

The challenges of demand and safety towards sustainable growth on exporting food products

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Abstract

Objectives: To identify growth of exports in cereals, seafood, fresh vegetable and fruits. Also to focus on preventive measures for rejections and denials on exporting food products and its raw material in International market.

Methods/Statistical analysis: The basic research procedure used to identify the growth of exports in India is through the data collected from APEDA of India. The Data has also been collected from research articles, websites, in order to comprehend the continuous issues related to exporting food products from India. The comparative study is carried out by collecting the data from 2012 to 2018.

Findings: The development of exports in sea foods and cereals for the financial year 2018 shows that there are precautionary measures carried out in exports for food safety and hygiene which recorded a gradual growth. Since the fresh vegetables and fruits are highly perishable and require proper temperature during storage, there is decline in exports for about 50%. The major reasons are due to insufficient storage space for storing fruits and vegetables; > 20 % vegetables and fruits stock is spoiled during postharvest due to improper storage facilities.

Application: Despite of existing issues in exporting products for some specific countries there exists sustainable growth in food products exports, due to international supply chains management firms that have entered in to the export market. The wastage and loss could be reduced in future.

Keywords: Safe food, processed food products exports, Fruits & Vegetable exports, Barriers of Exports.

1. Introduction

India is the major producer of cereals, and the exporter of sea food, placed on top ten exported items of the country, and provides a source to flourish the Indian economy with an impressive growth in GDP. Cereals exports developed by 35% to USD 8.1 billion in beginning of 2018 therefore it increased demand in global markets. As India is one of the leading exporters of cereals, Vegetables, sea food and processed food products, government is concerned in giving subsidies on enhancing the exports of food products like cereals, fresh vegetables, sea foods and processed foods. In spite of various attempts, Indian exporters are experiencing refusal and restriction on exporting food products due to food safety in regard with health hazards. The cause of disagreement is due to the type of food products exported and the contamination of food materials due to bacterial and microbial organisms in the Importing region. This will drive to poor demand for exporters of processed food products, vegetables and cereals. The developed countries' markets are the primary target for the export of cereals, Sea foods, processed foods and horticulture from the past few decades [1]. The conventional food exports have repeatedly reduced and restored by exporting processed food in the markets of developed countries. The shipment of 13,77,244 Metric tons of sea food acquired US dollars 7.08 billion during the financial 2017 -18 with a 19% hike comparatively from the previous financial year 2016 -17. The complete Indian agricultural exports evolved with a 16.45 per cent compound annual growth rate (CAGR) between the financial years 2010-2018 and with a growth of 38.21 billion US dollars in financial year 2018 [2]. During the month of August 2018 the agriculture exports were reached to US dollars 15.67 billion. Whereas, the 15% decline reported on fresh vegetables exports during Dec 2017, simultaneously 4.3% with fresh fruits. Nevertheless, approaching to international markets contains numerous objections in regard with safety standards.

The scientific awareness enhanced the quality standards which are not stable and keep changing with the systematic experiments and it is expensive to transform procedures and methods of food processing. Deploying food safety standards in order to improve the access to international export market and to accomplish the market expectation, with successful trade transaction. The knowledge of transition in food safety standards is needed for exports about the concerned importing country. According to the Food safety requirements of sea foods which is associated with normal hygiene in relation with definite microbiological and chemical contaminants of fish, the technical awareness of fishery products will be changing with developing issues of the countries and made them to apply stringent rules and regulations in order to establish the safety standard of the fishery products to be imported.

