# Non-Tariff Measures And The Direction Of Agricultural And Processed Food Products Export Of India: An Empirical Analysis In The Regime Of WTO

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*ABSTRACT*

This study analyzes the impact of Non-tariff Measures (NTMs) on the direction of Agricultural and Processed Food exports (APFE) after the establishment of WTO. The countries have been classified into three groups viz Developed, Developing and LDC countries, to assess the impact of NTMs on the direction of export. An increasing trend was observed for the agricultural and processed food export to Developed Countries for selective years in terms of export value. But in terms of percentage share, a decreasing trend has been observed. There is no difference has been seen in the percentage share and value of agriculture trade to developing countries. It has been recognized that there is an increasing trend presented for LDC for all the selective years compared to the base period in value terms and it has also been noted that the percentage share of APF export to LDC has been increasing during the period. To analyze the impact of Non-Tariff Measures (NTMs) on the Direction of India's exports, particularly in agriculture and food products, the prevalence of NTMs in trade is calculated by the way of incidence indicators viz. the coverage Ratio (CR), the Frequency Index (FI), and the Prevalence Score (PS). The data for all the indicators have been collected from the UNCTAD-TRAINS database for all the sectors and the agricultural sector. The countries those rank declined in 2022 compared to the year 1995 in terms of the import value of agricultural and processed food from India, these countries have the highest level of coverage ratio, frequency index, and prevalence score. It is confirmed that the nexus between NTMs and India's

agricultural and processed food exports in the case of India after establishment of WTO.

Keywords: Agricultural and Processed Food Export, Non-tariff Measures, Coverage Ratio, Frequnecy Index, Prevalenc score.WTO.

**INTRODUCTION**

In India, agriculture is the main occupation. About 58 per cent of the population depends upon agriculture. It is the backbone of the Indian economy and is the oldest and largest occupation of India (Pinky Bains, 2019). India's comparative advantage, as per the factor endowment theory of comparative advantage, lies in the exports of agricultural and labor-intensive products. The performance of India's agricultural exports has been quite poor in comparison with other countries' industrial exports and world agricultural exports (Sachdev, 1993)**.** There has been a remarkable increase in the value of agriculture export to Rs.2430.24 billion in 2013-14 from the skimpy value of Rs.4.82 billion in 1970-71 and total export of India increased to Rs.2085.96 billion in 2013-14 from the value of Rs.20.36 billion in 1970-71. The export of all the sectors viz. agriculture, manufacturing, and services are accelerated during reform periods. Though the acceleration started from 1990-91 in all the sectors the rate of increase was comparatively low for agriculture, the instability of agriculture export was significantly higher during the reform period at 2 per cent compared to pre-reform period at 0.71 per cent. It expresses that trade liberalization leads to high volatility in agriculture exports (Loganathan & Stanly Joseph, 2018).

India was one of the original signatories of GATT and an active member, though liberalization started in 1990s based on IMF prescribed path, the controls on consumer goods and agricultural goods in terms of tariff and quotas continued. It was almost after almost a decade due to complaints by major trading partners and fellow members of WTO that such restrictions came dow, The liberalization in agricultural trade has been influenced by internal as well as external policy. India was committed to follow WTO provisions relating to agriculture mentioned in the Agreement on Agriculture (AoA) by signing a Dunkel Draft on April 1994. It has influenced India's agricultural trade through Market access, Domestic Support, Export

