

## Increasing the potential of air orchid exports in Thailand

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### Abstract

This study aimed to 1. analyze the problems and obstacles in air orchid export in Thailand, 2. study the operation of air orchid export in Thailand, and 3. find ways to increase the potential of air orchid export in Thailand. This research was qualitative. Key informants included 3 orchid export entrepreneurs, 3 transport agents involved in the orchid export business, and 3 marketers, totaling 9 people (all of whom had at least 7 years of experience in air freight). The tools used were structured interviews and content analysis. The research results found that:

Problems and obstacles in air orchid export in Thailand It was found that currently, consumption behavior in foreign markets is quite diverse. Consumers demand quality orchids or new orchid species, causing entrepreneurs to maintain production standards and develop new species. Factors that reduce the quality of orchid exports include the spread of diseases in orchids, such as black rot, leaf spot, and yellow leaf spot, etc., the problem of orchid rot when subjected to inappropriate temperatures, and the problem of agricultural labor shortages.

Methods for air orchid export in Thailand found that 1. Exporters should give importance to the transportation of orchids from the garden to the packing house to select, grade and carry out pest control procedures. 2. Cooling process to make orchids fresh, strong, quality and insect-free, as well as a cooling system that controls both temperature and humidity in both the packaging and transportation to the airport. 3. Documents requesting a CITES permit from the Department of Agriculture by bringing the orchids to be exported for inspection. 4. Technological readiness of employees from upstream to downstream processes. Guidelines for increasing the potential of air orchid exports in Thailand found that guidelines for preventing factors that reduce the quality of orchid exports from the problem of disease outbreaks in orchids, using technology to help manage the orchid care system and using scientific knowledge to improve orchid varieties to create new strains that can resist epidemics in orchids, the problem of orchid rot when subjected to inappropriate temperatures, training employees on how to transport orchids, what temperature should be used to be appropriate and help maintain the freshness of orchids throughout the transportation, and using lightweight, strong, and durable waterproof coated paper packaging materials for air transportation, and the problem of labor shortages in the agricultural sector, using technology or artificial intelligence. To cope with the insufficient labor for work and to train employees to increase their skills and create readiness before starting work.

**Keywords:** Orchid Export, Air Freight, Fresh Flower Export Process

## 1. Introduction

In 2023, Thailand ranked first in the world in exporting orchids, with Vietnam, the United States, Japan, China, and India as its main trading partners, respectively. Orchids are considered a symbol of Thailand. Popular orchid varieties for export include Dendrobium, Mocha, and Oncidium, respectively. Orchid exports were valued at 4.68 million US dollars, or 161.72 million baht. Thailand's major orchid production areas include Nakhon Pathom, Samut Sakhon, Nonthaburi, Bangkok, and Prachin Buri. (Office of Agricultural and Industrial Trade Promotion, 2023)

Due to the current consumption behavior of foreign markets, consumers demand quality orchids or new orchid species, causing entrepreneurs to maintain production standards and develop new species (Office of Agricultural and Industrial Trade Promotion, 2023). Factors that cause orchid exports to be of lower quality include the problem of disease outbreaks in orchids, such as black rot, leaf spot, and yellow leaf spot (Thai Orchids Magazine, 2023), the problem of orchid spoilage when exposed to inappropriate temperatures, and the problem of agricultural labor shortages.

Exporting orchids by air The first step is preparing orchids for export. Orchids cultivated for export will have steps after cutting the flowers until packaging that are different from general orchids sold domestically. Exporters should pay attention to everything from transporting orchids from the garden to the company's packing house to select, grade, and perform pest control procedures and the cooling process to make the orchids fresh, strong, of high quality and free from insects, as well as the cooling system, which controls both temperature and humidity, both during packaging and transportation to the airport. Exports from Thailand to foreign countries will require a CITES permit from the Department of Agriculture. by bringing the orchid plants to be exported for inspection as well. If they are purebred orchids, CITES must be requested at the CITES office in Kasetsart University, Bangkok. For hybrid orchids, requests can be made at the Plant Quarantine section at the airport. Exporters must have an exporter ID card with the Department of Foreign Trade and the Customs Department. A phytosanitary certificate must be requested from the Department of Agriculture if the orchids to be exported are purebreds or are in certain strains with requirements.

Therefore, the researcher saw the problems that occurred and affected the quality of orchid exports. Therefore, the researcher conducted a study on increasing the potential of orchid exports, the current situation of orchid exports, which is an analysis of the problems and obstacles along with methods for orchid exports, and led to an increase in the potential of orchid exports. The researcher can use the study to provide guidelines for entrepreneurs to conduct business in the future.

