

A Study of Import Substitution of Agricultural Product and Policies in India

¹**Rama Rani, Research Scholar**

SOB, Galgotias University

²**Dr. Rashi Mittal, Associate Professor**

SOB, Galgotias University

³**N. Aishwarya, Student-BBA**

I.T.S Mohan Nagar, UG Campus

ABSTRACT

India is currently the world's second largest producer of agricultural products. According to the 2014 FAO world agriculture statistics, India stands as the world's largest producer of fresh fruits and vegetables. It is considerably a wide-ranging producer of chickpeas and milk produce majorly. It is a large scale producer of fibrous crops, spices and staples. India embarks as second largest producer of wheat, rice and food staples around the globe. India is ranked fifth largest producers of poultry meat and livestock as well. According to the reports released in 2008, claimed that India's population is being increasing rapidly than its potential to produce rice and wheat and to feed its population, Where recent studies and research shows that only if there is reduced spoilage, less wastage of food, increased agricultural efficiencies and use of advanced agro based equipment's would result increased ability to feed its population and also left available for exports purpose. India after independence adopted a policy which is encouraging the production and use of domestic goods rather than of those which are imported from other countries. The present study is an effort to analyze the Import substitution of agricultural products, the current India's position in agricultural production, export and import of agro products, effects of Import substitution on Indian economy, Measures as well as implementation efforts by the Indian government also their results and to state some suggestion on how we can achieve the aim of import substitution policy.

Key Words: Agricultural, Import Substitution Policy, Agro-Import, Agro-Export, Indian Economy

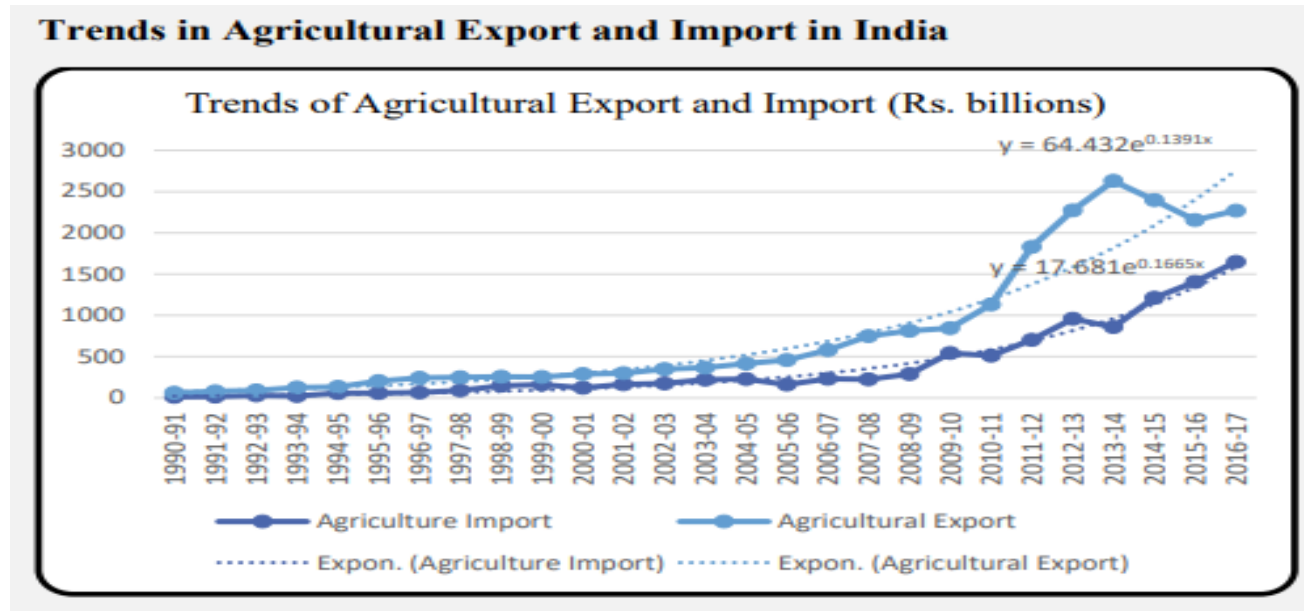
I. INTRODUCTION:

Import substitution is an intention to bar the import of goods and to encourage the use of products which are domestically made. The policy of import substitution is with the objective to increase profits of domestic industry and to increase the demand for nations own produce. It is a policy which pushes natively produced food grains and to minimize imports,

It has being said that sustainable economic development is possible only if there is an increase in the levels of industrial self-sufficiency and output. It is the strategy of meeting self-sufficiency in the world economy. All of these infers that there is a great need for increasing attention towards the agricultural sector in the industry. Import substitution is majorly a strategy that targets to abolish the import of foreign products and creates demand for the production in the domestic market. Sole purpose of this very policy is to change the economic condition as well as the structure of the country by substituting foreign goods with domestically produced ones and to simulate demand. In the initial seven five year plans the trade in India was famed by the inward-focused trade strategy which is known as import substitution. It is the trade policy which is aimed to promote economic growth by restricting imports that are competing with the domestic products in developing countries. It approaches to substitute externally produced goods and services with locally produced ones which will in turn reduce regional unemployment or protect small industries.