Competition and Sanitary and Phyto-sanitary measures. (Loganathan, 2021). Market access in one of the most important aspects of the Agreement on Agriculture. Member countries are required to abolish non-tariffs measures such as quantitative import restrictions, variable import levies, minimum import prices, discretionary import licensing, non-tariff measures maintained through state trading enterprise, voluntary export restraints and similar border measures other than ordinary customs duties etc., by calculating their tariff equivalents and adding these to the fixed tariffs. However, members are allowed to practice non-tariff measures under the 'Special Treatment' clause subject to certain conditions to be followed. (Bhalla & Gurmail Singh, 1996). Domestic support measures refer to all domestic support measures provided to agricultural producers with the exception of domestic measures which are not subject to a reduction in terms of the criteria set out in Article 6 and in Annexure 2 of AOA. The commitments are expressed in terms of "Total Aggregate Measurement of Support (Total AMS) and "Annual and Final Bound Commitment Levels". According to the agreement on domestic subsidies, member countries agreed to reduce trade-distorting subsidies. For this purpose, it divides subsidies into three categories viz. Green, Blue and Amber. Green and Blue subsidies are permitted subsidies and to which reduction commitments do not apply. Amber subsidies are subsidies to which reduction commitments apply (Nehru,2012). All the member countries had agreed during the Uruguay Round to reduce tariffs by fixed percentages. Developed and transition countries undertook to reduce tariffs by an average of 36 per cent over a period of six years from 1 January 1995 and developing countries by 24 per cent in 10 years. The least developed countries were exempted from the tariff reduction commitments. Article 14 of the Agreement on Agriculture is concerned with the application of "Sanitary and Phyto-sanitary" (SPS) measures. According to article 14, members agree to give effect to the Agreement on the application of Sanitary and Phyto-Sanitary measures. "Sanitary measures" dealt with the protection of human and animal health and life cover regulations that related to food safety and the prevention of animal-borne diseases from entering a country. Similarly, the aim of Phyto-Sanitary measures to protect plant life by ensuring that plant-borne diseases are not brought in by importing plant varieties (Loganathan,2021)

The world agricultural trade occurs in a highly imperfect setting as a result of Non-Tariff Barriers (NTBs) imposed by developed

and developing countries (Deepak Nayyar & Abhijit Sen, 1994). Elimination of tariffs and the various nontariff barriers would provide significant improvements in trade flows for selected products and some reductions in consumer prices and NTMs have an economic effect on international trade in goods" (UNCTAD, 2018). With this background, the present study has been devoted to examine the impact of NTMs on the direction of agriculture export after the establishment of WTO.

**METHODOLOGY**

The study is based on secondary data. To analyze the direction of Agricultural and Processed Food (APF) export of India under the regime of WTO, date for this study have been collected from Agriculture and Processed Food Products Export Development Authority (APEDA) for the total export value of Developed, Developing and Least Developing Countries from 1987-88 to 2021-22 from the official website (www.apeda.government.in) of APEDA.

The simplest approach to summarizing the prevalence of NTMs in trade is to calculate incidence indicators (Deardorff and Stern, 1998). These indicators are based on the intensity of the policy instruments and measure the degree of regulation without considering its impact on trade or the economy. Three commonly used incidence indicators are the coverage ratio, the frequency index, and the prevalence score. The coverage ratio (CR) measures the percentage of trade subject to NTMs, the frequency index (FI) indicates the percentage of products to which NTMs apply, and the prevalence score (PS) is the average number of NTMs applied to products. These indicators are open and calculated on overall trade, considering all types of NTMs, but they are also suited to illustrate the incidence of particular NTMs on specific groups of products (e.g. average number of SPS measures applied on agricultural products). In notation:

$$CR_i = \frac{\sum_{k=1}^{hs} NTM_{ik} X_{ik}}{\sum_{k=1}^{hs} X_{ik}} 100$$

$$FI_i = \frac{\sum_{k=1}^{hs} NTM_{ik} D_{ik}}{\sum_{k=1}^{hs} D_{ik}} 100$$

$$PS_i = \frac{\sum_{k=1}^{hs} \#NTM_{ik} D_{ik}}{\sum_{k=1}^{hs} D_{ik}} 100$$

Where subscript k denotes product and i country imposing the NTMs, and where NTMi k is a dummy variable denoting the presence of an NTM (or type of NTMs) in the selected HS aggregation level (typically HS6 or HS4), #NTM denotes the number of NTMs, X is the value of imports, and D is a dichotomous variable taking the value 1 when country i imports any quantity of product k, and zero otherwise.1

