Development of Vanilla Agribusiness and Its Export Opportunities to Support Triple Export Program (Gratitude) on Lombok Island

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Abstract. Vanilla is one of the agricultural export commodities that has a very high economic value. Vanilla is one of the plantation crop commodities directed to the Gratitude program or the Export Triple Movement initiated by Minister of Agriculture Syahrul Limpo in 2020, which is targeted for five years to unite the strength of all stakeholders of agricultural development.

Based on the explanation of export opportunities to support the triple export program, it can be seen from management's flow and quality standards. Vanilla in Indonesia has quite a good potential and supports improvements in economic, social and cultural development. This can be seen from the increasing demand from several countries for quality and the quantity of vanilla in Indonesia yearly. And efforts to strengthen value-added vanilla exports by diversifying export products by not relying on raw materials and downstreaming vanilla processed products. The types, quantity and quality of non-oil and gas export commodities will continue to be improved. The increasingly fierce competition in foreign trade requires every country to increase the quantity and quality of its products.

Keywords: vanilla; products; export.

INTRODUCTION

Vanilla is a spice plant that belongs to the orchid family (Orchidaceae). This plant is native to Mexico and Central America. Vanilla is widely used as an ingredient in the food industry and as a pharmaceutical fragrance (flavour and fragrance ingredients). Vanilla plants first entered Indonesia in 1819, which Morchal brought from the Antwerp Botanical Gardens. This plant was planted in the Bogor Botanical Gardens and could grow well and flower but does not produce fruit because it cannot self-pollinate. In 1950 Taysman practised artificial pollination (by hand) with satisfactory results. In the 1960, the vanilla plant increased from the West Java area (Garut and Banten) and continued spreading to Central Java and East Java. However, in 1967 there was an attack of stem rot which caused the vanilla plant to decline in Central Java and West Java. The subsequent development shifted to East Java, but due to theft and price fluctuations in 1980, the area of vanilla plantations in East Java decreased and then shifted to Bali and North Sulawesi [1].

The Province of West Nusa Tenggara is a suitable development area for vanilla plants regarding land suitability and climate. The development of vanilla as a supporter of the free or triple export program can absorb labour in the production process, especially during pollination, so that the wider the vanilla area, the more labour is needed, while maintaining the vanilla area requires good cooperation and management because from year to year the area is wide. Outside the vanilla plantation area, data is taken from [2]. In 2019, it was 9,532 ha, with a production of 1,461 tons of dry pods, while the 2020 figure increased slightly by 10,219 ha, with a display of 1,545 tons of dry pods. For 2021 the estimated figure is 10.582 ha, with a production of 1,688 tons of dry pods. Vanilla products are almost entirely destined for export, as for the area of vanilla in West Nusa Tenggara taken from [2] a total of 294.07 hectares with an average production of around 40.32 tons per ha. From this amount, vanilla is a plant with great opportunity and potential to support the Gratitude program for export to Eu-

ropean countries, especially the highest demand, namely from America and Canada.

It is necessary to implement technology from cultivation to post-harvest. Development and strengthening strategies can be used to increase production and quality, for example, by facilitating facilities and infrastructure as well as training on applying cultivation technology according to standards. With these conditions and phenomena, it is necessary to develop vanilla commodity areas through vanilla plant area development activities supported by increasing human resources and institutions as well as escorting and mentoring. Implementation of labour-intensive activities in the form of planting preparation and maintenance in vanilla plantation area development activities, then policies and strategies in vanilla plantation area development,

In the international market, the price of vanilla is determined by its quality. Each importing country has different quality requirements. The market in the United States requires more vanilla with low moisture content (20–25%) because it is used as a raw material for the extraction industry. The European market, generally consumed directly by households, requires whole (good looking) vanilla, high vanilla content, sharp aroma and 30–35% moisture content. Meanwhile, the International Standards Organization (ISO) has set specifications for vanilla traded in the world market. Meanwhile, nationally, it has been determined by the National Standardization Council under the Indonesian National Standard (SNI). Vanilla specifications that meet the general requirements according to the Indonesian National Standard are: smells of vanilla; glossy black or glossy black-brown to brown; full pods filled to underweight, oily, pliable to stiff; free of foreign matter; mould-free.