### 1.1 Research Objective

1.1.1 analyze the problems and obstacles in air orchid export in Thailand

1.1.2 study the operation of air orchid export in Thailand, and

1.1.3 find ways to increase the potential of air orchid export in Thailand. This research was qualitative

## 2. Literature Review

A sustainable supply chain is an interaction between sustainability and a supply chain which is an important step from the latest operational and environmental audits and operational sustainability. The sustainable supply chain performance dimensions comprise economic performance, environmental performance, social performance, and institutional performance. First, economic performance is the most important incentive to implement a sustainable supply chain. Sustainable jobs may not generate positive profits and short-term sales due to very high initial costs. However, these guidelines will help companies improve their long-term performances by continuously improving their ability to manage environmental risks and improve environmental and social performances. Wissawa Aunyawong (2021) In this study, there are two aspects of economic performance, which are the marketing and financially operational results. Performance refers to the extent to which companies improve costs, quality, delivery, and flexibility. Work accomplishment relates to the company's competitiveness, meaning the actual or accepted competitiveness of the manufacturer as compared to the main competitors in the target market. In the sustainable development era, performance is less important when compared to other indicators. Second, environmental performance is an executive's concern because it is a requirement related to compliance and regulatory necessities under public awareness, including desires for organisational competitive advantages. For example, reducing energy can improve environmental performance. Environmental performance is also known as the achievement of an organisation regarding performance related to pollution control and efficient use of resources. With an increasing demand for environmental and social performance, organisations do not only have to consider efficiency, costs, delivery, quality, and flexibility, but also the environmental and social performance. Environmental and social efficiencies are very important. The organisation's goal is to gain a sustainable competitive advantage. Third, the social performance consists of three parts which are social responsibility, social issues, and philosophy of social response. Performance in social sustainability consists of 5 indicators, including human rights, employment problems, supplier relationships, community initiative, and public relations for corporate social responsibility. The development of balanced scorecards to be in line with the environment and society and organisational performance in the stakeholder's view is a difficult task and has the nature of the complexity of social practices. Fourth, institutional performance is another important factor that supports sustainable development, in addition to economic, social, and environmental performances. For the integration and importance to environmental protection, economic, social, and ecological sustainability are organised together by institutional sustainability as driving factors. This is a practical framework for assessing sustainability.

## 3. Methods

In the qualitative study, the researcher selected purposive sampling to conduct in-depth interviews with 9 key informants, according to the concept of Cresswell (2018) who suggested that in-depth interviews for research on explaining phenomena should have 3-10 people. This research used the triangulation method to compare the research findings from different sources and perspectives from 3 business operators, 3 transportation companies related to the business, and 3 marketers of ABC Company in Ratchaburi Province to confirm the credibility and validity of the data or findings in the research.

The selection criteria are as follows:

1. Business operators must have experience in various operations related to orchid transportation for no less than 5 years.
2. Transportation companies related to the business must have experience in managing orchid transportation for no less than 5 years.
3. Marketers must have research work in logistics and supply chain or orchid transportation.

The research instruments used were structured interviews, with primary and secondary data collection. In addition, content analysis was performed.

### **3. Results and Discussion**

#### **1. analyze the problems and obstacles in air orchid export in Thailand**

1.1 Current orchid business conditions Thai orchid exports are sent to many countries. Some countries have decreased, stable and increased trading, allowing the business to continue. Most of the major trading partners are still in Asia, mainly Japan and China, followed by the United States and European countries. The strength of the Thai orchid business comes from the species selected for cultivation and export as species that can be grown in Thailand's climate, allowing this business to still have the strength to compete with competitors.

1.2 Problems in business management. Inefficient transportation will affect the quality of orchids, which must take into account freshness, not bruised and transportation costs that must be able to compete with competitors as well. Negotiation with trading partners or consumers who have different cultures, the appreciation of the baht, and the lack of quality personnel, including experience and expertise in the field of work in some organizations.

#### **1.3 Methods for solving problems that occur**

Create packaging with specific characteristics for each type of orchid species To maintain quality to support transportation that may not be of good quality sometimes and to reach consumers well, be efficient in developing an understanding of the culture and language of trading partners and the ability to negotiate, manage costs appropriately in all aspects, including transportation, labor, management and raw materials, and find the right things. To motivate employees to love their jobs and stay with the organization effectively.

#### **Export Procedures from Thailand**

Orchids to be exported abroad must have a request and CITES from the Department of Agriculture. Bring the orchid plants to be exported for inspection. If they are purebred orchids, you must request CITES at the CITES office at Kasetsart University, Bangkok. For hybrid orchids, you can request them from the Plant Quarantine Division at the airport.