## RESULTS AND DISCUSSION

### Agricultural and Processed Food (APF) Export value to Developed, Developing and Least Developing Countries

Table 1 has exposed the APF export value and growth rate for the selective years to Developed, Developing, and Least Developing Countries. The APF export value to developed countries has increased to Rs.29176.44 crore in 2021-22 from Rs.216.42 crore in 1987-88. There is an increasing trend was observed for the agriculture export value to developed countries for selective years. It has increased from Rs.216.42 crore in 1987-88 to Rs.328.07 crore in 1990-91 with the growth rate of 34.03 per cent. It has increased to Rs.1469.98 crore in 1995-96 from Rs.328.07 crore with a growth rate of 77.68 per cent. The APF export value has increased from Rs.1469.98 crore in 1995-96 to 2630.56 crore in 2000-01 the corresponding growth rate was 44.12 per cent. The APF export value was Rs.4140.05 crore in 2005-06, Rs.8143.56 crore in 2010-11, Rs.17918.3 crore in 2015-16 and Rs.20746.4 crore in 2017-18 and the corresponding growth rate has noted at 36.46 per cent, 49.16 per cent, 54.55 per cent, and 13.63 per cent respectively. It is revealed from the table that the lowest growth rate was realized in 2005-06 at 36.46 per cent among the five-year interval value. The APF export value to developing countries has increased from Rs.524.91 crore in 1987-88 to Rs.81231.65 crore in 2017-18. It has recognized from the table that there is an increasing trend presented for all the selective year compared to the base period. It is observed from the table APF export to developing countries has registered at Rs.571.9 crore in 1990-91 to Rs.4691.16 crore in 1995-96, Rs.5677.84 crore in 2000-01, Rs.11600.09 crore in 2005-06, Rs.32287.01 crore in 2010-11, Rs.76679.88 crore in 2015-16 and Rs.11060.21 crore in 2021-22. The corresponding growth rate was 8.18 per cent, 87.81 per cent, 17.38 per cent, 51.05 per cent, 57.89 per cent, and 5.60 per cent respectively. It is discovered from the table that the highest APF export growth rate is noted for developing

countries at 87.81 per cent in 1995-96 and the lowest point was noted at -11.61 per cent in 2019-20.

**Table 1. Agricultural and Porcessed Food (APF ) Export Value to Developed, Developing and Least Developing Countries for Selected Years**

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1987-88 | 216.42 | - | 524.91 | - | 29.1 | - |
| 1990-91 | 328.07 | 34.03 | 571.69 | 8.18 | 37.84 | 23.10 |
| 1995-96 | 1469.98 | 77.68 | 4691.16 | 87.81 | 1741.97 | 97.83 |
| 2000-01 | 2630.56 | 44.12 | 5677.84 | 17.38 | 863.5 | -101.73 |
| 2005-06 | 4140.05 | 36.46 | 11600.09 | 51.05 | 2949.04 | 70.72 |
| 2010-11 | 8143.56 | 49.16 | 32287.01 | 64.07 | 3356.72 | 12.15 |
| 2015-16 | 17918.31 | 54.55 | 76679.88 | 57.89 | 12324.31 | 72.76 |
| 2016-17 | 29176.44 | 62.83 | 79663.91 | 3.89 | 12881.99 | 4.53 |
| 2017-18 | 24211.08 | -17.02 | 83780.96 | 5.17 | 17376.76 | 34.89 |
| 2018-19 | 24,662.02 | 1.86 | 91975.72 | 9.78 | 18038.68 | 3.81 |
| 2019-20 | 23925.48 | -2.99 | 81299.22 | -11.61 | 13727.28 | -23.90 |
| 2020-21 | 32224.15 | 34.69 | 89807.75 | 10.47 | 30274.12 | 120.54 |
| 2021-22 | 29,176.44 | -9.46 | 111060.21 | 23.66 | 43,563.44 | 43.90 |

**Source:** APEDA (Agricultural and Processed Food Products Exports Development Authority)

It is observed from the table after the establishment of WTO, growth rate has come down from 87 per cent to 17.38 per cent in 2000-01. The APF export value to Least Developed Countries (LDCs) has increased from Rs.29.1 crore in 1987-88 to Rs.17269.31 crore in 2017-18. It is observed from the table 1 the highest growth rate was noticed in 2020-21 at 120.54 per cent . The negative growth rate is recognized in 2000-01 at -101.73 per cent compared to 1995-96 at 97.83 per cent. It has been noted from the table after 2000-01 there has been an increasing trend for the export of APF products presented for the least developing countries. The APF export value for LDC is observed at Rs.37.84 crore in 1990-91, Rs.1741.97 crore in 1995-96, Rs.863.5 crore in 2000-01, Rs.2949.04 crore in 20005-06, Rs.3356.72 crore in 2010-11, Rs.12324.31 crore in 2015-16 and Rs. 43,563.44 crore in 2021-22. Table 2 and figure 1 have exhibited a percentage share of APF export trends with Developed, Developing and LDC developing countries.