In previous decades, an unprecedented record in production of food-grains was set, where there a significant jump was noticed in the level of production that is about 217 mn tones in 2006-2007 to 275.11 million tonnes in 2016-2017. As the country witnessed drought in 2009, 2014 and 2015, this did not affect the food-production much. It was the time where it was noticeable that the country is both self-sufficient and has enough for export too. Due to the presence of surplus food grains it was advised to export food grains and to increase the number of processing units said by some experts, resulting more export than import.

Fig1



India stands as the world's second largest producer of Rice, Wheat and other cereals. Due to the fact that there is a humongous demand for the procurement of cereals, it has constructed an exceptional environment for India. In 2008, export of rice, wheat with other commodities were banned to satisfy domestic needs, but was latterly elevated while considering the surplus production and demand available in the global market. The most important cereals which were produced are paddy, wheat, millet, sorghum, maize, barley etc. Ministry of Agriculture of India reported the final estimation for 2015-16 stating, the

production of major cereals in particular rice, bajra and maize yielded 104.32 million tonnes, 21.8 million tonnes and 8.08 million tonnes respectively, beside India is not only the largest producer of cereal but also one of the largest exporter of cereal products in the world though China which takes a lead in producing rice or other cereals. Export of cereals in India stood at Rs 47,287.12 crore / 6,611.09 USD Millions throughout 2019-20, where Rice accounted for around 95.7% which is a very significant share in India's total cereals export, on the other side cereals containing wheat constitute only for about 4.3 % share in gross cereals exported from India.

II. INDIA'S POSITION IN AGRICULTURAL PRODUCTION AND EXPORT:

Indian agricultural commodities are exported to over and above 200 countries, top most countries where the agro products are being exported are specifically Iran, U.S.A, Nepal, Malaysia, U.A.E, Iraq and Saudi Arabia. India's agricultural GDP has escalated and further shows that in 2017-18 the percentage stood 9.4% and in 2018-19 it went up to 9.9%, whereas India's agricultural GDP turned down from 5.7% to 4.9% which depicts that there is availability of food grains for export and it also shows a reduced dependence of the country on import of agricultural goods from other nations. In terms of fruits and vegetables production, India stands second position. Nearly about 8.23 lakh tonnes of fruits valued Rs 5,638 crore and around 31.92 lakh tonnes of vegetables valued Rs 5,679 crores turn out annually. During the period 2018-19 India's total merchandise export stood USD 303.7 bn within which over USD 38.5 billion which is approximately 12.6% of agro goods.

India's Export of Agricultural Commodities Table 1

| COMMODITIES | 2013-14 | 2016-17 | 2017-18 | 2018-19 | Apr-Sep 2018 | Apr-Sep 2019 |
|--------------------|----------|----------|----------|----------|--------------|--------------|
| Basmati rice | 4,864.96 | 3,208.6 | 4,169.56 | 4,712.44 | 2,247.34 | 2,031.33 |
| Non-Basmati rice | 2,925.05 | 2,525.19 | 3,636.6 | 3,038.16 | 1,577.02 | 1,017.31 |
| Spices | 2,497.22 | 2,851.95 | 3,115.37 | 3,322.45 | 1,587.69 | 1,962.71 |
| Raw cotton | 3,637.53 | 1,621.11 | 1,894.25 | 2,104.41 | 929.59 | 226.6 |
| Fruits & vegetable | 1,563.88 | 1,684.51 | 1,687.51 | 1,732.21 | 797.08 | 745.44 |
| Coffee | 798.8 | 842.84 | 968.57 | 822.34 | 429.86 | 392.64 |
| Tea | 798.76 | 731.26 | 837.36 | 803.93 | 386.11 | 444 |
| Sugar | 1,177.03 | 1,290.71 | 810.9 | 1,360.29 | 490.83 | 808.03 |
| Wheat | 1,569.03 | 66.85 | 96.72 | 60.24 | 20.84 | 29.21 |
| Dairy products | 727.52 | 253.73 | 303.05 | 481.55 | 180.57 | 152.23 |

