

## **Seaweed Export Policy and its Improvement in the Context of Indonesia's Post-National Economic Recovery Pandemic**

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### **Abstract**

*The purpose of this study is to determine seaweed export policies in increasing income and post-pandemic national economic recovery. The impact of seaweed development policies and strategies, and analyze alternative effective business development policy strategies to increase seaweed farmers' incomes and state revenues in the national economic recovery. The research method is descriptive qualitative. The descriptive approach is to obtain a complete and accurate description of a situation. The results of this study are: Seaweed business development policy which refers to the seaweed cultivation development plan with seaweed business assistance programs facilitated by the government. Seaweed farming business strategies to increase production are a) development of cultivated products, b) provision of training in stages, c) providing consultation, d) optimizing existing production capacity, e) expanding planting areas, f) optimizing production, g) increasing funds, h) expanding and maintaining marketing networks.*

**Keywords:** Policy, Strategy, Export, Seaweed.

### **INTRODUCTION**

Indonesia has enormous opportunities and potential for marine commodity cultivation to be developed. The potential area of marine aquaculture is estimated to reach 26 million Ha, and approximately two million ha of which are very potential for seaweed development with an average dry seaweed production potential of 16 tons per Ha (Heijden, 2022). The demand for seaweed is increasing in line with the increase in population and the growth of seaweed-based industries, as well as the tendency of the world community to return to natural products.

Based on data from the MMAF (Ministry of Marine Affairs and Fisheries) of the Republic of Indonesia, if all land can be utilized, approximately 32 million tons of dried seaweed will be obtained per year. If the price of seaweed is Rp 4.5 million per ton, then the revenue obtained is around Rp 144 trillion per year (Efendi, 2017). The potential of seaweed in Indonesia can be one of the sources of income for the country's foreign exchange and is also able to make Indonesia the world's largest exporter of dried seaweed.

Seaweed commodities include products that have high economic value, this is because there are various kinds of products in everyday life sourced from the use of seaweed. The development of current technology can encourage the use of seaweed into a wider

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product, this can increase the demand and production of seaweed in various countries. Indonesia as a producing country markets its seaweed products domestically (domestic) and abroad (export). Indonesia is included in the largest seaweed exporter in the world, this can be seen in the following table:

Table 1. Volume and value of world seaweed exports by major exporting countries in 2021

Country Exporter	Volume (Ton)	Volume Contribution (%)	Value (000 US\$)	Value Contribution (%)
Indonesian	181.524	37,03	183.388	30,07
Ireland	80.800	16,48	35.134	5,76
Chile	68.837	14,04	87.323	14,32
Peru	29.642	6,05	19.972	3,27
South Korea	29.157	5,95	242.452	39,75
Other	100.277	20,45	41.656	6,83
World	490.237	100	609.925	100

Source: UN Comtrade, 2022

The table above shows that Indonesia is superior as the largest seaweed exporting country in terms of volume, with a contribution of 37.03 percent or 181,524 tons. When viewed in terms of export value, South Korea is superior to Indonesia with an export value of 242,452 thousand US\$, while Indonesia ranks 2nd with an export value of 183,388 thousand US\$. A good export value in a country reflects that the exported products have good competitiveness as well,

Seaweed development implementation is not optimal because it is still poorly understood, warehouse facility infrastructure is still lacking, and the role of local governments is still limited, as well as limited financial resources to help seaweed productivity, seaweed prices do not show a clear pattern, so commodity hoarding carries many risks for commodity owners.

Therefore, a seaweed cultivation development strategy is needed to increase seaweed production (Sahni Putri et al., 2022). The Indonesian Government's strategy in an effort to increase the competitiveness of seaweed products in the global market (Khaldun, 2017). This causes each country to build certain strategies to be able to gain advantages in the international trading system.

The increase in seaweed economic development is defined both in growth, productivity, and competitiveness in the context of national economic recovery. Government policy is a reference in efforts to increase economic growth through increasing product competitiveness based on the concept of competitiveness. Likewise with Indonesian seaweed commodities, to increase the competitiveness of seaweed products in the global market, several appropriate strategies are needed to be able to optimize this (Khaldun, 2017).

All parties have the same obligation to assist economic recovery. Moreover, the government, both central and regional, is obliged to recover the economy after layoffs due to Covid-19 (Mundzir et al., 2021). The government is fully committed to accelerating the process of economic recovery process affected by the Covid-19 pandemic. This is because the policy is considered important and urgent to accelerate the process of national economic recovery.

