Analysis of the Export Potential of Indonesian Processed Green Tea Products Through Export Market Mapping by Empowering International Trade Digital Data

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Abstract. The Indonesian tea trade specialization index value from 2006 to 2020 was positive from 0.439 to 0.627. This positive value indicates that the tea commodity has strong competitiveness and Indonesia as an exporting country produces more than domestic consumption. Domestic tea consumption data from 2002 to 2018 is still less than 1 kg/capita/year so that more tea is exported (Ministry of Agriculture, 2020). With the aim of knowing the appropriate export market potential in the destination country for the needs of Indonesian processed green tea products. Research methods that entirely use secondary data where the data comes from Trade Map 2021 data which is then analyzed by researchers with the help of international trade data sourced from E-Commerce sites, namely Amazon to see market dynamics of similar products prices and shipping rates between regions/countries. Based on Trade Map data for 2021 and additional market price data for similar products on E-commerce sites, namely Amazon, the result is that only Singapore and Chinese Taipei have the potential to supply Indonesian processed green tea products for export. The two countries, which have the potential to become exporters from Indonesia.

Keywords: Export · Green Tea · International Trade · Mapping · Potential

1 Introduction

1.1 Background

Tea is a plantation commodity that has nutritional, economic, social and environmental advantages. Green tea contains catechin compounds which are useful for lowering cholesterol, reducing the risk of tumor cancer, preventing high blood pressure, destroying fungi, bacteria and influenza viruses. Other ingredients in the form of minerals, vitamin C, vitamin B complex, and amino acids. Tea is used as a raw material in the chemical, pharmaceutical, cosmetic and food industries Shah 2006. Based on the economic aspect, BPS data shows that Indonesia's tea trade balance in 2020 amounted to 30,356

tons worth USD 70,467 thousand. Based on social aspects, tea plantations absorb more than 180 thousand workers, and according to environmental aspects, tea plantations play a role in water, soil, biodiversity conservation and as a tourist attraction [1].

There are 2 types of Indonesian tea trade, namely green tea and black tea. Green tea is tea that is not processed by incubation or enzymatic oxidation, so the smell of the leaves is not lost and fragrances such as jasmine are added. Meanwhile, black tea is tea that undergoes incubation or an enzymatic oxidation process during its processing [2].

The Indonesian tea trade specialization index value from 2006 to 2020 was positive from 0.439 to 0.627. This positive value indicates that the tea commodity has strong competitiveness and Indonesia as an exporting country produces more than domestic consumption. Domestic tea consumption data from 2002 to 2018 is still less than 1 kg/capita/year so that more tea is exported [3].

By looking at this potential, the researcher wants to map the export market for Indonesian processed green tea products by mapping the export market through a paper entitled "Analysis of the Export Potential of Indonesian Processed Green Tea Products Through Export Market Mapping by Empowering International Trade Digital Data".

1.2   Formulation of the Problem

After following up on the background of this paper, researchers have a problem that needs to be solved, namely: How to map the potential export market for Indonesian processed green tea products that are suitable?

1.3   Research Purposes

Based on the formulation of the problem, the researcher will answer these problems in a research objective, namely: To find out the appropriate export market potential in the destination country for the needs of Indonesian processed green tea products.

1.4   Benefits of Research

Based on the research objectives, this research has many benefits, including:

1. Creating data on potential export products that new exporters can use before marketing their products.
2. The creation of real learning experiences for researchers in mapping data on market potential for export products.
3. The creation of a new exporter ecosystem that is able to understand data properly and correctly to maximize its export activities.

2   Literature Review

2.1   Export Theory

Export is the process of legally moving goods or trading commodities from one country to another, and generally requires cooperation from customs both in the sending country (exporter) and in the receiving country (importer). The role of exports is as a means of

driving the country's economic growth by increasing the country's foreign exchange. Soekartawi (2005: 122) alludes to several factors affecting exports, such as international prices, exchange rates, export-import quotas, tariff and non-tariff policies, as well as policies to increase non-oil and gas exports. Hamdani (2012: 61) states that production for export must be a product that has the potential to compete in the global market.