Includes In Billion Dollars

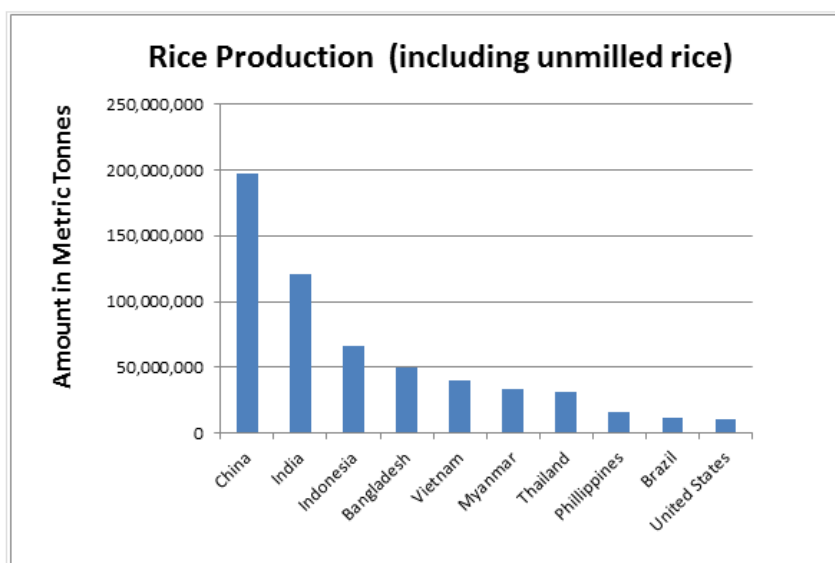
In the above mentioned table it shows India's export of agricultural products in the year 2013-19. In the year 2013-14, 2016-17, 2017-18, 2018, 2019 the export of Basmati rice was increased to 4,864.96, 3,208.6, 4,169.56, 4,712.44, 2,247.34, 2,031.33 respectively and that of wheat stood the lowest to 1569.03, 66.85, 96.72, 60.24, 20.84, 29.21 respectively. The export of Non-Basmati rice stood highest in 2017-18, lowest in 2019. Export of Species was topmost in 2018-19 and lowest in 2019, likewise for Raw cotton, Fruits & vegetables, coffee,

tea, sugar, Wheat, Dairy products the highest export was 3,637.53, 1,732.21, 968.57, 837.36, 1,360.29, 1,569.03, 727.52 and lowest marked 226.6, 745.44, 392.64, 386.11, 490.83, 20.84, 152.23 respectively.

Export of food grains shows countries agricultural abilities to produce agricultural related products including cereals, fruits and vegetables which are heavily present in surplus that could be exported to other countries as well. Main agricultural products which are exported to other countries constitute the following commodities majorly:

1. Rice:

India is the 2nd largest producer of rice across the world. It is having the most consumers in the world which is why cultivation of rice is practiced here in abundance. Rice is massively produced agricultural produce in India till today as there is a large presence of consumers within the nation and throughout the global market. There was an average production of 105.48 (million tonnes) of rice, where West Bengal ranked 1st with an average production of 14.54 followed Uttar Pradesh ranking 2nd with 13.45 and Punjab ranked 3rd with 11.03. Due to the Increasing demand from all over the global, resulted an inclined trend in the production of rice in India. In the below shown graph it could be clearly noted that India's rice production stood the highest than other countries only after china.



This graph demonstrates the top 10 rice producing countries and the amount of rice they have produced. Through analysing this chart, it is obvious that Asian countries have produced the most rice for the human population, as they occupy the top 8 rice producing countries.

Fig2

2. Buffalo milk:

Milk is the vital commodity that has always stayed in demand although buffalo milk is the second most source of milk in the world and a commodity which is produced plentifully by India. It accounts around 50 percent of the aggregate milk production within India. India ranks 1st with nearly 70,000,000 metric tonnes of buffalo milk production when compared globally. It lands around 50 percent of the aggregate milk production within nation. The frequent destinations for export are particularly the United States, Saudi Arabia, Hong Kong and UAE (US\$ 27.6 million). During 2015-16, the second largest importer of dairy

products was Pakistan with a share of 16.1% amongst the total production of dairy products which were exported from India, followed by Nepal, Bangladesh, Bhutan, Afghanistan and Singapore were other significant export destinations of dairy products from India.

3. Wheat:

India is a huge consumer of wheat. It is one of the significant as well as the most demanded agricultural yield which is consistently been extremely demand by global market. Wheat is an agricultural produce which is grown in bulk throughout several parts across India, especially in the north region. Punjab and Haryana produce it in most abundance however Uttar Pradesh, Madhya Pradesh, Rajasthan, Bihar and Gujarat are also amongst them. India's crucial as well as most vital destinations of wheat exports are Nepal, Bangladesh, U Arab Emts and Somalia with quantity of 1,62,413.54, 33,311.10, 8,436.60 and 4,057.00 respectively. India designate as seventh position during 2019 in terms of wheat production with 3.4t/ha.

4. Maize:

Maize is considered as one of the most adaptable agricultural cereal as it can be cultivated in varied climatic condition. Its largest producer is mainly USA where it constitutes about 36% of contribution worldwide. Maize is the 3rd most important crop after Rice & wheat; however it accounts for 10% of total food grain bearing in the country. Most vital maize growing states in India are the following Tamil Nadu, Telangana, Madhya Pradesh, Karnataka, Maharashtra and Andhra Pradesh as well.

