

Indonesian Agriculture-Based Creative Industry Challenges and Strategies – A Case Study of Rattan

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ABSTRACT— International trade, especially in export transactions, has become a special concern for both the Government and business owners who participate in it. Indonesia as an agricultural country, has agricultural resources that encourage export trade. These agricultural resources are not only sold in raw conditions, but also developed into creative industry products. Rattan is Indonesia's mainstay export commodity, the policy of banning the export of rattan in its raw condition encourages creative industries to process rattan into finished products. There is little literature on international trade in export commodities. In meeting this gap, this study discusses and analyzes more deeply the challenges and strategies of the Indonesian agriculture-based creative industry, especially in the rattan commodity. This study uses a literature review approach from various types of data, with RCA, SWOT, and TOWS analysis approaches.

KEYWORDS: export, rattan, international trade, SWOT

1. INTRODUCTION

The driving forces of commercialization in the agricultural sector have been discussed in several studies. The significant role of rural economic development encourages commercialization activities in rural areas, other factors that affect the commercialization of agriculture such as population growth, increased access to markets, intensification of crops, and growing asset accumulation. However, institutional and infrastructure constraints help explain the impediment to the commercialization of agriculture by smallholders [22]. Economic support for the country, which is supported by rural areas, is to utilize the natural resources in it, and to reduce poverty [30]. The agricultural sector provides direct potential for the growth of other sectors in developing countries. Another strengthening relationship for this is between agricultural value added per worker and GDP per capita [5]. Indonesia is an agrarian country whose economy is supported by an agrarian economy. Farming is an activity that is usually carried out by villagers throughout Indonesia, such as working as farmers, farm laborers, fishermen, and other agrarian jobs [9]. Although Indonesia is a rich country with all its agrarian potential, Indonesia is also a country prone to natural disasters. In the course of time, climate change and land changes have become a dilemma for every stakeholder, especially farmers [9].

MSMEs are widely spread in rural areas. Most of them run their business in a traditional way. They experience low levels of productivity, product quality as it is, and serving only a small localized market. However, some of them are successful in doing business with agricultural products and their derivatives [29]. This business is not only in the form of direct consumption from available agrarian sources, but also the creation of creative industries through agrarian sources that even penetrate international trade. However, the literature on the creative industry of agrarian products in international trade has not been much discussed. This study analyzes in depth the conditions experienced by MSMEs and how strategies can be applied, based on various literatures.

2. LITERATURE REVIEW

2.1 Rattan in Indonesia

At least Indonesia produces 80% of rattan raw materials worldwide [14]. Rattan is a vine that grows from the forest floor. It is included in the palm family which can be found in the rain forest. Rattan is usually harvested by farmers when it is many year old, to be used as various handicrafts that add value [26]. Rattan has become a mainstay commodity for several regions in Indonesia. The available resources make rattan one of their livelihoods in both local and international markets [25]. Before the ban on the export of rattan commodities, rattan could be exported in raw condition. This results in a high supply of this commodity abroad without any added value that can be developed. In addition, this has an impact on the preservation of the rattan itself [17]. In 2011, the Ministry of Trade established a ban on the export of raw rattan, random rattan, W/S rattan, and semi-finished rattan in Permendag No. 35 of 2011 [16]. This prohibition policy is aimed at increasing the productivity of finished rattan products to provide added value. This is to support the availability of raw materials in the country and develop craftsmen to produce various handicrafts made from rattan. Rattan produced for the export market includes furniture. The distribution of rattan production areas and furniture craftsmen in Indonesia naturally forms rattan industry clusters that are geographically bound to their natural and human resources. Examples are the rattan clusters scattered in the Cirebon area [11], Jepara [10], Sukoharjo [1], Padang [25], Katingan [21], and clusters in other areas.

However, natural rattan substitute products, i.e., plastic rattan, have become a major threat to craftsmen. Unbalanced price competition between natural rattan and plastic becomes a dilemma for the craftsmen. Therefore, a strategy is needed to develop the rattan industry from upstream to downstream to become a profitable industry [18].