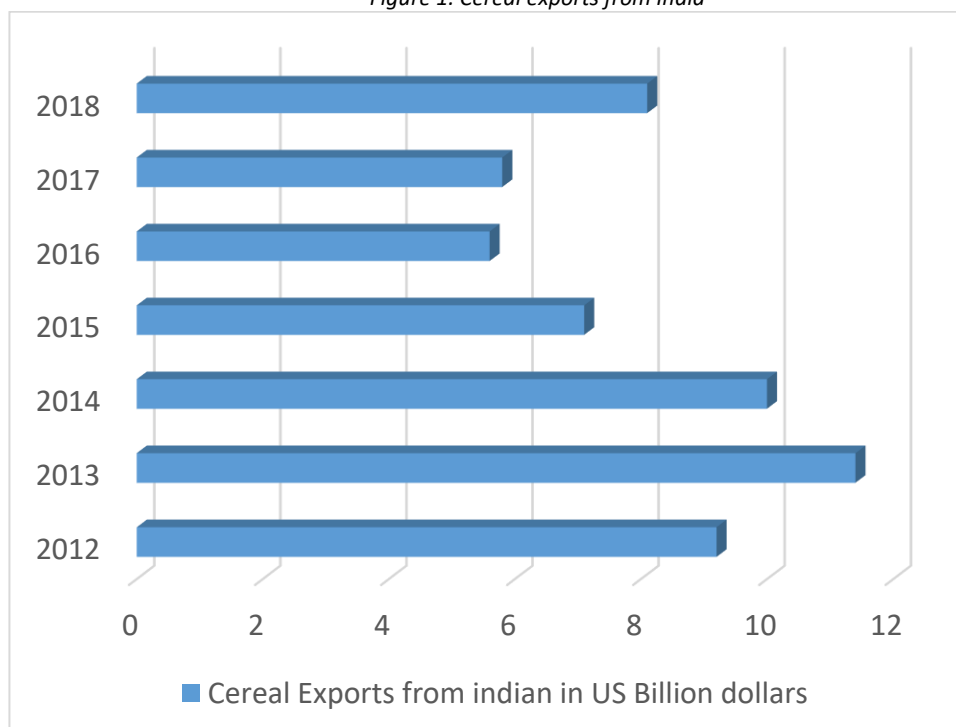
1.1. Refusal and detainment on exporting foods in international markets

The food safety challenges are the primary concern in fresh vegetables and sea food, when compared with other type of processed food product in Exports. The fresh vegetables, fruits and sea foods need to be delivered in good condition because they are easily perishable, if not stored or preserved in right temperatures. The importers wish these products to be fresh while receiving and consumer expects it, to be in fresh form. There is a big responsibility goes to food handlers throughout the supply chain to ensure and provide a safe and quality food. The health hazards may occur due to the development of microorganisms which in turn contaminates the fresh vegetables and fruits. The sea foods are contaminated by parasites, chemical wastes, and improper temperatures. The US Food and Drug Administration (FDA) has banned the entry lines of India on many shrimp shipments [3], due to the existence of microorganism salmonella a harmful bacteria led to food borne illness and also refused entry for the top brand of Indian snacks, stating that these food products are laden with pesticide, salmonella and banned the snacks imports from India in the first half of 2015.

1.2. Cereals exports

The cereals exports in India decreased in 2016 with the value of 1017.30 Million US dollars comparatively from the previous year 2015 which was measured about 3415.78 Million US Dollars. There was a phenomenal growth in Exports of Cereals in India from the past two decades especially when it reached the value of 3076.98 Million US dollars.

Figure 1. Cereal exports from India



India exporting cereals to many countries and the major importer of cereal is Iran during 2017 to 2018 [2]. Simultaneously made evidence as a largest producer and exporter of cereal products in the world. Although India is a second largest producer of Rice [4], Wheat and other cereals, due to the large requirement for cereals in the International market created an exceptional and favorable situation for exporting cereals from India.

This is a remarkable growth of cereal export even after some major cereal importing countries has started their own production [5]. The major importing countries of cereals from India are UAE, Saudi Arabia, Iran, Indonesia and Nigeria. India is also exporting many other agricultural products and which has the good response in exports like, Fresh Vegetables, Groundnut, Fresh Fruits, Processed Fruits & Juices, Processed Vegetables, Dairy Products, Pulses, Cocoa Products, Floriculture, Fruits and Vegetable Seeds.