2.2   Trade Map

Trade Map is a world statistical data center developed by UNCTAD/WTO International Trade Center (ITC) to answer questions related to strategic market research objectives, monitor international trade performance and trade performance of specific products, unlock comparative and competitive advantages, identify market potential and product diversification, as well as designing and prioritizing a variety of trade development programs for trade support companies and institutions. Convert primary trade volume data in bulk into an easy-to-obtain, easy-to-use and interactive web-based format. Trade Map provides users with data on country indicators and product performance, demand, alternative markets, and competitors' roles. The Trade Map presents information in the form of tables, graphs and maps, also by product, product group, country and regional grouping for export and import.

2.3   Harmonized Commodity Description and Coding System (HS Code)

The Harmonized Commodity Description and Coding System or better known as the Harmonized System (HS) is an international standard for the naming and numbering system used to classify trade products and their derivatives managed by the World Customs Organization (WCO), which has more than 170 members. Country and is based in Brussels, Belgium. Currently, the classification of goods in Indonesia is based on the Harmonized System and is included in a tariff list called the Indonesian Import Duty Tariff Book (BTBMI).

3   Research Methods

In this paper, qualitative descriptive researchers use research methods that all use secondary data where the data comes from the 2021 Trade Map data which is then analyzed by researchers with the help of international trade data sourced from E-Commerce sites, namely Amazon to see market dynamics in prices for similar products and shipping rates between regions/countries marketed through international standard E-Commerce sites as a reference for researchers in analyzing data that is more relevant to the potential export market for Indonesian processed green tea products to destination countries in accordance with product potential in a country.

4 Discussion

4.1 Familiarity with Trading Maps and Their Use in Analysis

Trade Map is a global statistical data center developed by the UNCTAD/WTO International Trade Center (ITC) to answer questions related to strategic market research objectives, monitor international trade performance and trade performance of specific products, unlock comparative and competitive advantages, identify market potential and product diversification, as well as designing and prioritizing various trade development programs for trade support companies and institutions. Convert primary trade volume data in bulk into an easy-to-obtain, easy-to-use and interactive web-based format. Trade Map provides users with data on country indicators and product performance, demand, alternative markets, and competitors' roles. The Trade Map presents information in the form of tables, graphs and maps, also by product, product group, country and regional grouping for export and import. Using it is quite easy, the first thing you have to do is find the HS code of the product you are going to export. After that, visit the Trademap.org page. If it's open, you enter the hs code that you got, then click Trade Indicators. Then a lot of data will appear that can be used as research material. There you will find countries that import products similar to yours. From these data, the market conditions of export destination countries are studied by considering the following matters:

1. Trade Balance

As much as possible choose a country that has a negative trade balance. Because it means the country imports more than it exports and needs your product. That way, the opportunity to get buyers in the country is wide open.

2. Unit Value

After determining the selling price of your product plus shipping costs for the product to the ship, then you can look for countries that have high unit values. The higher the value of the item, the more profit you can get. What if you find that the unit values are all lower than your selling price? You can choose a unit value that is close to your desired price. Because the unit value listed in the list is the average unit value.

3. Entrance Fee

Choose a country that has a low entry rate. The lower the entry fee in the destination country, the greater the profit.

4.2 Indonesian Processed Green Tea Export Potential

The agriculture, forestry and fisheries sectors play a role in the Indonesian economy where the contribution of Gross Domestic Product to current prices in 2020 is IDR 2,115,389.1 billion or 13.70 percent. The plantation sub-sector provided the highest contribution of IDR 560,226 billion or 3.63% [1].

Tea is a plantation commodity that has nutritional, economic, social and environmental advantages. Green tea contains catechin compounds which are useful for lowering cholesterol, reducing the risk of tumor cancer, preventing high blood pressure, destroying fungi, bacteria and viruses. Influenza. Other ingredients in the form of minerals, vitamin C, vitamin B complex, and amino acids. Tea is used as a raw material in the

chemical, pharmaceutical, cosmetic and food industries (Shah, 2006). Based on the economic aspect, BPS data shows that Indonesia's tea trade balance in 2020 was 30,356 tons worth USD 70,467 thousand. Based on social aspects, tea plantations absorb more than 180 thousand workers, and according to environmental aspects, tea plantations play a role in conserving water, soil, biodiversity and as a tourist attraction [2].

4.3 Mapping Analysis of Processed Green Tea Export Market Potential Using Trade Map Data Sources

After seeing the data on the export potential of Indonesian processed green tea products that are very likely to be exported, for this reason the researcher wants to conduct further research on the potential export market for Indonesian processed green tea to countries that have the potential to receive processed green tea products from Indonesia for consumption in destination countries.