2.2 International trade of rattan

The MSME sector is an independent sector in supporting the national economy, entrepreneurs, or business owners at the MSME level require time, financial, psychological, and social risk efforts, where those entrepreneurs struggle to get monetary rewards and personal satisfaction [6]. The creative industry is an industry whose activities focus on creativity under the conditions of contemporary society, which are characterized by distinctive traditions and trends [20]. In another definition, the creative industry is defined as an industry that drives a country's creative economy [2]. One of the drivers of the Indonesian economy is the creative industry. This industry develops tangible and intangible assets into goods that have added value. This creative industry sector utilizes resources both in raw materials and labor in the process. Returning to the scope of rattan, rattan finished products are among Indonesia's mainstay creative industries. The distribution can be in the form of individuals or clusters that spread across various regions in Indonesia. Geographic coverage differences lead to special situations between clusters. An example is the relationship between clusters and complementarity across industries and institutions [13]. This supports the rattan industry in the cluster to grow. In fact, these rattan business owners themselves are members of the association of rattan entrepreneurs to make it easier for them to exchange information and opportunities.

Based on BPS data in 2020, the export value of rattan in finished products such as chairs increased by 16.6% from the previous year, or the total export value in 2020 reached US\$ 68.8 million. Despite the COVID-19 pandemic, export activities continue to run well [35]. The export environment is often more complex and dynamic than the domestic market, hence there is a need for the ability to learn and adapt to challenging export markets [27].

3. METHODOLOGY

This study uses a qualitative data approach by using literature review data from various international journal articles. This study measures the competitiveness of the rattan industry in international trade using the RCA or Revealed Competitive Advantage approach [4]. The RCA method measures the export performance of a

product from a country by calculating the market share of the export value of a product to the total exports of a country compared to the share of the value of the product in international trade [15], [31]. The RCA formula is as attached below;

$$RCA = \frac{\frac{X_{ij}}{X_j}}{W_i/W_t} > 1$$

X_{ij} = Export value of commodity i from country j

X_j = Total export value from country j

W_i = World export value of commodity i

W_t = Total world export value

The literature data is processed with a SWOT analysis approach to map the challenges and strategies of the agriculture-based creative industry. SWOT analysis is used because it can map internal and external factors that can affect creative industry activities that occur in Indonesia.

4. ANALYSIS AND DISCUSSION

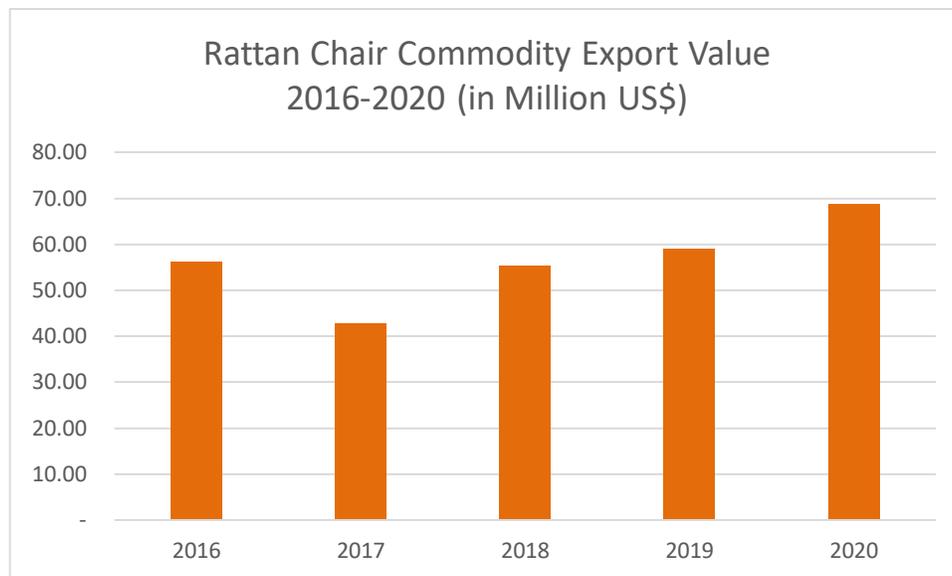
In this study, researchers focus on in-depth analysis of the challenges and strategies for rattan export commodities, specifically rattan chairs in international trade, as referenced in the methodology above. First, researchers measure their competitive advantage using the RCA approach introduced by [4], and below is the calculation of RCA in 2020;

$$RCA = \frac{\frac{68,83}{163,31}}{94,87/17.142,1} > 1$$

RCA = 76,15 (high competitive advantage)

Based on the measurement of the RCA value on rattan chair products with HS Code 940153, it shows that rattan products exported by Indonesia control the largest market share in the world. At least in 2020, Indonesia controls the market share of this product by 73% with total exports in 2020 reaching 11,986 tons. The largest market destinations are the United States, followed by Japan, Australia, France, and Russia. Of the total rattan production exported, the United States absorbs 35% of the products exported by Indonesia [33].