Figure 1 shows that there is a remarkable growth in cereals exports on 2018 comparing to FY 2016, 2017 and also it is observed that there was a major export of cereals during FY 2013.

1.3. Fruits & Vegetables exports

The climate of India is ideal for the production of many varieties of fresh vegetables and fruits and India is one of the major suppliers of fresh fruits, vegetables and Horticulture, which is more than 250 million metric tons of fruits and vegetable every year [6]. The ample amount of fresh vegetables and fruits production led to enormous hope for exporting it to other countries and the export measured during 2017-18, will be around 1,459.93 Million US dollars which comprised of fruits and vegetables [7]. The major fruits exported from India are Mangoes, Bananas, Pomegranates, Grapes, Walnuts and the vegetables such as Okra, Onions, Green Chilies, Bitter Gourd, Mushrooms and Potatoes [8]. There is a gradual decline in exports of fresh fruits and vegetables and horticulture products with the strict and stringent rules fixed by importing countries. Around 50% of decline in exports from India during the first half of 2018. The data prepared by Agricultural & Processed Food Products Export Development Authority (Apeda) exhibits that the exports of fresh vegetables & fruits from India declined by 26.3% and continued to decline stage due to the, irregular methods of handling consignments at exits, and improvements should be required on storage and preventive measures formed by importing countries based on food safety from microorganism and chemicals wastes [9].

Figure 2. Fruits and vegetables exports from India

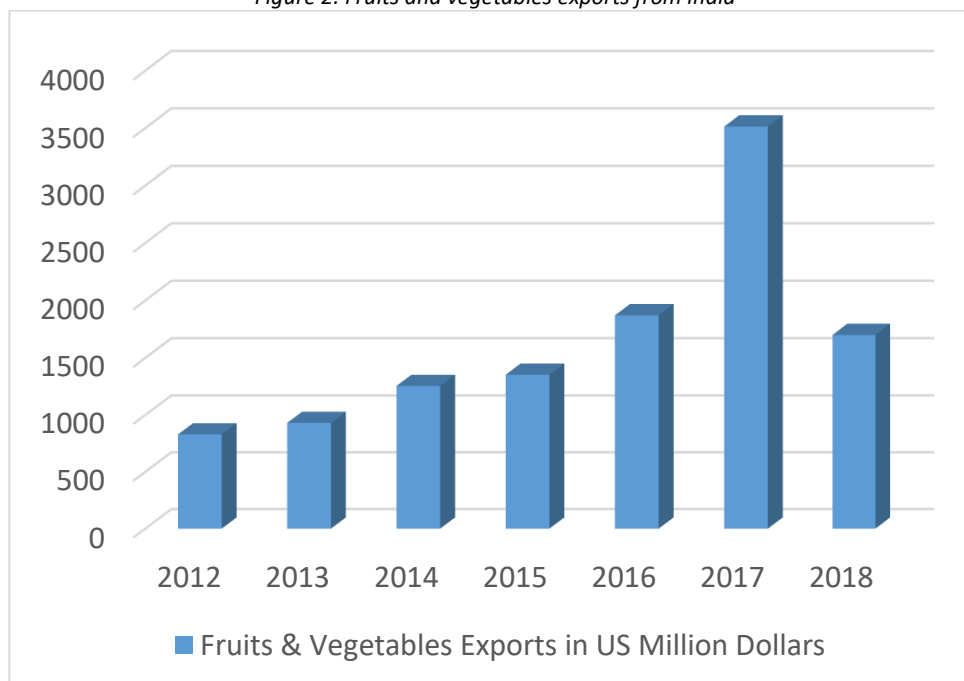


Figure 2 exhibits the exports of fruits and vegetable from FY 2012 to FY 2018. It is noticed that there is a decline in FY 2018. But there was a gradual export till FY 2017, and it is measured with USD in millions.