5. Raw Cotton:

Raw cotton is a staple fiber which is produced by India in abundance. It is a long tradition of cultivating across the world and is in constant demand by the cotton textile by global market. India ranks highest in terms of cotton production, followed by China, United States, Brazil, Pakistan, Turkey, Uzbekistan, Mexico, Australia and Mali accordingly. The cultivation of raw cotton is yielded in several parts across the country mostly in Andhra Pradesh, Haryana, Karnataka, Madhya Pradesh, Rajasthan and Punjab. We can understand the export of raw cotton clearly by looking the below mentioned graph-

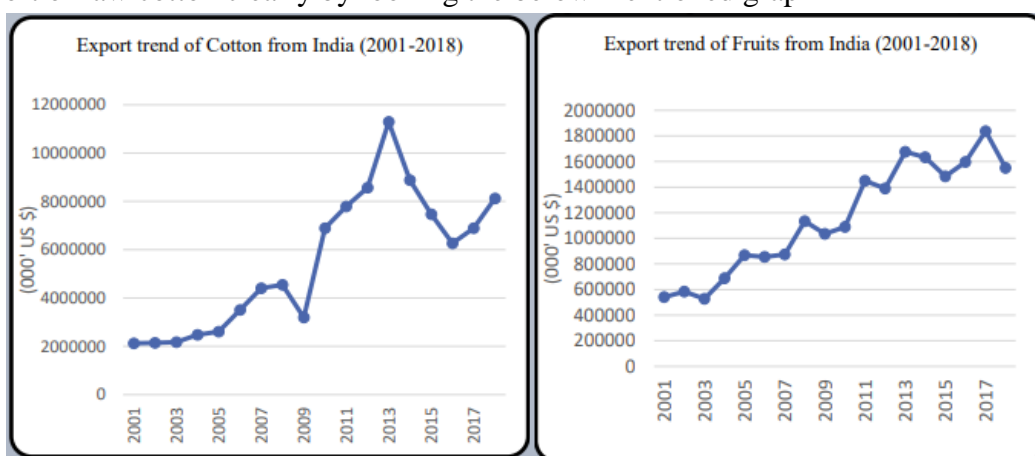


Fig3Fig4

6. Fruits and vegetable:

Due to India's diverse climatic condition a vast variety of Fresh as well as processed fruits and vegetable assures its availability throughout the nation. India landson 2nd in terms of fruits and vegetable production worldwide, just after china. In fiscal year 2020 India exported nearly about 764 million U.S dollars of fresh fruits and 646.78 million U.S dollars of processed fruits & juices. Almost around Rs 5922 crores of fresh vegetables were exported from India to other countries amongst which Bangladesh, Netherland, UAE, Malaysia, Saudi Arabia, UK are the ones to receive in bulk.

III. INDIA'S POSITION OF IMPORT FOR AGRICULTURAL PRODUCTS:

Agricultural-imports consider for only a minimal proportion of the country's aggregate imports. As in 2018-19 nearly 102 billion agricultural commodities were imported in India. During the span from 1999 to 2000, edible oil constituted for about 70% of the gross agricultural import, and around 50% of the total values of imports in recent years. It is a kind of commodity which has been imported often due to its lower production and high consumption. Almost 10% of aggregate imports counts of raw cashew nut, while other products like spices, sugar, pulses and milk products makes-up a very small share. Despite the fact that India has been exclusively in terms of export, yet bear a heavy load of import bills. Indian Agricultural import where seen increasing from Rs. 85,727 crores during 2013-14 to Rs 1,39,933 crore during 2015-16. The numerals clearly highlight a considerable growth of 63% rise of agricultural import.

Table 2: India's top 15 agricultural import commodities

Quantity: '000 tonnes Value in Rs. Crores

| Sl No | | 2013-14 | | 2014-15 | | 2015-16 | |
|-------|--------------------------|---------|-------|---------|-------|---------|-------|
| | | Qty | Value | Qty | Value | Qty | Value |
| 1 | Vegetable Oils | 7943 | 44038 | 11548 | 59094 | 15639 | 68630 |
| 2 | Pulses | 3178 | 11037 | 4585 | 17063 | 5798 | 25619 |
| 3 | Fresh Fruits | 769 | 7716 | 858 | 9544 | 836 | 11013 |
| 4 | Cashew raw | 776 | 4668 | 941 | 6600 | 962 | 8701 |
| 5 | Spices | 156 | 3452 | 161 | 4392 | 191 | 5382 |
| 6 | Sugar | 881 | 2287 | 1539 | 3668 | 1943 | 4038 |
| 7 | Alcoholic Beverages | | 2076 | 0 | 2508 | 0 | 2915 |
| 8 | Cotton Raw Incl. Waste | 181 | 2376 | 259 | 3101 | 232 | 2563 |
| 9 | Misc Processed Items | | 1474 | | 1749 | 0 | 1799 |
| 10 | Cocoa Products | 52 | 1072 | 65 | 1551 | 56 | 1399 |
| 11 | Wheat | 11 | 27 | 29 | 61 | 516 | 870 |
| 12 | Coffee | 60 | 729 | 75 | 930 | 66 | 802 |
| 13 | Fruits / Vegetable Seeds | 8 | 449 | 14 | 611 | 14 | 702 |
| 14 | Marine Products | 31 | 411 | 28 | 452 | 50 | 635 |
| 15 | Cereal Preparations | 53 | 419 | 63 | 569 | 61 | 573 |