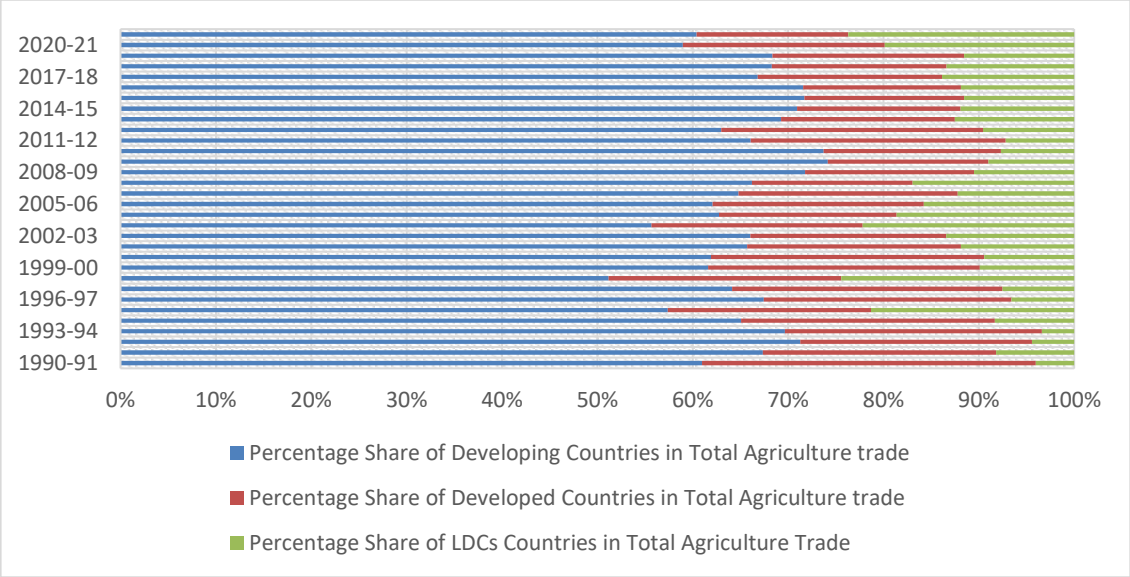
**Table 2**. **The Percentage Share of Developed, Developing and Least Developing Countries in Total APF Export for Selected Years**

| Year | Percentage Share of Developed Countries in Total APF Export | Percentage Share of Developing Countries in Total APF Exprot | Percentage Share of LDCs Countries in Total APF Export |
|---|---|---|---|
| 1987-88 | 28.09 | 68.13 | 3.78 |
| 1990-91 | 34.99 | 60.97 | 4.04 |
| 1995-96 | 18.60 | 59.36 | 22.04 |
| 2000-01 | 28.68 | 61.90 | 9.41 |
| 2005-06 | 22.15 | 62.07 | 15.78 |
| 2010-11 | 18.60 | 73.74 | 7.67 |
| 2015-16 | 16.76 | 71.72 | 11.53 |
| 2021-22 | 15.87 | 60.42 | 23.70 |

**Source:** APEDA (Agricultural and Processed Food Products Exports Development Authority)

There has been a decreasing trend that has to be observed for a percentage share of APF export to developed countries during 1987-88to 2021-22. There was no much difference in the percentage share of APF export for developing countries during 1987-88 to 2021-22, the percentage share of APF export to LDC has been increasing over the period of time. India has exported 28.09 per cent of APF products to developed countries in 1987-88.