1.4. Seafood exports

The exports of seafood from India provides considerable growth in Indian economy and giving employment for the people near coastal area and contributes a 4% of earnings from total export from India. Sea food has been developed significantly in recent years and influence foreign money exchange, with earnings of 7.08 billion US Dollars on FY 2017-18. India contributing 6% of sea food production in world and ranked second biggest sea food producer with the exports of 13, 77,244 MT in International market during FY 2018. Despite of introducing the inclusive food safety measures from India, the percentage of refusal and detainments has been raised simultaneously over the period [10], due to the existence of salmonella harmful bacteria in sea food. The progressive scientific knowledge of food consumption related to health and safety of consumer, initiated the severe rules and strict regulations in order to assure the standard on food safety among seafood consumers and other processed food products [11]. The deployment of advanced technology to maintain the food safety with respect to International standards on hygiene and quality throughout the supply chain in exports will resolve, the issues raised from importing countries for exporters of India and can able to meet the upcoming demand in sea food Exports [12].

Figure 3. Seafood exports from India

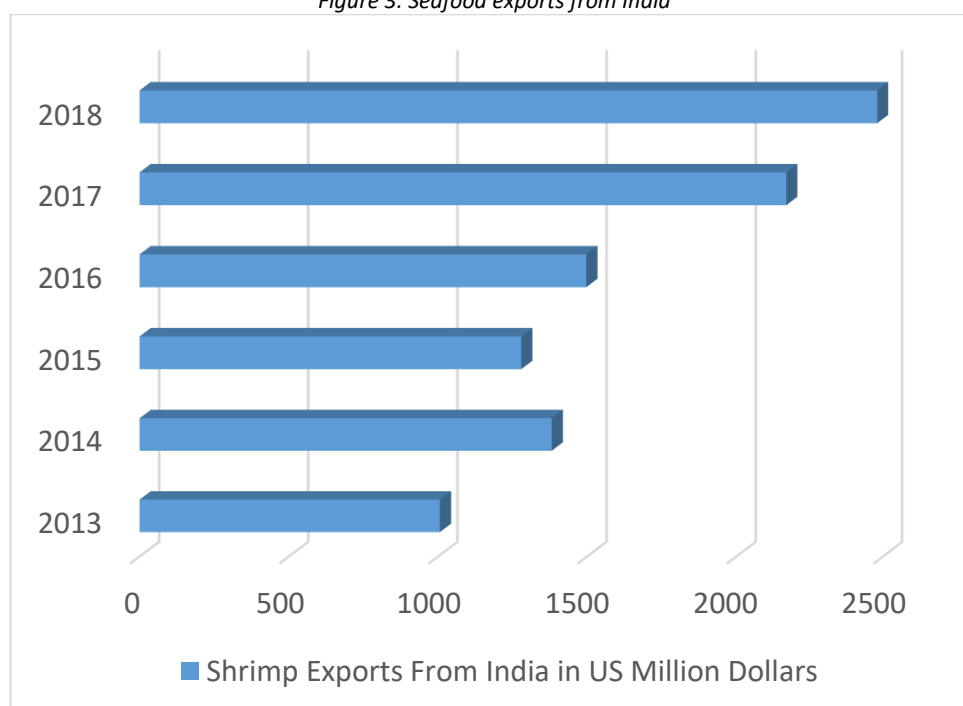
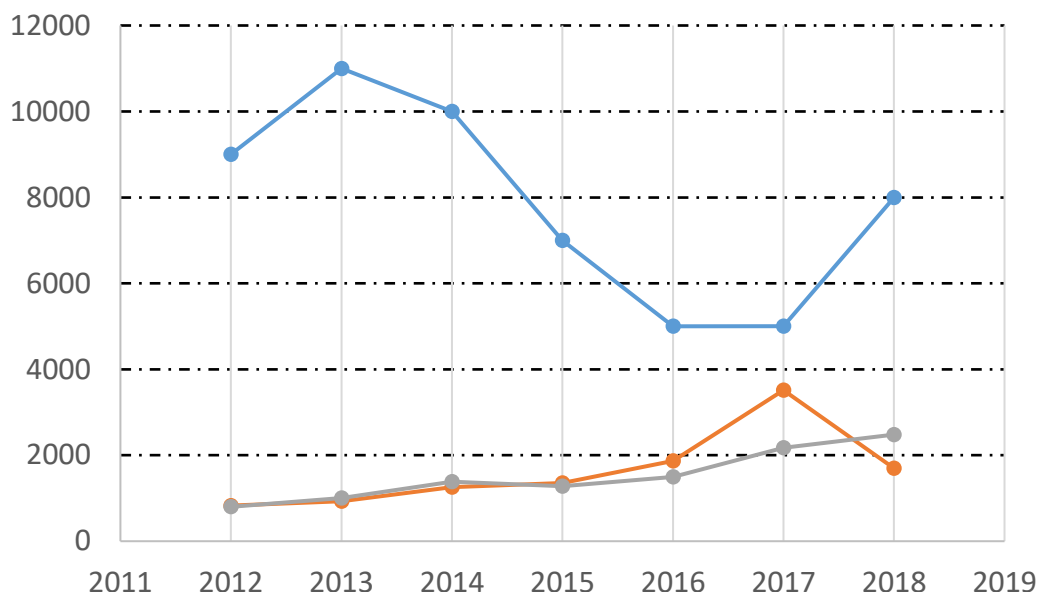