Source: DGCIS, Kolkata

In the above stated table we can clearly observe that Vegetable oils, Sugar, Pulses, Fresh fruits, Cashew nuts are the most imported commodities by India. If we examine carefully we can see that the demand for the import of these five agricultural products has been increasing from time to time, also when about 7943(000 tonnes) of vegetable oil in 2013-14 is compared to 15639(000 tonnes) in 2015-16 it could be clearly concluded that the quantity stands almost doubled.

Import share of agricultural commodities during 2015-16 was densely occupied by vegetable oil with 52% of share in total value of agricultural commodities, followed by 20% pulses, 8% fresh fruits, 7% Cashew, 4% spices, 3% sugar 2% cotton and 1% cocoa.

Below listed are the items which inhibits a majority of agricultural produce in mass percentage, which are namely-

1. Edible oil/Vegetable oil:

It is the only commodity which holds most percentage of total import value, nearly a half of it. It is one of the crucial produce that is often in demand by India as seen in recent times. Edible oil engrosses 52% of the aggregate import settling 15639(000 tonnes) quantity wise. Palm oil which is an edible oil is imported plentifully from Indonesia and Malaysia and also Sunflower oil which is imported from Russia and Ukraine is consumed just about 1.7 MMT per year, where close to 90% of it is imported.

2. Cashewnuts:

These are another vital commodity's which are acquired in bulk. It consists nearly 7% of the total import value. Near to 962(000 tonnes) of the raw cashew were imported in 2015-16, and are densely imported from Kenya, Mozambique and Tanzania, where close to 177,289 tons of it were been imported.

3. Fresh fruits:

India is a mass-producer of fresh fruits, yet it imports a good amount of them. Fresh fruits like Kiwi, Apple Cidar, Red grapes, Mangosteen, Dragon fruit etc are the fruits which are most commonly seen imported by India where it nearly counts for about 8% of the aggregate agricultural import which is mainly obtained by China, Hong Kong, United States. The quantity of import of fresh fruits could be seen escalated when compared to previous years.

4. Spices:

Spices are an essential agricultural produce which has always stayed in demand by the global market. India imports diverse kind of spices which counts for 4% of aggregate import value. One of the reports states the import of black pepper stood nearly 10,990 tonnes in the FY 20, where a noticeable contribution in this share was from Vietnam, Sri Lanka and Indonesia of close to 6,657 tonnes, 2003 tonnes, 1034 tonnes respectively.

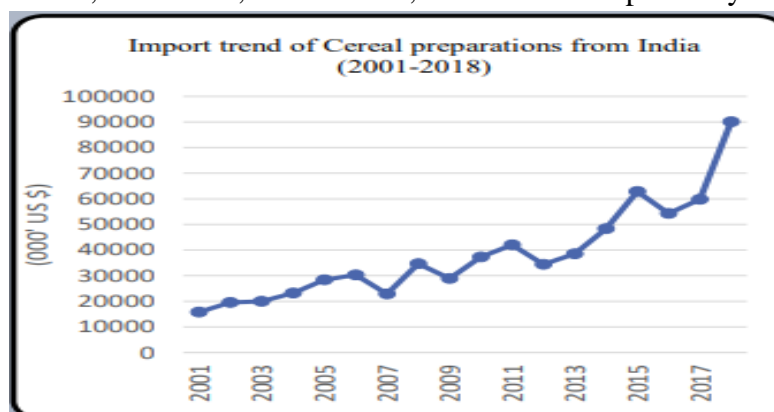


Fig5

5. Cereals:

A very significant amount of distinct pulses are imported by India from other countries which reported 20% of the total import value. Approximately 5798(000 tonnes) of pulses were imported in the year 2015-16 which values to 25619. During the FY 19 around 80.35 billion rupees of pulses were received by India. Most common pulses which are often imported were red kidney beans, red lentils, and white chickpea.

IV. MEASURES TAKEN BY INDIA FOR IMPORT SUBSTITUTION

Import substitution policy is a set of measures targeting encouragement of domestic produce and also to increase competitiveness amongst global market. It is a steady effort towards replacement of imported goods to domestic ones. It mainly aims on enhancing the trade balance and decrease buy in of other countries agricultural produce. It increases the demand for the domestic goods which in turn controls import from other countries and minimizes the interdependency of the country for agricultural produce. This policy aims at pushing up the national agricultural production and to create new and innovative products to stimulate demand, diversifying production and minimize import. There are certain set of measures which are taken by the government of India in view for Import substitution of agricultural produce so as to increase demand for domestic products and to restrict the import of a number of agricultural commodities into India.