**Figure 1. Percentage Share of Developed, Developing and Least Developing Countries During 1990-91 to 2020-21 in Total APF Export**

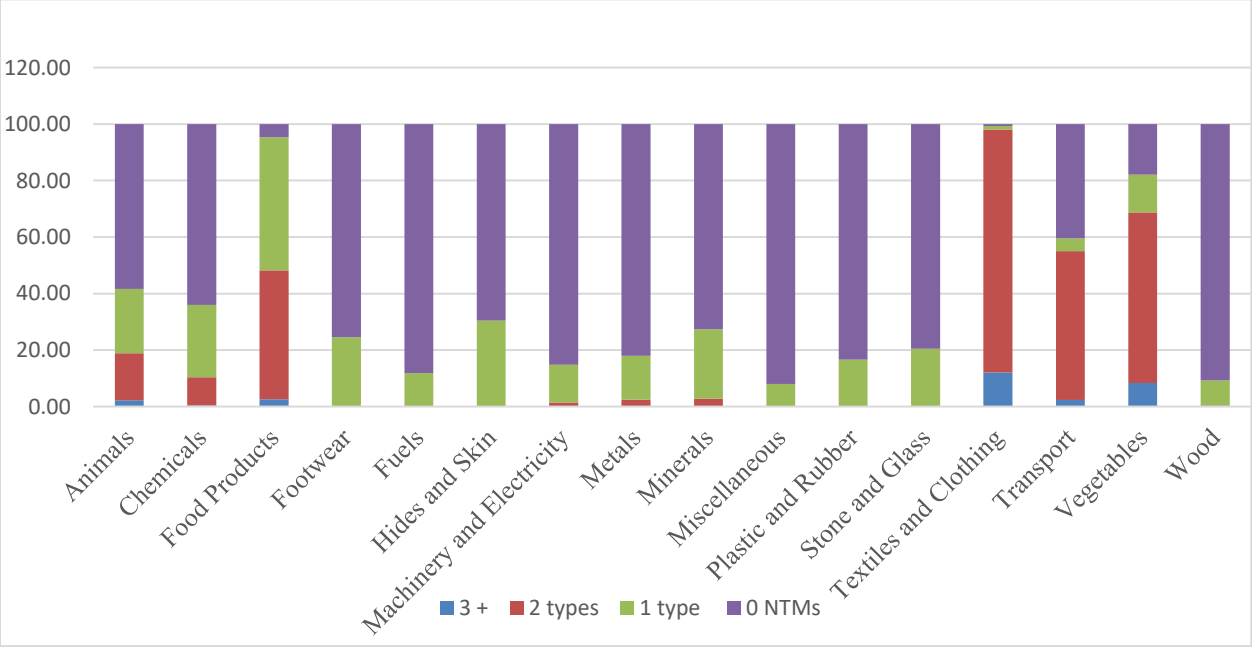


**Source:** APEDA (Agricultural and Processed Food Products Exports Development Authority)

It increased to 34.99 per cent in 1990-91 and decreased to 34.99 per cent in 1990-9 to 18.60 per cent in 1995-96. In 2000-01 India has exported 28.68 per cent of APF products in developed countries. It declined to 22.15 per cent in 2005-06, 18.60 per cent in 2010-11 and 15.87 per cent in 2021-22. Overall, India's APF trade with developed countries has been coming down in terms of percentage.

India exported 68.13 per cent of its APF produce to developing countries in 1987-88 and decreased to 66.97 per cent in 1990-91 and 59.36 per cent in 1995-96. It has increased to 61.90 per cent in 2000-01 and 62.07 per cent in 2005-06. India has exported 73.74 per cent in 2010-11. The percentage share of APF export to developing countries has come down 71.72 per cent in 2015-16 and 60.14 per cent in 2021-22. India has exported its APF products to LDCs 3.78 per cent in 1987-88 increased to 4.04 per cent in 1990-91 and 22.04 per cent in 1995-96. The APF export to LDCs decreased to 15.78 per cent in 2005-06. In 2010-11 APF export to LDCs was 7.67 per cent and it has increased to 11.90 per cent in 2015-16 and 23.70 per cent in 2021-22. Overall, the percentage share of India's APF export to LDCs has been increased.