Based on the phenomenon that has been described, it can be seen that Indonesian seaweed exports are a reliable commodity to restore the national economy after the pandemic, it is said to be successful if the competitiveness of the commodity is getting better. The competitiveness of commodities in a good country can be seen from the good export value. Indonesia is one of the largest seaweed producers and exporters in the world,

Indonesia should be superior to other competitors both in terms of volume and export value. So, the purpose of this study is to analyze how the Seaweed Export Policy in the Framework of Indonesia's Post-Pandemic National Economic Recovery? And How is the strategy to increase seaweed production and exports in the context of Indonesia's National Economic Recovery After the Pandemic.

## METHOD

This research method is carried out with a qualitative approach, namely the researcher as the main instrument in collecting and processing data focuses on the process and meaning of an event in the investigation, while this research approach uses qualitative descriptive, which describes the reality and facts that occur. The purpose of using a descriptive approach is to obtain a complete and accurate description of a situation. A descriptive approach to this study is to describe and analyze how Indonesian seaweed exports in the world market for national economic recovery.

The data collection method used in this research is a literature study such as reviewing documents, reports, and articles as well as phenomena that occur today. This research was conducted in Indonesia which includes Sabang to Merauke. The choice of all regions of Indonesia as research locations is because from year to year the volume of dried seaweed exports is increasing.

## RESULTS AND DISCUSSION

Seaweed Exports in the Context of Indonesia's Post-Pandemic National Economic Recovery

Export is the activity of transporting goods abroad to meet the resource needs of the destination country. Human needs are limited, and resources are limited, so that not all goods and services needed by citizens of a country can be produced by the country itself (Tika, Juliansyah, & Murtala, 2022).

Table 2. Indonesian Seaweed Export Data to Europe Destination Countries

Destination Country	France	Denmark	Spanish	Total Exports to Europe
2012	1 200,0	818,2	706,0	2 724,2
2013	1 720,0	1 455,9	486,2	3 662,1
2014	2 538,8	772,4	1 260,4	4 571,6
2015	3 655,6	1 206,0	1 712,3	6 573,9
2016	1 537,2	1 201,3	762,9	3 501,4
2017	1 845,6	998,0	1 052,4	3 896,0
2018	2 767,3	666,8	2 727,5	6 161,6
2019	3 166,8	1 864,2	2 390,0	7 421,0
2020	3 297,0	154,8	2 127,2	5 579,0

Source: Central Bureau of Statistics (BPS, 2022)

The table 2 above is data on the amount of seaweed exported by Indonesia to several countries in Europe. It can be seen that the highest number of exports occurred in 2019 and the lowest exports occurred in 2012. Indonesian seaweed prices tend to increase, decreasing prices due to the quality of seaweed production which is influenced by rainfall and seaweed disease. Below is an overview of Export data and International Prices which international prices will also affect foreign consumers' interest in Indonesian seaweed in addition to the price tag to obtain a certain amount of seaweed.

The competitiveness of Indonesian seaweed exports abroad is very good compared to other countries, plus Indonesia is one of the main producers of seaweed in the world. Even according to Porse and Bixler, two world seaweed experts, Indonesia's dried *Eucheuma cottonii* production will not be beaten by other countries (Salim et al., 2015). Indonesia is still the world's main producer of *Gracilaria* and *Eucheuma cottonii* seaweed. In 2020, the government targets Indonesia to control 10% of the world carrageenan market share and the composition of seaweed exports and value-added goods to 60% and 40% (Juarsa, 2019). Of course, this is a positive thing to invest and trade value-added products. Therefore, the prospect of Indonesian seaweed is still very promising to focus on development.

Actually, in the field the problem of seaweed produced by farmers is very diverse, good quality seaweed should be harvested at least after 45 days old. In fact, if the price is good, then crops that have not reached mature age are harvested in pursuit of income even though they do not see the quality and quality that is desired by producing seaweed for less than 45 days in pursuit of profit (Mardia, Fachrie, & Dahniar, 2022). Seaweed will be economically valuable after getting further handling, after drying and becoming dried seaweed, but not enough to stop there but must be processed further to produce products of high economic value. Processing dried seaweed can produce agar-agar, kerajinan or algin depending on the content contained in seaweed. Dried seaweed is seaweed that has been cleaned of dirt, such as sand, rocks, then separated and dried in the sun (Khalik, 2022).

In Indonesia itself, the most widely cultivated type of Seaweed is the type of *Eucheuma Cottoni* which is included in the type of algae or Red Seaweed, the development of its cultivation is very potential. Because cultivating this type of seaweed is quite easy and the market demand is very high (Kaslama & Amount, 2022). Seaweed cultivation has three methods: Basic method (bottom method); Offbottom method, and; Floating method (Syahbuddin & Habibah, 2021). In order to achieve satisfactory results, seaweed cultivation first determines the location and seedlings. Good seaweed cultivation locations according to the Director General of Education are good as follows: (a) Water quality where the temperature  $\pm 25-30^{\circ}\text{C}$  with a clarity level of  $\pm 5-10$  meters; (b) The cultivation area shall be away from river mouths and freshwater sources; (c) The basic substrate consists of sand, mud, sandy mud, and rocky waters; (d) Protected from large waves and currents (too strong); (e) Have smooth water movement; (f) The depth of water at the lowest low tide is at least 30-60 cm; (g) The location of cultivation must be away from ship traffic or not be on the shipping lanes of ships; (h) Free from industrial waste pollution; (i) Free from the possibility of predators such as herbivorous fish, turtles or sea urchins; (j) The location of cultivation must be easily accessible by land or sea transportation (Syahbuddin & Habibah, 2021).