Measures taken for imports substitution are-

- ***India's commitment on tariff restraining:***

Tariffs are an effective aid to protect the call for domestic produce by changing the conditions and mode for import so as to put the competitiveness on surge. It is a significant tool to land a balance between domestic agricultural industry and market access. These tariffs lays down quotas by allotting low or no duties to imports up till a certain volume and to add on high rates for overtaking predefined import mark. India does constrain its tariff rates on agricultural import as committed in GATT (General Agreement on Tariffs and Trade). The average Indian agricultural bound tariff is 113.5% which is the highest amongst the world. India's average bound tariff rate of agricultural products is noticeably greater than its average bound rates for nonagricultural products.

- ***Restrictions on import of agricultural produce:***

A physical restriction on import or banning of some goods is used to curb import of few agricultural produce. These restrictions are done by imposing high rate quotas. It is an effective way to restrict the import of some kinds of agricultural produce. Certain restrictions and ban where imposed on a number of agricultural products imported by India. As on 19 July 2011 the India's Department of Animal Husbandry, Dairying, and Fisheries imposed a ban on agricultural import like on live birds, feathers, poultry, eggs and on various other products related to poultry from all countries reporting LPAI and HPAI.

- ***Custom Import Duty:***

Custom duty is a term that defines a kind of tax which is charged on all sorts of goods that are imported into the country. In other word, it is the tax or tariff which is imposed on the commodities which are exchanged between nations. Recently the government of India raised the import duty on wheat from 30% to 40%. This step was taken to encourage the demand of domestically produced grain and other agricultural products. It is a very initiative taken in view to boost up the domestic agro products. Likewise the government in March 2017 imposed 10% import duty on wheat, which got doubled to 20% in November during the same year. In May 2018 it increased to

30% in order to restrict imports of the same. While in 2019 the custom import duty remained the same no change was introduced.

- **Financing in Agricultural sector:**

Financing in the agricultural sector by India proved to be a vital step for encouraging import substitution in the country. In the fifteenth finance commission set up a high level group (HLEG) mentioned measurable performance incentives given to the states in order to encourage agricultural exports and also to enhance and promote crop cultivation for acquiring high import substitution. It is a great initiative introduced to increase opportunities regarding Indian agricultural products for import substitution to decrease import dependence rate and to increase exports sustainably. This will result in reduction of agricultural waste, a high rate of value addition, competitiveness in global market as well as to raise productivity of our agricultural sector.

There are many factors which are contributing to the import substitution policy are mainly the extent of the domestic market, potential to dispense investments after exporting raw materials and availability of natural resources. The widening of restrictions in exports would eventually lead to a result of declined agricultural import.

V. IMPLEMENTATION AND RESULTS:

The idea of the Indian government of launching import substitution policy was designed to replace foreign imports and to boost domestic manufacturing by implementation of national product and also for the rightful development of production stages replacing the foreign import within the nation. For the production of agricultural commodities and for its demand, there are two ways to achieve the same, firstly lowering the import of foreign produce including the equipment's as well as plant protection aids and, secondly to practice Import substitution that is the encouragement of production, demand and supply of national own produce, which would minimize the procurement of foreign agricultural commodities. As per the measures taken by the government of India for Import substitution, a huge amount of tariffs were established on the import of agricultural yield. India is the biggest palm oil importer and imported the same significantly from Indonesia and Malaysia. The government recently increased the tax on import of crude palm oil to 44% from 37.5% which could result in purchase and demand for rival edible oils like sunflower oil and soya oil. Due to the good record of monsoon and higher support price offered by the government the import of pulses dropped from 66 lakh tonne during 2016-17 to 56.5 lakh tonne in 2017-18, emerging 10% fall on import of pulses which derived savings in foreign exchange nearly upto Rs 9,775 crore. There are a number of agricultural commodities which are restricted by India some of them are namely ginger: fresh, Durum wheat, seeds of cumin other than black, seeds of coriander, soya bean of seed quality, Jawar of seed quality and many more. These have resulted in simulation of locally produce goods. Currently India has increased the tariff and import duties to accelerate the local manufacturing. The government of introduced several schemes for supporting the agricultural sector by providing them financial assistance regarding loan for purchase of land and equipment's, expansion and also for product

marketing loans. Some of the schemes are as follows National Bank for Agriculture and Rural development (NABARD), Kisan Credit Card Scheme and Dairy entrepreneurship scheme. During the month of May in 2019 NABARD invested a venture capital of Rs 700 crore (US\$ 100 million) aiming increased focus on startups and for equity investment in agricultural sector. Government declared Rs. 15,000 crore (US\$ 2.13 billion) for animal husbandry infrastructure development. While in September PM Matsya Sampada Yojana, e-Gopala App as well as many other initiatives were launched mainly for dairy, agriculture and animal husbandry, where it was announced that in the next 4-5 years an investment of about Rs 20,000 crore (US\$ 2.7 billion) would be made in 21 states. Currently the steps and measures which are taken by the government have resulted an inclination of most demand for agricultural produce towards nations own yield and have limited or minimized the procurement of foreign agricultural goods which would certainly make our country as a self-sufficient and self-reliance nation as well as availability of aggregate value for export purposes also.