Figure 2: Non-Tariff Barriers on India Imposed by other Countries



**Source:** UNCTAD-TRAINS portal

Figure no.2 shows Non-Tariff Barriers imposed on India by other countries**.** The above figure clearly indicates that products related to agriculture and food items exported from India have been facing higher levels of NTMs compared to other products. These results are also in line with a few of the studies that were already been done in this area some of the studies given, NTMs significantly reduces developing countries' exports to OECD countries but does not affect trade between OECD members. (Anne-Célia Disdier, Lionel Fontagné & Mondher Mimouni, 2008), NTMs barriers in Agriculture and food products comparatively higher. NTMs are revealed to be the more dominant trade barrier, with their importance growing over the period. (Zhaohui Niu, Chang Liu, Saileshsingh Gunessee and Chris Milner,2018), Due to NTMs India has also suffered significant export losses from time-to-time on account of its inability to respond to such SPS requirements adequately (Kasturi Das, 2008)

| Country | Frequency Index in Per cent | Coverage Ratio in Per cent | Prevalence Score |
|---|---|---|---|
| Australia | 67 | 70 | 3.5 |
| Germany | 92 | 89 | 6.3 |
| France | 92 | 89 | 6.3 |
| Singapore | 47 | 60 | 2.6 |

**The Direction of Agricultural and Proceed Food (APF) Products Export and Non-tariff Measures:**

The top five import countries of APEDA products are identified based on the value in 1995 and 2022 for the categories of Developed, Developing and Least Developed Countries. These countries have taken into account as backward-ranking countries for all the categories. The Frequency Index (FI), Coverage Ratio (CR), and Prevalence Score (PS) are compiled from the UNCTAD-TRAINS data base for the Agriculture sector and for all the sectors, to see the status of Non-tariff Measures (NTMs) in back ward-ranking countries.

**Table no.3: NTM for all the Sectors for Backward Ranked Developed Countries**

Source: Rank Calculated by author and compiled FI,CR and PS from UNCTAD-

TRAINS Portal

Table no.3 shows that few of the selected developed counties that rank were within the top five in terms of value in 1995 and out of the top five in the year 2022. The highest level of frequency index, coverage ratio, and prevalence score is observed for Germany and France at 92 per cent, 89 per cent and 6.3 respectively. Overall, the frequency index range between 47 to 92, and The coverage ratio from 60 to 89 per cent have been noted in the above table. For the prevalence score, the value lies between 2.6 to 6.3 for given countries. However, the same countries have the highest level of frequency index, coverage ratio, and prevalence score for the agricultural sector compared with that of all the sectors which are given in table 4. In particular, for the agriculture sector the frequency index range between 96 to 98 per cent, and the coverage ratio is 98 to 99 per cent. The prevalence score lies between 9.1 and 16.1 for the identified countries.

**Table no.4: NTMs for Agricultural Sectors for Backward Ranked Developed Countries**

| Country | Frequency Index in Per cent | Coverage Ratio in Per cent | Prevalence Score |
|---|---|---|---|
| Australia | 98 | 98 | 15.5 |
| Germany | 98 | 98 | 16.1 |
| France | 98 | 98 | 15.5 |
| Singapore | 96 | 99 | 9.1 |

Source: Rank Calculated by author and compiled FI,CR and PS from UNCTAD- TRAINS Portal

Table no.5 shows the top four developing countries in 1995 for which the rank declined in 2022 in terms of the value of agricultural imports from India. South Africa does not have NTMs data for the year 2022. The Frequency Index, Coverage ratio, and Prevalence Score data have been given for Russian Federation, Philippines, and Indonesia for all

the sectors. The Philippines has the highest level of FI, CR at 84 per cent and 88 per cent respectively. The Russian Federation has FI, CR and PS at 76 per cent,85 per cent and 4.2 respectively. Indonesia has the lowest level of FI,CR and PS at 61 per cent,70 per cent, and 3 among the list of the countries in the categories of Developing countries. Notably, all the listed developing countries have the highest level of FI, CR, and PS which is found in table number 5. The highest value of FI and CR is noted for the Philippines and Indonesia at 100 per cent FI and CR among the listed countries. The highest level of prevalence score is observed for Indonesia at 17.1.