Export development is influenced by the strategy chosen by developing countries in carrying out industrialization. Industry cannot be said to hinder export development, but the chosen strategy affects export growth which also has an impact on economic growth. For export-oriented countries, it will export based on the principle of "comparative advantage" (Santosa, 2018), which says a country will tend to produce more goods whose production processes are relatively more efficient and exporting them in turn exchanges them for other goods that have relatively fewer advantages.

The Indonesian government in an effort to increase the competitiveness of seaweed in the global market through related ministries must form a policy scheme for each ministry (Khalidun, 2017). Based on the functions and tasks of each ministry, it will provide a clear picture and flow in the policy implementation process later and not contradict each other. Policies issued by the government are policies implemented by each ministerial agency based on their respective functions and duties to provide a clear picture of a policy to be implemented by the government.

Seaweed business development policy which refers to the seaweed cultivation development plan with seaweed business assistance programs facilitated by the government (Ardiyansyah & Hasanah, 2019). An effective alternative to business development to increase the income of seaweed farmers is the development of policy strategies between the government, seaweed farmers and traders by involving universities as facilitators of experts.

#### Strategy to Increase Seaweed Production and Export in the Framework of Indonesia's Post-Pandemic National Economic Recovery

Indonesia is the largest archipelagic country, with a manageable sea area of 5.8 million km<sup>2</sup>, the marine sector is very strategic for Indonesia, which is blessed by a very large sea area accompanied by an abundance of marine resources that are so large. There are so many and various marine resources that are used by the Indonesian people for trade (Wiratama S, Bestari, & Yuliansyah, 2021). This is with changes in export destination countries expected to increase exports (Jakaria et al., 2021).

Export development is influenced by the strategy chosen by developing countries in carrying out industrialization. Industry cannot be said to hinder export development, but the chosen strategy affects export growth which also has an impact on economic growth (Santosa, 2018). Seaweed business development policy strategy which refers to the seaweed cultivation development plan with seaweed business assistance programs facilitated by the government (Ardiyansyah & Hasanah, 2019).

Seaweed commodities have great potential to be improved, especially for farmers themselves and owners of the seaweed processing industry (Faradiah, Hamzah, & Saimul, 2022). To be able to explore the potential of seaweed commodities from an economic perspective, it is necessary to increase the knowledge of seaweed farmers on how to carry out cultivation techniques effectively, apply partnership patterns for seaweed farmers to maintain stable selling prices and adequate business assistance for Indonesian grass processing industry players.

People who cultivate seaweed have a great opportunity because they have no competition in other areas where seaweed cultivation is very strategically located (Sahni Putri et al., 2022). As well as strategies to support the prospect of Indonesian seaweed trade (Juarsa, 2019), there needs to be a national strategy to build a highly competitive industry. This can be achieved by increasing the number of seaweed processing industries and maximizing the production capacity of existing industries (Adiguna, Krisnamurthi, & Erwidodo, 2022).

Harnessing internal strengths and minimizing external threats with a strategy to improve the quality of cooperation between seaweed farmers and the government requires very careful strategic steps. Alternative effective business development strategies to increase acceptance. Seaweed farmers are: (1) Development of cooperation between the government, seaweed farmers and traders by involving universities as facilitators of experts. (2) centralizing the role of stakeholders in seaweed management. (3) Develop a good capital system and management business through cooperatives and conduct training and coaching for seaweed farmers on the importance of business partnerships and the establishment of seed farms. (4) The formation of associations and the role of cooperatives are empowered again.

## CONCLUSION

Based on the results and discussion mentioned above, the following conclusions can be drawn:

Increasing seaweed productivity is very important to increase the competitiveness of Indonesian seaweed with other producing countries, so there is a need for technology and

policies from the government to increase seaweed productivity in an effort to recover the national economy. This will be realized if the government provides good policies for seaweed farmers in increasing productivity and processing with good technology to increase exports. Seaweed Development Strategy Based on the results of the analysis conducted, some of the best strategies in developing seaweed farming business are as follows: a) development of cultivation of cultivated products, b) provision of training in stages, c) providing consultation, d) optimizing existing production capacity, e) expanding planting area, f) optimizing production, g) increasing the acquisition of funds, h) expanding and maintaining marketing networks.

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