VI. SUGGESTIONS:

Import substitution of agricultural produce is a significant policy which has an aim to increase utilization as well as demand of the nation's own produce in an effective way such as to reduce wastage of countries own produce and also to increase export percentage. Below stated are some suggestions to overcome the problem of Import substitution:

- Industries as well as the government should encourage the engagement of research and development in agricultural sector for uplifting the quality of the agricultural produce.
- In the policy of Import substitution there should be a certain set of measure taken for its promotion and also for investment policy.
- An appropriate guiding principle should be introduced for efficient utilization of domestic goods and also to take in foreign exchange for more effective utilization.
- Industries which introduce well defined cost advantage should be mostly enrolled in this import substitution programme.
- The two major components that should be given a significant importance are cost and quality control.
- There should be facilities made available for handling, distribution and storage of pre-harvesting and post-harvesting produce.
- Policy should be framed so that they could be taken while urgent situations with minimal financial cost involved.
- Food security, supply side constituents and processing amenities are the ones which are undertaken by several different department of ministries which when allied together could help to amplify the import substitution policy.
- To uplift institutional mechanism to facilitate the engagement of small and medium farmers in value chain for a specific produce.
- Encouraging Research and development for inventions of new products for the market.
- Justifiable amount of protections should be extended to the domestic producers while negotiation with the global market players.

CONCLUSION:

Import substitution is a tremendous policy established specially for boosting the demand and use of domestic goods in the nation, which is well-matched for a country like India. India is a country meriting with different varieties of market which could be dealt as a substitute for an agricultural product imported into the country. Since India is a country with small domestic market, therefore it's imperative to support the domestically produced agricultural commodities by shrinking the amount of agricultural import. Import substitution is a policy which allows the utilization of country's own capital for supporting and uplifting the local produce. The Indian government has taken vital steps in regard to import substitution, which has led to a great push for domestically generated ones. Several schemes were launched in the interest of Indian farmers while supporting them to grow in terms of production, cultivation, finance, distribution as well as marketing. At the same time we also have to look the other way that is we can't wholly depend on people's benignity towards the purchase of local products given that the alternative goods cost a lot lesser. We as citizens have to realize that we have responsibility too. Here the consumers must both should have to relies as well understand the aftermath of their purchases towards the local economy and to also learn the real value in the goods that are being locally accessible, which hence justifies that import substitution can considerably furnish domestic produce to a route towards self-reliance as well as economic fortune.

REFERENCES:

1. *Agriculture in India - Wikipedia* Retrieved on November 17, 2020 from https://en.wikipedia.org/wiki/Agriculture_in_India#:~:text=India%20is%20the%20second%20largest,coconut%2C%20sugarcane%20and%20numerous%20vegetables.
2. *Development of a strategy of import substitution* Retrieved on October 16, 2020 from https://www.researchgate.net/publication/305396285_Development_of_a_Strategy_of_Import_Substitution
3. *India claims to be self-sufficient in food but fact say otherwise* Retrieved on November 11, 2020 from <https://www.downtoearth.org.in/news/food/india-claims-to-be-self-sufficient-in-food-production-but-facts-say-otherwise-62091>
4. *Cereals* Retrieved on November 11, 2020 from http://www.apeda.gov.in/apedawebsite/six_head_product/cereal.htm#:~:text=Rice%20including%20Basmati%20and%20Non,from%20India%20during%20this%20period.
5. *India's farm exports rise 23.24% in march-June despite pandemic* Retrieved on November 11, 2020 from <https://economictimes.indiatimes.com/news/economy/agriculture/indias-farm-exports-rise-23-24-in-march-june-2020-despite-pandemic/articleshow/77609656.cms>
6. *Cereals* Retrieved on November 12, 2020 from http://www.apeda.gov.in/apedawebsite/six_head_product/cereal.htm
7. *India's Agricultural Import and Export (Fig1, 3, 4, 5)* Retrieved on November 13, 2020 from <http://www.farmerfriend.info/pdf/export-import.pdf>
8. *Geographical enquiry-Rice (Fig2)* Retrieved on November 20, 2020 from <https://riceproductionoacc.weebly.com/production.html>