Figure 3 exhibits the sustainable growth of sea food exports from FY 2013 to FY 2018 and there was a phenomenal growth of sea food exports continuously, although countries started maintaining stringent rules and regulations.

1.5. Growth of export in food products

In this analysis, it is observed that the huge revenue is generated by cereals and the major cereals exported will be comprised with Basmati rice, Non Basmati rice, Wheat, Millet, Barley. The exports of cereals reached to peak in 2013 and declined during 2016 later stabilized and improved with the income of 8.1 billion US Dollars. A similar growth found between fresh vegetables, fruits and sea food during the FY 2016-17 and a decline during FY 2017-18 for Fruits and vegetables, whereas the seafood exports seems to be gradually increased [13-16]. The main challenges faced by exporters are providing fresh, safe and healthy food to the consumers, especially in regard with fruits, vegetables and sea foods, because these foods are highly perishable and also influenced with harmful bacteria like salmonella, on the other hand the proper storage facilities and infrastructure is required in terms of storing these food products in right temperatures.

Figure 4. A comparative study between exports of food products from India



Our study demonstrates that there is a growth of exports with cereals and sea foods; cereals contribute the maximum revenue through exports in India and there is a decline in fruits and vegetable exports as shown in Figure 4.

2. Conclusion

This study determines that the food products exported from India has a great demand in the world market with an inclusive growth excluding few perishable food products. Even though India is one of the largest food producers in the world, it cannot utilize the demand completely from International market due to safety and quality aspects. This can be possible only by adopting innovated advanced technology in transforming market expectation, due to scientific advancement. There is a growth in sea foods and cereals exports during FY 2018 which shows that the preventive measures being adopted in exports for food safety and hygiene; while the fresh vegetables and fruits exports are declined to more than 50% due to inadequate storage and infrastructural facilities. Because the vegetables and fruits will be easily perishable if the right temperature is not maintained. It is predicted that more than ~20% food stock is lost during postharvest due to improper storage facilities for fruits and vegetables and observed that the food processing sector is experiencing funding problems during transactions. In spite of these existing challenges, the export of food products has a sustainable growth and great opportunities, as the big supply chains firms have entered in to the International export market.

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