**Table No.5: NTMs for Agricultural Sector for Backward Ranked Developing Countries**

| Country | Frequency Index in Per cent | Coverage Ratio in Per cent | Prevalence Score |
|---|---|---|---|
| Russian Federation | 98 | 99 | 11.8 |
| Philipines | 100 | 100 | 17.1 |
| Indonesia | 100 | 100 | 11.7 |
| South Africa | NA | NA | NA |

Source: Rank Calculated by author and compiled FI,CR and PS from UNCTAD-

TRAINS Portal

From the above discussion, it is observed that all the listed developed and developing countries whose rank declined in 2022 have the highest level of Frequency Index, Coverage Ratio, and Prevalence score. Hence, the NTMs have been influencing significantly the direction of agricultural and processed food export in the case of India. Few of important literatures also confirmed the above result, which has given here, NTMs do raise trade unit values for half of the HS6 products nd increased the average price-raising effect of about 8 per cent. However, a quarter in the presence of deep-Non-tariff measures, preferential trade agreements would reduce the prices (Olivier Cadot and Julien Gourdon, 2016). NTM significantly reduce developing countries' exports to OECD countries, but do not affect trade between OECD members. (Anne-Célia Disdier, Lionel Fontagné & Mondher Mimouni, 2008). NTMs barriers in Agriculture and food products are comparatively higher. NTMs are revealed to be the more dominant trade barrier, with their importance growing over the

period. (Zhaohui Niu, Chang Liu, Saileshsingh Gunessee and Chris Milner, 2018)

So the Government of India needs to look into NTMs of foreign countries while framing the trade policies

**Reasons for dipping export to developed countries from India based on literature Review:**

- SPS-related problems have always remained a major cause of concern for Indian marine exports to the Europe Union, which has very stringent regulations in the field of marine products. In August 1997, the EU banned fisheries exports from India on SPS grounds. (Atul Kaushik and Saqib M 2001)
- India's exports of meat and meat products have encountered diverse SPS problems, particularly in the Europe Union. The EU does not allow the import of Indian buffalo meat on grounds of the prevalence of food and mouth disease (FMD) in Indian cattle.(WTO, 2007)
- The Scientific Standing Committee of the EU categorized India as the country of GBR level II, i.e. 'BSE (Bovine Spongiform Encephalopathy (BSE, or 'mad cow disease'). This had the potential to disrupt India's beef trade not only with the EU Member states but also with other trading partners.(WTO,2007)
- Indian exports of spices, peanuts, groundnuts, cereals, and various other processed foods, among other items, have long since been facing severe problems on grounds of presence of aflatoxin beyond the Maximum Residue Levels (MRLs) permitted by the Europe Union. (WTO 2007)
- Indian exports of mango and mango pulp have been affected by SPS-related problems in various export destinations including the United States, Japan, the EU, Australia, and New Zealand. Even though India is the largest mango producer in the world, accounting for roughly 50 per cent of the global mango production, with the highest number of varieties, exports of mango and mango pulp from India have not really been significant.
- In June 2007, Russia banned imports of rice (along with sesame and groundnuts) from India on grounds of detection of pests in rice consignments. On grounds that Sudan Red
  is potentially carcinogenic, the EU banned its use in processed foods. (Kasturi Das 2008)

- In October 2003, the EU specified the requirement of Sudan-free certificates for all spices, including red chili powder and notified the appropriate agencies in India [the Spices Board and the Export Inspection Council (EIC)]. ( Divvaakar 2006 )
- India is the world's largest producer of milk accounting for around 14 per cent of the world milk production. However, presently, Indian milk products are not allowed to be exported to the EU. India is the world's largest producer and consumer of tea. However, pesticide residue in Indian tea has been a major cause of concern for India with respect to market access in various export destinations, particularly in the EU. (Kasturi Das 2008)

**CONCLUSIONS**

There is an increasing trend is observed for the agricultural and processed food (APF) export value to developed countries for selective years. But in terms of percentage share, a decreasing trend has been observed, there is no much difference has been seen in the percentage share of APF export to developing countries after establishment of WTO and the percentage share of APF export to LDC has been increasing in the regime of WTO. The percentage analysis shows that agriculture export to developed countries has been declining after establishment of WTO. The result and discussion has confirmed that the nexus between APF export and NTMS.So, the Government of India may look into this matter and try to increase agricultural and processed food export to developed and developing countries by way of having bilateral trade agreements focusing on NTMs. Moreover, for developing economy like India, with its huge size and population, the levels of consumption within the country are important considerations. However, looking at exports only as a means of disposing of the available surpluses cannot form the basis of a healthy export policy. Obviously, it would be necessary to increase agricultural production significantly not only to meet the domestic requirements in full but also to generate adequate export surpluses By way of yield improvement, reduction in wastes and efficiency in land resources.

