) and tiger shrimp (*Penaeus monodon*) supports Lampung's integration into global value chains. The presence of integrated firms such as PT Central Pertiwi Bahari, PT Dipasena Citra Darmaja, and PT Wahyuni Mandira illustrates how private actors function as key agents within liberal economic systems by connecting local production to international markets (Wahyudi et al., 2019). At national level, Indonesia ranks among the world's leading shrimp exporters, competing with countries such as India, Vietnam, Ecuador, and Thailand. In 2023 Indonesian shrimp exports reached approximately USD 1.8 billion with Lampung contributing an estimated 15–20% of this total (Ministry of Maritime Affairs and Fisheries, 2023). From a liberal economic perspective, Lampung's ability to adapt to diverse market requirements like strict food safety regulations in the United States and quality-oriented preferences in Japan demonstrates how comparative advantage, institutional

cooperation, and interdependence shape sustainable participation in the global seafood trade together.

National Interest and Interdependence in Lampung Shrimp Exports

National interest is a concept which shapes a country's foreign policy based on a realist perspective that prioritizes national security and resource availability (Dermawan, 2019). National interest is a vital element of a nation's needs encompassing the survival of nations and states, independence, territorial integrity, military security, and economic prosperity. Therefore it is always prioritized in every decision making or action taken by a government toward other countries whether positive or negative (Oppenheim, 1987). Lampung's shrimp exports reflect Indonesia's broader economic interests as they not only contribute to regional income but also support Indonesia's position as one of the world's largest shrimp producers. Through the Ministry of Maritime Affairs and Fisheries (KKP), the government aims to make Indonesia a global leader in the shrimp industry.

Shrimp is not only a key export commodity for Indonesia but also for several countries such as Vietnam, Thailand, India, and Ecuador (Rachmawati et al., 2021). Lampung can boost its regional economic growth through shrimp exports which contribute a significant percentage to Lampung's Gross Regional Domestic Product (GRDP). Data shows that the fisheries sector with shrimp as its primary commodity has become one of the largest contributors to GRDP after agriculture. Jobs are created not only in shrimp ponds but also in processing industries, feed mills, cold storage units, and logistics services which can reduce unemployment and increase per capita income. Local MSMEs such as fishery product processors and pond equipment providers benefit from this export market. Shrimp exports are a driving force for the development of more efficient and sustainable aquaculture technologies through local government's efforts to practice responsible aquaculture practices such as waste management and environmental conservation to the sector's sustainability. Shrimp exports aims to strengthen international relations through trade because it support the view that foreign policy is designed to maximize economic opportunities in the international system for national welfare.

Lampung's shrimp exports can be viewed through the concept of interdependence which involves mutual dependence between Lampung as a shrimp producer and its export destination countries. This mutual dependence

between countries through international trade is explained by the theory of interdependence where countries depend on each other to meet the demand for commodities that cannot be produced efficiently. Lampung contributed 56.91% of Indonesia's shrimp exports (2021) with a value reaching IDR 136.66 billion as of August 2024. Major destination countries such as the US, Japan, and China rely on Lampung's shrimp supply requiring this market for their economic growth. Government policies such as the "National Shrimp Barn" target strengthen Indonesia's bargaining position but also increase global market dependence on Lampung's supply. Furthermore 89% of Lampung's shrimp exports demonstrate deep integration within trade networks influenced by factors such as exchange rates and the sanitary policies of importing countries. Lampung's shrimp exports represent a clear example of global economic interdependence where regional comparative advantages align with international market needs.

Contribution of Shrimp Exports to the Economic Growth of the Lampung Region

Lampung enjoys a strategic geographic location which support superior fishery commodities in Indonesia. In 2023, shrimp has demonstrated significant performance in increasing Lampung Province's gross regional domestic product (GRDP). According to data presented by the Lampung Province Central Statistics Agency (BPS), Lampung's export growth reached 5.89% in 2023. This export growth was driven by increased exports in the fisheries sector, with shrimp as the primary commodity (BPS Lampung, 2024). In 2023, Lampung Province's fishery exports reached IDR 2.1 trillion with shrimp as the primary commodity. Shrimp export volume reached 10,209 tons with 886 shipments contributing IDR 1.3 trillion in revenue or approximately 61.9% of the total. This increase in export value directly increases Lampung Province's foreign exchange reserves and can boost growth in the fisheries sector. According to the Lampung Provincial Maritime Affairs and Fisheries Office total fisheries production in 2023 reached 343,000 tons, with 14.4,000 tons allocated for export dominated by shrimp and swimming crab. This demonstrates that Lampung's production quality meets international export standards (Lampung Provincial Government, 2024).

Lampung's shrimp exports not only increase the value of international trade but also impact the regional economy. The impact of shrimp exports is shown in increased regional revenues including taxes, levies, and other related

sectors. Increased exports also create increased demand for port services, transportation services, and the provision of raw materials for fish feed, seeds, and medicines. This demonstrates the strengthening of the local economic structure and the indirect improvement in community welfare resulting from shrimp exports.