9. *Export from India of Wheat Retrieved on November 20, 2020 from http://agriexchange.apeda.gov.in/product_profile/exp_f_india.aspx?categorycode=0603*
10. *Agricultural trade: It's only sugar 'n' spice for India's farm shipment now (Tabular data) Retrieved on Nov 20, 2020, from <https://indianexpress.com/article/business/agriculture-trade-its-only-sugar-n-spice-for-indias-farm-shipments-now-cotton-export-import-6095181/>*
11. *India exports 33.5 lakh tonnes of sugar so far in 2019-20 marketing year Retrieved on November 22, 2020 from <https://economictimes.indiatimes.com/news/economy/agriculture/india-exports-33-5-lakh-tonnes-sugar-so-far-in-2019-20-marketing-year/articleshow/75601357.cms>*
12. *International trade in processed foods: An Indian perspective Retrieved on November 22, 2020 from <https://www.eximbankindia.in/Assets/Dynamic/PDF/Publication-Resources/ResearchPapers/79file.pdf>*
13. *Export and import of agricultural product Retrieved on November 22, 2020, from https://www.indiabudget.gov.in/budget_archive/es2000-01/chap820.pdf*
14. *Trade Division (Fig4) Retrieved on November 23, 2020, from <http://agricoop.nic.in/sites/default/files/overviewTrade7082015.pdf>*
15. *International trade in processed foods: An Indian perspective Retrieved on November 22, 2020 from <https://www.eximbankindia.in/Assets/Dynamic/PDF/Publication-Resources/ResearchPapers/79file.pdf>*
16. *India imported 10,990 tonnes of black pepper during April-August FY20 Retrieved on November 23, 2020 from <https://www.thehindubusinessline.com/economy/agri-business/india-imports-10990-tonnes-of-black-pepper-during-april-august-fy20/article30162723.ece>*
17. *Import substitution policy: concepts, methods of analysis and main areas of import Retrieved on November 23, 2020 from <http://rrsociology.ru/en/journal/article/358/>*
18. *Import substitution Nationalism in the interest of the nation- Not protectionism Retrieved on December 5, 2020 from <https://taxguru.in/dgft/import-substitution-nationalism-interests-nation-protectionism.html>*
19. *India- Import tariffs Retrieved on December 5, 2020 from <https://www.privacyshield.gov/article?id=India-Import-Tariffs#:~:text=India's%20average%20WTO%2Dbound%20tariff,agricultural%20tariff%20is%2032.8percent.>*
20. *Wheat import duty increased to 40% Retrieved on December 5, 2020 from <https://economictimes.indiatimes.com/news/economy/agriculture/wheat-import-duty-increased-to-40/articleshow/69088971.cms?from=mdr>*
21. *Trade and Agricultural Disease: Import Restrictions in the Wake of the India-Agricultural Products Dispute Retrieved on December 5, 2020 from <https://www.cambridge.org/core/journals/world-trade-review/article/trade-and-agricultural-disease-import-restrictions-in-the-wake-of-the-indiaagricultural-products-dispute/C85D6F61218047A8902E0809C58D957C>*

22. *15th Finance Commission sets up expert group to boost farm exports Retrieved on December 5, 2020* from <https://www.livemint.com/news/india/15th-finance-commission-sets-up-expert-group-to-boost-farm-exports-11581954736085.html>
23. *India raises import tax on crude palm oil to 44% Retrieved on December 11, 2020* from <https://www.moneycontrol.com/news/business/economy/india-raises-import-tax-on-crude-palm-oil-to-44-4891891.html>
24. *Pulses import falls by 1 million tonnes in FY'18 Retrieved on December 11, 2020* from <https://www.thehindubusinessline.com/economy/agri-business/pulses-import-falls-by-1-million-tonnes-in-fy18/article23902421.ece>
25. *List of items prohibited for import into India Retrieved on December 12, 2020* from <https://www.dhl.com/content/dam/dhl/local/cn/dhl-ecommerce/documents/pdf/cn-ecommerce-onboarding-import-in-restriction-en.pdf>
26. *Agricultural loan in India Retrieved on December 12, 2020* from <https://www.bankbazaar.com/home-loan/types-of-agricultural-loans-in-india.html>
27. *Agriculture in India: Information About Indian Agriculture & Its Importance Retrieved on December 12, 2020* from [https://www.ibef.org/industry/agricultureindia.aspx#:~:text=In%202019%2D20%2C%20Rs.,\(US%24%202.13%20billion\).](https://www.ibef.org/industry/agricultureindia.aspx#:~:text=In%202019%2D20%2C%20Rs.,(US%24%202.13%20billion).)
28. *Export promotion and Import substitution, Retrieved on December 5, 2020* from <https://sdak24.com/export-promotion-and-import-substitution-notes-of-entrepreneurship/>
29. *Agricultural Export policy, Import policy in India Retrieved on December 5, 2020* from <https://www.agrifarming.in/agriculture-export-policy-import-policy-in-india>
30. *Import substitution, Retrieved on December 20, 2020* from <https://www.slideshare.net/dineshnikam180/import-substitution-47140617>