Indonesia as a country that has the highest natural rattan production in the world, Indonesia becomes strong in terms of supply of natural rattan raw materials. Even though the government has imposed a policy of banning the export of rattan for non-finished products [17], it does not dampen the interest in the export of finished products in international trade.



Graph 1. The export value of rattan chair commodities in 2016-2020 (in US\$ million)

Graph 1 shows data on the export value of the rattan chair commodity in the last 5 years, from 2016- 2020, which was carried out by Indonesia. There was a decline in exports in 2017 compared to the previous year, which was decreasing by around 24% year on year. One of these conditions is influenced by the lack of absorption of domestic rattan production by entrepreneurs of rattan handicrafts. It has to be noted that rattan farmers are not allowed to export rattan in non-finished products [19], [32]. Then, the export gradually experienced a significant increase from 2018 to 2020. Even though there has been COVID-19 pandemic since 2019, it has not reduced the interest of this commodity export product in international trade. There is a role of the government in supporting this commodity development program for the international market. The year 2020 was the highest year both in terms of export value and quantity in the last 5 years. This shows that the furniture sector during the pandemic has become a prima donna in the international market. Along with global activity restrictions and the implementation of Work From Home, there has been an increase in demand for furniture in the global market. This, this condition supports the productivity of furniture business owners [23].

4.1 SWOT Analysis

Table 1. SWOT Analysis

Strength	Weakness
<ol style="list-style-type: none"> 1. Source of raw material available 2. Creativity of human resources 3. Varied products 	<ol style="list-style-type: none"> 1. Export knowledge is still limited among craftsmen 2. Limited working capital 3. Depending on middlemen
Opportunity	Threat
<ol style="list-style-type: none"> 1. Wide market 2. Technological development 3. Government support 	<ol style="list-style-type: none"> 1. Land reduction 2. Plastic rattan substitution 3. Increase in raw material prices

Table 1 above is a SWOT analysis of international trade in export commodities based on literature data. A more in-depth analysis is provided below.

4.1.1 Strength

Indonesia, as the largest natural rattan producing country in the world, has a fairly guaranteed availability of

raw materials [34]. The availability of these raw materials is spread in various regions in Indonesia, where the characteristics of this rattan plant grow in tropical rain forests. The distribution of natural rattan production in various regions in Indonesia has contributed to growing market opportunities in the non-agricultural sector, i.e., the creative industry sector. As discussed in previous studies, the potential of developing countries in the agriculture sector can develop other sectors. In the case of rattan in Indonesia, rattan as a natural product is used to make furniture that has added value. Rattan craftsmen have creativity potential in processing it into various furniture. The expertise of the craftsmen in processing rattan to meet the demands of foreign markets cannot be separated from existing internal and external factors. For examples are the distribution of creative industries based on clusters of rattan commodities, and how clusters that are geographically close to the source of raw materials develop the skills of the craftsmen around them.

4.1.2 Weakness

Based on export data, Indonesia is the largest rattan exporting country for rattan chairs. However, constraints on exports such as knowledge of international trade are weaknesses that many craftsmen experience. The constraints are knowledge in export regulations, product standards, payment methods, incoterms used, and so on. Language barrier is also an obstacle experienced by these business owners [12]. In addition, limited working capital is an obstacle for business owners to deal with payment delays from their customers, including in purchasing raw materials to farmers. Business owners who do not export directly usually use third parties or middlemen to sell their products. Thus, there is a high dependence on middlemen, including in determining the selling price. Therefore, limited access to information on international trade conditions that occurs causes the weak positioning of business owners at the MSME level in getting benefits from existing export transactions.