Exporters must have an exporter ID card from the Department of Foreign Trade and the Customs Department and must apply for a phytosanitary certificate from the Department of Agriculture if the orchids to be exported are purebreds or are in certain species with regulations, such as orchids in the Orchidaceae family, which are included in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Applications for permission to export protected plants and protected plant remains according to the families and species specified in the list requiring permission in Bangkok can be submitted at the Plant and Agricultural Materials Control Division, Department of Agriculture. In the provinces, applications can be submitted at only 3 plant quarantine checkpoints: Chiang Mai Airport Plant Quarantine Checkpoint, Phuket Airport Plant Quarantine Checkpoint, Hat Yai Airport Plant Quarantine Checkpoint. For more information, please contact the Plant Import and Conservation Division.

- To register as an orchid exporter, you can apply for registration at the Export Service Division.

- Applying for a Phytosanitary Certificate: Applying for a Phytosanitary Certificate is accompanied by the exported goods. It is not mandatory. It is the exporter's wish to apply or is in accordance with the requirements of the importing country. Except for orchid exports to the European Union, exporters must apply for a Phytosanitary Certificate from the Department of Agriculture and must present it to customs officers every time they export. Anyone who wishes to apply for a Phytosanitary Certificate must submit an application using the P.K.9 form. The central office can submit it at

- Plant Standards and Inspection Services, Plant Quarantine Division,

Currently, there are companies providing international freight services that can take care of the transportation from the time the goods are still at the factory/farm, carry out the export permit application process with the relevant agencies on behalf of the exporter, which has details in terms of export documents and other technical steps to ensure that the goods can leave the country smoothly, including managing the international transportation process, contacting airlines/shipping lines, and when the goods arrive at the destination country, they will proceed with the import permit application with the customs department of the destination country according to the correct procedures, including the import inspection process, the tax payment process to ensure that the goods reach the recipient/customer at the end. The steps for the goods to pass the import procedures of the destination country are complicated due to the regulations, preparation of local language documents, and the correct procedures of each area. However, you should choose an experienced company or a company with a Chinese partner to carry out the minor steps in the destination country.

Therefore, the shipping company, also known as a shipping company, is an important part that helps the transportation process go smoothly and it is very important for exporters to use the service to reduce the complications that may occur from all the export documentation processes and reduce the problems that may occur in the export process. Most exporters will have a shipping company to provide services. Each shipping company may have expertise in different areas. Choosing a shipping company that is specialized, trustworthy, and can solve export/transportation problems is very important. The companies on the list from these sources are companies that have been screened by agencies/associations and are reliable. If you encounter any problems with the service, you can complain to the association directly.

## 5. Conclusion

The results of the analysis according to objective 1 found that The results of the analysis according to objective 1 were found to be consistent with Akkapat Bualom (2024). The results of the study found that logistics management to support changes in the supply chain of cut flower orchid exports in the Vietnamese market The situation of the spread of the coronavirus

2019 (Covid-19) has resulted in changes in the supply chain. The export value and growth rate of Thai cut flower orchids decreased by -34.14 percent. Entrepreneurs in the supply chain need to adapt to survive. When considering Thailand's major export markets, it was found that The export value to the Vietnamese market has continuously increased despite facing the spread of the virus. It is the number 1 export market for cut flower orchids in Thailand in 2022 with an export value of 20.98 million US dollars. This study aims to study the logistics management of entrepreneurs in the supply chain of cut flower orchids exported to the Vietnamese market. So that those who are interested can use the results of the study as a model for implementing logistics activities in other ASEAN markets. The study found that there is logistics management that aims to develop the level of customer service in 4 activities: 1) Customer service activities by suppliers of production factors who provide disinfectant products that are not harmful to orchids for sale, which is considered a way to solve problems and respond to customer needs in a timely manner. 2) Order management activities have developed the level of customer service by increasing modern communication channels and farmers aim to produce high-quality orchids to meet customer orders in a timely manner. 3) Procurement activities have been procured under strict measures to prevent the spread of the virus in order to obtain quality and safe products. 4) Packaging activities have measures to disinfect to prevent the spread of the virus at every step and reduce the size of the packaging to comply with the air transport conditions of the airline.

The results of the analysis according to the second objective were found to be consistent with Ancharporn Laorungphisit (2024) Competitive strategies of Thai banana exporters under non-tariff trade barriers (NTBs). The research results consist of 1) the context and environment of competition using SWOT Analysis as a tool to analyze both internal and external factors affecting the performance and challenges of Thai banana export businesses under non-tariff trade barriers; 2) the analysis of strategies from using strengths to cope with threats (Threats), using strengths to cope with obstacles (ST) in Thai banana exports using TOWS Matrix as a tool; 3) the results of the study TOWS Matrix is used to define the competitive strategies under Non-Tariff Barriers (NTBs). The main recommendations from the research results are to cluster entrepreneurs to increase their bargaining power, to link government database networks to create advantages in the global trade arena, and to enhance the competitiveness of Thai entrepreneurs based on innovation in production, marketing, and the adoption of digital technology.

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