Researching further that every export activity must be carried out based on relevant data to achieve maximum product export goals, for this reason researchers will use Trade Map data as an indicator to map product potential to export markets in a region or country (Fig. 1).

Based on the data contained in the figure, it is explained that the researcher wants to analyze the most potential export market for the export range of Indonesian processed green tea products. Researchers also use price rate data by choosing similar products in International E-Commerce, namely Alibaba.com and Amazon.com.

Furthermore, the researcher looked for additional data needed through the Amazon E-Commerce site with similar products, the researcher took the example of green tea products made in Indonesia, namely Gopek tea products (Fig. 2).

With these two data, researchers are ready to carry out a mapping analysis of Indonesia's processed green tea export market. Next, the researchers analyzed secondary data, namely the 2021 Trade Map data, then matched it with additional E-Commerce data focused on the Amazon site. And obtained the following analysis:

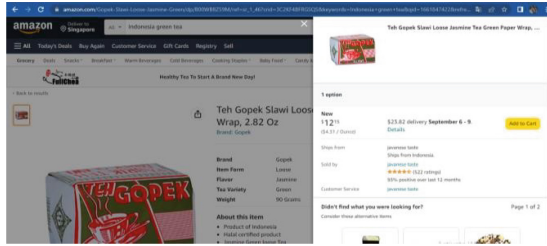**Fig. 1.** Trade Map Data for 2021 Processed Green Tea Exports from Indonesia

Fig. 2. Additional data on market prices via Amazon E-Commerce Media.

1. Based on the 2021 Trade Map data, the Philippines is the highest importer but unfortunately the Philippines' trade balance is (+) or it can be said that the number of exports of green tea products in the Philippines is higher than the need for imports of green tea products. And that means the Philippines was not selected.
2. Based on the 2021 Trade Map data, Singapore is the 2nd highest importer of green tea products in the world and has a trade balance (-) and has a Unit Value (USD$ 3,258) greater than FOB (FOB: USD$ 11.67) meaning Singapore can be selected.
3. Based on Trade Map 2021 data, the United States and Australia are the 3rd and 4th highest importers in the world. But unfortunately the trade balance of the two countries is (+) or it can be said that the amount of exports of green tea products of the two countries is higher than the need for imports of green tea products. And that means the United States and Australia were not selected.
4. Based on the 2021 Trade Map data, Chinese Taipei is the 5th highest importer of green tea products in the world and has a (–) trade balance and has a unit value (USD$ 3,826) greater than FOB (USD$ 31.51). China can be selected.
5. Based on the 2021 Trade Map data, Spain, the Netherlands, Vietnam, Timor Leste, Hong Kong, Russia, Cambodia and Malaysia have a trade balance (+) or it can be said that the total exports of green tea products in the eight countries is higher than the requirement import of green tea products. And that means Spain, the Netherlands, Vietnam, Timor Leste, Hong Kong, Russia, Cambodia and Malaysia were not elected.

5   Conclusion

Researchers can conclude about the results of an analysis of the potential export market for Indonesian processed green tea products using digital international trade data, namely as follows:

1. Based on Trade Map 2021 data and additional market price data for similar products on the E-commerce site, namely Amazon, it is known that Singapore and Chinese Taipei have the potential to supply Indonesian processed green tea products that will be exported to these two countries. For exporters from Indonesia.
2. Based on the 2021 Trade Map data and additional market price data for similar products on the E-commerce site, namely Amazon, results were obtained which explained that the Philippines, the United States, Australia, Spain, the Netherlands, Vietnam, Timor Leste, Hong Kong, Russia, Cambodia, and Malaysia does not have the potential to fulfill Indonesian processed green tea products for export to these

eleven countries because it has a trade balance (+) or it can be said that the number of exports of green tea products in these eleven countries is higher than the need to import processed green tea products from Indonesia's country of origin.

3. Analysis of the potential export market for Indonesian processed green tea products based on international trade data can be an indicator for exporters before carrying out their activities by looking at data sources of existing product potential to achieve export goals. According to the potential of the product in the planned destination country.

6   Recommendation

Based on these conclusions, this research can be developed further in the future including:

1. Add data sources for analysis regarding the export potential of green tea products. Processed by Indonesia in mapping suitable export markets based on real-time international trade data.
2. Adding a denser subject to solving the problem regarding the export potential of Indonesian processed green tea products in the appropriate export market mapping.
3. Adding research methods to obtain accurate results as an indicator of exporters in mapping export markets.

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