4.1.3 Opportunity

Based on export data in 2020, exports of rattan commodities, especially rattan chairs from Indonesia, meet international market demand by 73%. This means that rattan handicraft products are a promising export product. In addition, the development of technology, both in marketing and production technology, also increases opportunities in trading this commodity. For example is the development of e-commerce technology—how business owners can expand their market through marketing strategies to global markets [7]. In production technology, many technologies have been developed to increase the productivity of rattan handicraft production, one of which is the rattan blade smoothing tool [24]. The government supports the creative industry in international trade, as the creative industry encourages the creative economy in Indonesia, one of which is through the Creative Economy Agency [3].

4.1.4 Threat

The conversion of agricultural land can threaten agricultural production itself. This condition will threaten the availability of raw materials. In addition, the widespread substitution of natural rattan with plastic rattan also threatens rattan farmers [28], causing the price of rattan to plummet. This non-ideal condition causes losses for rattan farmers and rattan craftsmen. The bargain price of imitation rattan products causes not ideal price competition. On the one hand, the threat of an increase in the price of rattan raw materials can also burden the rattan craftsmen, if the bargaining price of the market does not change or the market is sensitive to price.

4.2 TOWS Analysis

Table 2. TOWS Analysis

Strength - Opportunity	Strength-Threat
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<ol style="list-style-type: none"> 1. S1, O1, O2: Utilization of e-commerce technology 2. S2, O3: Training and human resource development 3. S3, O3: Provision of exhibition facilities 	<ol style="list-style-type: none"> 1. S1, T1: Rattan production management 2. S2, T2: Developing rattan substitute products combined with natural rattan 3. S3, T3: Product standardization
Weakness-Opportunity	Weakness - Threat
<ol style="list-style-type: none"> 1. W1, O3: Extension and training related to export 2. W2, O2: Working capital support 	<ol style="list-style-type: none"> 1. W3, T3: Rattan sales policy

Table 2 above maps TOWS matrix, where the mix of strategies between internal and external factors has been mapped in Table 1, which is related to SWOT analysis. Based on the TOWS analysis in Table 2, the challenges and strategies of the rattan creative industry in international trade are mapped below.

Challenge:

1. Market adaptation

Market adaptation to all possible occurring changes becomes a challenge for business owners in managing their market adaptability in international trade.

2. Product adaptation

The ability to adapt products to meet international market demands is a challenge for business owners of the rattan creative industry, especially in terms of product standardization, along with the threat of product substitution from rattan substitution. Therefore, business owners are required to always maintain the quality of the products they produce.

3. Export regulation

International trade regulations must be understood by business owners of the rattan creative industry. Export transactions involve two or more countries so that business owners must understand the regulations related to exports.

4. Foreign language skills

With the advancement of existing technology, documentation of foreign language documents can be accommodated properly, even though the language is not the main language of business owners.

Strategy:

The strategies in accommodating all the challenges that exist in the rattan creative industry have been analyzed and mapped based on the TOWS analysis below.

1. Utilization of e-commerce technology

Utilization of e-commerce technology is a strategy that can be applied to penetrate the international market. Adapting from traditional to digital ways can increase opportunities to transact in international markets, along with easy access to information that can be used by business owners.

2. Extension and training related to export

Extension and training related to the export of existing human resources are strategies to update knowledge to human resources, including counseling related to the current export policy.

3. Rattan production management

Strategies in implementing rattan production management to meet demand in the international market include adjusting product standardization and using technology to support the production of rattan handicrafts by taking into account the existing supply and demand.

4. Working capital support

Working capital support to encourage cash flow of business owners in export activities has become a special concern for the government. The government has a work program in financing business owners who do

business, one of which is through the People's Business Credit (Kredit Usaha Rakyat) [8].

5. CONCLUSION

This study is to analyze the challenges and strategies faced by the creative industry of rattan commodities in international trade. The analysis of this study shows that rattan commodities in the furniture sector, such as rattan chairs, are one of the mainstays of Indonesia's export commodities. At least 73% of the demand for rattan chair products in the world is fulfilled by Indonesia. The distribution of the rattan creative industry is distributed across various regions in Indonesia, both individually and in clusters that are close to the source of supply. Based on the results of the literature analysis, there are at least four challenges faced by business owners, including market adaptability, product adaptation, export regulation, and foreign language skills. Therefore, strategies that can be applied from the SWOT and TOWS analysis are the use of e-commerce technology, export-related counseling and training, rattan production management, and working capital support.

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