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**Appendix-1**

In this article **Developed Countries** include the United States, Netherland, United Kingdom, Canada, Australia, Singapore, Germany, France, Belgium, Israel, Norway, Japan, Italy, Spain, Hong Kong, New Zealand, Korea Republic, Poland, Switzerland, Denmark, Sweden, Greece, Portugal, Slovenia, Ireland, Finland, Austria, Estonia, Czech Republic, Slovak Republic, Liechtenstein, and Luxembourg.

**Developing Countries** are Vietnam Social Republic, United Arab Emirates, Saudi Arabia, Iran, Iraq, Malaysia, Indonesia, Sri Lanka, Egypt Arab Republic, Kuwait, Oman, Senegal, Qatar, Yemen Republic, Philippines, Russia, Cote D Ivoire, Somalia, Turkey, Algeria, Pakistan, Jordan, South Africa, Bahrain, Thailand, Djibouti, Taiwan, China , Madagascar, Ghana, Mauritius, Angola, Nigeria, Maldives, Sudan, Niger, Bhutan, Cameroon, Libya, Ukraine, Turkmenistan, Georgia, Syria, Gabon, Brunei, Brazil, Argentina, Reunion, Tunisia, Morocco, Mexico, Namibia, Seychelles, Zambia, Armenia, Chile, Mauritania, Azerbaijan, Comoros, Rwanda, Romania, Lithuania, Dominic Republic, Equatorial Guinea, Uzbekistan, Bulgaria, Croatia, Korea D P Republic, Serbia, Trinidad, Tajikistan, Belarus, Fiji Islands, Kazakhstan, Cyprus, Laos, Colombia, Cuba, Albania, Chad, Peru, Guadeloupe, Malawi, Jamaica, Guatemala, Botswana, Panama Republic, Guyana, Venezuela, Uruguay, Kyrgyzstan, Malta, Costa Rica, Papua New Guinea, Honduras, French Polynesia, Unspecified, Mongolia, Eritrea, Suriname, Moldova, Netherlands Antilles, El Salvador, Macedonia, Solomon Islands, Paraguay, Lesotho, Bosnia-Herzegovina, Ecuador, Tonga, Cape Verde, Nicaragua, Sao Tome, Puerto Rico, Martinique, Barbados, Bahamas, Guam, New Caledonia, Macao, Dominica, Belize, Cayman Islands, Samoa, Aruba, St Lucia, Bolivia, Kiribati Republic, Marshall Island, St Helena, Monaco, American Samoa, British Virgin Islands, St. Kitts Nevis.

**Least Developing Countries** are Nepal, Bangladesh, Benin, Guinea, Myanmar, Liberia, Togo, Kenya, Ethiopia, Afghanistan, Tanzania Republic, Gambia, Sierra Leone, Burkina Faso, Congo D. Republic, Uganda, Haiti, Mozambique, Mali, Cambodia, Guinea Bissau, Burundi, Central African Republic and Zimbabwe

**Apendix-2:**

Classification of Non-tariff Measures

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|---|---|---|---|
| Imports | | Technical measures | • Sanitary and phytosanitary measures<br>• Technical barriers to trade<br>• Pre-shipment inspection and other formalities |
| | | Non-technical measures | • Contingent trade-protective measures<br>• Non-automatic import licensing, quotas, prohibitions, quantity-control measures and other restrictions not including sanitary and phytosanitary measures or measures relating to technical barriers to trade<br>• Price-control measures, including additional taxes and charges<br>• Finance measures<br>• Measures affecting competition<br>• Trade-related investment measures<br>• Distribution Restrictions<br>• Restrictions on post-sales services<br>• Subsidies and other forms of support<br>• Government procurement restrictions<br>• Intellectual property<br>• Rules of origin |
| Exports | | | • Export-related measures |