Featured types and varieties of vanilla. The success in planting vanilla depends on the cultivation techniques carried out, from using superior varieties, planting and maintenance procedures to harvesting and post-harvesting correctly. As of 2018, the Research Institute for Spices and Medicinal Plants has released two high-yielding types of vanilla, namely Vania 1 (yield 2.1 tons/ha with vanillin content of 2.808%) and Vania 2 (yield of 1.8 tons/ha with vanillin content of 2.983%).

In general, vanilla cultivation on the island of Lombok grows with the Planifola Andrews variety, which is the best and most widely grown vanilla plant in the world and uses organic vanilla clusters, especially for development in the area at the foot of Mount Rinjani, Sembalun sub-district. It is very suitable for the climate and nutrients for the development of vanilla plants to continue to increase the volume of export value.

Post-harvest and vanilla processing. Indonesian vanilla is accepted in the international market, so the processing must comply with the quality standards that have been set. The quality improvement process is described as follows: 1) freshly harvested pods are washed from the attached dirt and sorted by length, thickness, damage and defective pods; 2) vanilla fruit that has been sorted must be processed immediately. The method of processing can be done using sunlight or a dryer.

The production capacity of organic vanilla that can be produced according to export qualifications is only seven wet tons or the dry equivalent of one ton. However, the potency is 15 tons damp or two tons dry vanilla. The organic also involves exporters vanilla from Organic Spices Lombok. The business actor, who is also the farmer's partner, provides knowledge about the processing methods of vanilla.

RESULTS AND DISCUSSION

Indonesian Vanilla Export. The exported NTB vanilla is organic, and NTB vanilla has export opportunities because it has a unique characteristic compared to vanilla in other regions. Significantly of the uniqueness of the aroma and taste, it is very popular with customers in the USA. The most significant vanilla production on the island of Lombok for the development of vanilla cultivation is in the districts of East Lombok and West Lombok, which are potential areas for the development of vanilla exports which can increase the income of coffee farmers financially. Vanilla farmers in West Lombok Regency have received particular attention, developed and fostered through a program to increase vanilla production with the Mataram Class I Agricultural Quarantine Center to support the triple export program.

The land for organic vanilla development is spread over several islands of Lombok, namely in East Lombok Regency in Sajang District, with a total of 69 farmers with 128 hectares of land. In Pringgasela District, there are 52 farmers with 60 ha of land. North Lombok Regency in Bayan District covers an area of 55 hectares, and West

Lombok Regency in Narmada District with 40 farmers with a land area of 60 ha.

Table 1 - Recapitulation data on vanilla plants in the Province of NTB in 2021

No	Regency	Area	Production (Tons)
1	North Lombok	63.48	1.85
2	West Lombok	125.46	10.89
3	East Lombok	94.50	27.51
4	Sumbawa Brt	2.00	-
5	Sumbawa	3.63	0.07
6	Bima	5.00	-

Figure 1 – Cultivation and planting of vanilla using coconut husk as the main support for plant propagation

Figure 2 – Vanilla plants that thrive in locations in North Lombok Regency

Figure 3 – Vanilla flowers, that are ready to be crossed

Figure 4 – Vanilla observers from abroad check the vanilla sorting process

Figure 5 – Results of the vanilla drying process

Figure 6 – The process of drying vanilla with solar power at UD Rempah Organic Lombok Location

Figure 7 – Discussion with various parties to observe the condition of vanilla

Until now, the development of organic vanilla will always promise good opportunities and increase economic value for vanilla farmers on the island of Lombok and can also lead to interest from other farmers who are interested in learning and want to cultivate vanilla. Based on requests from vanilla importing countries so far, there is no limit to the number of requests for vanilla because the demand for vanilla in these European countries is excellent.

CONCLUSIONS

Based on the explanation of export opportunities to support the triple export program, it can be seen from management's flow and quality standards. Vanilla in Indonesia has quite a good potential and supports improvements in economic, social and cultural development. This can be seen from the increasing demand from several countries for quality and the quantity of vanilla in Indonesia yearly. And efforts to strengthen value-added vanilla exports by diversifying export products by not relying on raw materials and downstreaming vanilla processed products. The types, quantity and quality of non-oil and gas export commodities will continue to be improved. The increasingly fierce competition in foreign trade requires every country to increase the quantity and quality of its products.

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