Shrimp exports provide short-term and long-term contributions that can boost economic growth in Lampung Province. In the long term developing shrimp exports can be a key strategy for achieving regional economic resilience. By diversifying export markets, increasing production capacity, and strengthening Lampung's shrimp brand as a leading national product, Lampung's position in global world will be further strengthened. Government efforts to encourage Small and Medium Enterprises (SMEs) to participate in the export value chain are also expected to distribute economic benefits to the community. The local government, business actors, and other supporting institutions work together and synergize to achieve this goal. The local government also invites relevant agencies, namely Pelindo II, the Harbormaster and Port Authority Office (KSOP), Customs and Excise, the Fish Quarantine Office, and the Port Health Office, to collaborate to streamline Lampung's shrimp export process and ensure product quality meets international standards.

The above explanation concludes that shrimp exports make a significant contribution to the economic growth of Lampung Province. With exports reaching IDR 1.3 trillion in 2023, shrimp is a key player in the fisheries sector and a significant source of foreign exchange for Lampung Province. In addition to boosting regional economic growth, shrimp exports can also create jobs, improve community welfare, and strengthen the local economy.

Export Competitiveness Enhancement Strategies

1. Trade Cooperation: trade relations has been developed with various shrimp importing countries. This cooperation is facilitated by various trade agreements such as the ASEAN Free Trade Area (AFTA), the Indonesia-Japan Economic Partnership Agreement (IJEPA), and various other free trade agreements (FTAs) (Ashari et al., 2016). These agreements have gradually reduced tariff and non-tariff barriers, thereby facilitating the flow of shrimp exports from Lampung to trading partner countries.

2. **Investment Cooperation:** Several foreign companies have invested in Lampung's shrimp industry, both through direct investment and joint ventures with local companies. Foreign investment brings not only capital but also technology, modern management, and access to global markets (Pramastya, 2021). Examples include investments from Thai and Japanese companies in the development of intensive shrimp ponds and shrimp processing plants in East Lampung and South Lampung.

3. **Technology Transfer:** Lampung has made cooperation in shrimp cultivation and processing technology with developed countries such as Japan, Taiwan, and Thailand. This technology transfer encompasses intensive cultivation techniques, biofloc systems, feed technology, disease control, and environmentally friendly post-harvest technology. Through this technology transfer, shrimp pond productivity in Lampung can be increased while reducing negative impacts on the environment.

4. **Standardization and Certification:** To meet increasingly tight global market requirements, Lampung has developed standardization and certification collaborations with various countries and international institutions. Standards such as HACCP (Hazard Analysis Critical Control Points), BAP (Best Aquaculture Practices), ASC (Aquaculture Stewardship Council), and various other food safety standards have been adopted by shrimp producers in Lampung. Adoption of these standards not only improves access to international markets but also encourages sustainable farming practices.

CONCLUSION

Shrimp exports play a strategic role in driving economic growth in Lampung Province. Its strategic location with a long coastline and direct access to the Sunda Strait has made Lampung as one of Indonesia's major shrimp production centers (BPS Lampung, 2023). Shrimp has become a leading commodity contributing to the regional economy through international trade activities (KKP RI, 2023). In recent years Lampung's shrimp exports have shown a fluctuating trend with export volume reached 17,487 tons representing a 5.6% increase compared to 2020 (BPS RI, 2023). Despite several downturns the fisheries sector remains highly dependent on shrimp exports (FAO, 2022). Major export destinations such as United States, China, Japan, the Netherlands, Italy,

South Korea, and several Asian countries (KKP RI, 2023). Lampung ranks as the third-largest shrimp exporter after East Java and Central Java, contributing approximately 10–12% of Indonesia's total shrimp exports (BPS RI, 2023).

Lampung's shrimp exports can be analyzed through liberalism and the concept of interdependence (Keohane & Nye, 2012). Liberal economic principles emphasize free trade and comparative advantage which are reflected in Lampung's cooperation with shrimp-importing countries (Krugman et al., 2018). Importing countries depend on a stable supply of shrimp while Lampung benefits from its natural and structural comparative advantages in shrimp cultivation (Ricardo, 1817). This reciprocal relationship creates economic interdependence between exporting and importing countries (Keohane & Nye, 2012).

The contribution of shrimp exports to Lampung's regional economic growth is substantial. In 2023 the total value of Lampung Province's fishery exports reached IDR 2.1 trillion with shrimp contributing approximately IDR 1.3 trillion or 61.9% of the total export value (BPS Lampung, 2023). This sector not only supports Gross Regional Domestic Product (GRDP) growth but also generates employment across shrimp farming, processing, and distribution activities (Todaro & Smith, 2015). Supporting sectors such as logistics, transportation, and export services have expanded alongside shrimp exports, creating a multiplier effect on the local economy (World Bank, 2021).

Lampung's shrimp export growth is supported by abundant natural resources, extensive cultivation land, technological innovation, favorable government policies, access to global markets, and a strong international reputation (Porter, 1990; KKP RI, 2020). Shrimp exports are not only important for Lampung's regional economy but also support Indonesia's strategic position in global trade (Morgenthau, 2006). Through the Ministry of Maritime Affairs and Fisheries the Indonesian government seeks to place the country as a global shrimp industry leader with Lampung as a key contributor to foreign exchange earnings (KKP RI, 2020). In the long term shrimp export development can serve as a strategic foundation for strengthening Lampung's economic resilience through export diversification, increased production capacity, and enhanced product branding (World Bank, 2020). The inclusion of small and medium enterprises (SMEs) in the shrimp export value chain is also expected to promote more equitable economic distribution and sustainable local development (Todaro & Smith, 2015).

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