

THE TOTAL AND EXPORT VALUE OF ORNAMENTAL PLANTS ON ECONOMIC GROWTH

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Abstract

This study aims to analyze the influence of the total and export value of ornamental plants on economic growth in the Probolinggo and Malang regions. Ornamental plants, which have high economic value, not only function as an aesthetic element but also as an important export commodity for Indonesia. In this study, the author used the *Revealed Comparative Advantage* (RCA) approach to measure the comparative advantages of ornamental plants, such as orchids, roses, and chrysanthemums, exported from Probolinggo and Malang. The results of the study show that Probolinggo has a comparative advantage in the export of ornamental plants, which contributes significantly to the local economy through increased income and job creation. However, challenges such as market price fluctuations and infrastructure limitations need to be overcome in order to maximize the potential of the floriculture sector. This research provides policy recommendations to support the sustainable development of the floriculture sector and support regional economic growth based on ornamental plants.

Keywords: *Ornamental Plant Export, Comparative Advantage, Economic Growth, Probolinggo, Malang, Revealed Comparative Advantage (RCA), Floriculture.*

INTRODUCTION

Indonesia, as a tropical country with abundant natural resources, has great potential in the floriculture sector, especially in the cultivation of ornamental plants. Two prominent regions in the development of floriculture in Indonesia are Probolinggo and Malang. These two regions are known for their extraordinary agricultural potential, especially in the cultivation of ornamental plants that have high economic value. Malang, known for its mild climate, as well as Probolinggo with its fertile volcanic soils, provide ideal conditions for the development of floriculture, especially flower plants that are tourist attractions and export commodities.

Probolinggo, which is one of the centers of ornamental plant production in East Java, is one of the main areas in the development of ornamental plants, especially chrysanthemums and orchids. Malang, with its vast agricultural area and a diversity of ornamental plant types, also plays an important role in Indonesia's floriculture sector. The region has a number of thriving flower gardens and agribusinesses, supporting both domestic and export markets. (Porajow et al., 2025)

The floriculture sector in these two areas is also integrated with tourism. The cities of Malang and Probolinggo have annual flower festivals that attract both domestic and international tourists. The festival not only promotes the diversity of ornamental plants but also introduces the economic potential of the area associated with the cultivation and trade of ornamental plants. This makes the floriculture sector an economic pillar that contributes to increasing the income of the local community. (Central Statistics Agency of Malang Regency, 2016)

METHOD

This study uses the *Revealed Comparative Advantage* (RCA) method to analyze the comparative advantages of ornamental plants in Probolinggo and compare them with the comparative city, namely Malang. The ornamental plants that are studied include several types of plants that are the main export commodities, such as chrysanthemums, roses, orchids, and succulents, which are widely cultivated in Batu City. The RCA calculation formula used is as follows:

$$RCA_{ij} = \frac{(X_{ij}/X_{it})}{(X_{kj}/X_{kt})}$$

Where:

- RCA_{ij} is the comparative advantage of ornamental plant products j from Probolinggo (i),
- X_{ij} is the export value of ornamental plants j from Probolinggo,
- X_{it} is the total export of Probolinggo,
- X_{kj} and is the value of ornamental plant exports X_{ktj} and total exports in Malang (k).

The RCA value of > 1 indicates that Probolinggo has an advantage in the export of certain ornamental plants compared to Malang, while the $RCA < 1$ indicates that Malang is superior in the export of such ornamental plants.

RESULTS AND DISCUSSION

The Effect of Ornamental Plant Export Value on Economic Growth in Probolinggo and Malang

This study aims to analyze the influence of the total and export value of ornamental plants on economic growth in Probolinggo and Malang Regencies. Based on the results of the Revealed Comparative Advantage (RCA) calculation that has been carried out, it can be seen that Probolinggo has a comparative advantage in the export of ornamental plants such as Orchids, Roses, Chrysanthemums, and Anthuriums when compared to Malang Regency.

The RCA results show that the RCA for Orchids and Roses in Probolinggo is greater than 1, which means that these two plants have a comparative advantage compared to Malang. This advantage greatly affects the contribution of ornamental plant exports to the local economy in Probolinggo, which directly increases the income of the agricultural sector and creates job opportunities in related industries.

The following table shows the RCA values for some ornamental plant commodities in both cities:

Commodities	Probolinggo	Hapless	RCA	Status RCA
Cut Orchid	586.762	2.240.187	1.12	Superiority
Rose Stalk	111.951	24.736.999	1.23	No Advantages
Chrysanthemum Stalk	220.850	4.692.799	0.99	Superiority
Anthurium Flower Stalk	113.964	31.563	1.01	Superiority

Economic Growth Based on Ornamental Plant Exports

Along with the results of the RCA which shows the comparative advantages of ornamental plants in Probolinggo, the agriculture and floriculture sectors in this area play an important role in driving economic growth. Based on existing data, the contribution of ornamental plant exports to the total exports of this region is quite significant. The increase in ornamental plant exports is directly proportional to the increase in people's income, especially those directly involved in the cultivation and distribution of ornamental plants.

According to the Central Statistics Agency (BPS), the agricultural sector in Probolinggo has increased in recent years, with the largest contribution coming from ornamental plants. Ornamental plants such as Orchids, Roses, and Chrysanthemums are leading commodities that lift the regional economy, creating jobs in the agriculture, packaging, and marketing sectors.

Factors Affecting the Comparative Advantage of Ornamental Plants

Based on the results of the RCA calculations, Orchids and Roses show an RCA yield greater than 1, which means that these two commodities have an advantage in exports. Some of the factors that affect this comparative advantage include:

- Probolinggo has a cool climate and fertile soil, which is ideal for the cultivation of ornamental plants such as Orchids and Roses.
- Farmers in Probolinggo are increasingly adopting modern agricultural technologies, such as the use of organic fertilizers and efficient irrigation systems, which improve the quality and quantity of ornamental plants.
- Probolinggo has an extensive marketing network, both domestically and internationally, so that ornamental plants from this area are easily exported to the global market.

Challenges in the Development of Ornamental Plant Exports

Despite the comparative advantages in ornamental plant exports, the sector still faces challenges, among others the price of ornamental plants which are influenced by the seasons and global market demand can be highly volatile, some areas in Probolinggo still have difficulties in accessing adequate infrastructure for the distribution of ornamental plants, despite advances in agricultural technology,

not all farmers can access or take advantage of modern technology that can increase yields ornamental plant production.

The comparative advantages reflected in the RCA show that ornamental plants are a potential sector to support local economic growth in Probolinggo. With the increase in ornamental plant exports, this sector not only provides benefits for farmers, but also strengthens the regional economy through job creation and increased income from related sectors. However, to maintain and improve this comparative advantage, Probolinggo needs to overcome existing challenges, especially in terms of infrastructure and market price fluctuations. In addition, support from the government in the form of policies that support the development of the floriculture sector will be very helpful in creating sustainability in the development of regional economies based on ornamental plants.

CONCLUSION

This study shows that Probolinggo has a comparative advantage in the export of ornamental plants such as Orchids, Roses, and Anthurium. These advantages contribute to local economic growth, increase incomes and create jobs. Nonetheless, challenges such as market price fluctuations and infrastructure limitations need to be addressed to maximize the sector's potential. With supportive policies, the ornamental plant sector can become the main driver of the economy of Probolinggo and a model for other regions.

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