

India's Export Potential and Product Diversification with Brazil, Russia, China and South Africa

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Abstract:

The impacts of export volume on economic growth have been empirically investigated in a large number of research, as is well known. A small number of studies highlight the significance of improving export quality rather than volume for economic growth, despite the fact that the focus of the literature has recently changed from volume to quality of exports. The main objective of this research paper is to find out the India's Export Potential and Product Diversification with Brazil, Russia, China and South Africa. Brazil and India have a lot of unrealized export potential because of their strong diplomatic ties, complementary economies, and joint membership in multilateral organizations like BRICS.

Keywords: empirically, investigated, significance, Diversification.

Introduction

The impacts of export volume on economic growth have been empirically investigated in a large number of research, as is well known. A small number of studies highlight the significance of improving export quality rather than volume for economic growth, despite the fact that the focus of the literature has recently changed from volume to quality of exports. According to current research, improving the quality of goods has a beneficial impact on important measures of a nation's economic performance, increasing GDP growth, employment, trade volume, and wages (Crino and Ogliari 2015). In the literature on economics, export product diversification has received a lot of attention. According to Adam Smith and David Ricardo's classical trade theories, nations need to focus on producing goods in which they specialise. The Heckscher-Ohlin hypothesis states that nations ought to focus on goods in which they have a high factor intensity (Laursen 2015). The writings of Prebisch (1950) and Singer (1950), however, cast doubt on these theories and show that, over time, the growth rate of emerging nations will be negatively impacted by the importation of industrial commodities and the export of basic goods (Cadot et al. 2011).

The BRICS nations are causing economic instability throughout the world during the current financial crisis. Due in part to comparatively moderate progress in the industrialized nations, their weight in world production has expanded dramatically in recent years. However, it is also evident that these nations will require a significant amount of time to achieve the wealth levels of the industrialized

world. A wealth analysis based on the Human Development Index also supports this conclusion. Russia is the top member of the BRICS group in this regard. (*A Service of Zbw*, n.d.)

Review of literature:

Parteka and Tamberi (2013) examined changes in relative (i.e., evaluated in comparison with global patterns) heterogeneity of import and export structures across the course of economic development, this research adds to the body of knowledge on trade diversification. Specifically, we fill in a gap in our analysis of export patterns by concentrating on import diversification. Despite variations in levels (imports are generally more diversified than exports, especially at lower stages of economic development), we use highly disaggregated trade statistics (4963 product lines) for 163 countries (1988–2010) and discover that they follow a similar path of evolution in the development process. Economic expansion is accompanied by a progressive relative diversification (despecialization) of import and export structures, whilst re-specialization is only feasible in a restricted number of nations (extremely rich, tiny ones, plentiful in oil).

Gozgor and Can (2016) used a panel data set of 115 nations from 1970 to 2010 to experimentally investigate how export product variety affects overall export quality. The International Monetary Fund's three export diversification metrics—the extensive margin, which measures the variation in the quantity of new products exported, the intensive margin, which measures the variation in export values among current exports, and the overall (Theil) index—as well as the data sets of the overall export quality are used. It concludes that a greater range in export values among current exports from low- and lower-middle-income nations has only led to an increase in export quality.

Wani and Dhami (2017) explained that the worldwide development structure's design is changing as a result of the BRICS economies. Over the course of the past ten years, BRICS have strengthened and expanded its powerful alliance in the world economy. The trade structure of emerging economies (BRICS) and the global economy as a whole has seen significant changes during the past ten years. The BRICS emerging nations' growing proportion of global exports reflects their growing significance. While the BRICS nations have been striving to improve their commerce, they undoubtedly require a structural revitalization.

Mania and Rieber (2019) expressed that the benefits of an export-diversification-based approach to economic development are widely acknowledged in the most recent economic literature. Through cross-sectoral technological spillover effects, export diversification promotes development and economic growth while facilitating structural transformation. But not every export basket has the same capacity for expansion and financial advancement. Therefore, the ability of a nation to grow its productive structure must be taken into consideration while evaluating the quality of export diversification. Additionally, the relationship between export diversification and economic growth may be impacted by the new corporate internationalization initiatives. It is true that the global manufacturing process is vertically fragmented, with developing nations specialized in tightly defined production process segments.

Maryam and Mittal (2019) suggested that the numerous international economic agreements that exist today, whether they be bilateral, regional, or multilateral, have an impact on the formulation of international trade and investment policies. In this case, it has become a significant platform for BRICS

to demonstrate their expanding influence in the global economy and to influence important issues that support investment and trade. India has a comparative advantage mostly in agricultural and related items, followed by industrial and man-made products, according to the bilateral revealed comparative advantage analysis (BRCA) of India with each of the BRICS member nations at the aggregate level. Between 2001 and 2015, India's export basket with the BRICS nations underwent slight structural changes, according to BRCA study.

Bashir et al. (2020) explored a panel data set of 115 nations from 1970 to 2010 to experimentally investigate how export product variety affects overall export quality. The International Monetary Fund's three export diversification metrics—the extensive margin, which measures the variation in the quantity of new products exported, the intensive margin, which measures the variation in export values among current exports, and the overall (Theil) index—as well as the data sets of the overall export quality are used. It concludes that a greater range in export values among current exports from low- and lower-middle-income nations has only led to an increase in export quality. Additionally, it notes that both a greater range in export values among current exports and new products sold in upper-middle- and high-income nations has been associated with an increase in export quality.

Bruno De Conti et al. (2021) The governments of the BRICS countries have chosen to move away from this passive role and toward shifting their positions in the international arena. However, this is challenging within the multilateral institutions that are already in place because they have a tendency to uphold the established power structure. As a result, the BRICS made the decisions to: (i) align their demands inside the "old" organizations (namely the WTO, IMF, and WB); and (ii) establish new institutions. As a result, the BRICS have organized as a group that opposes the current order and is engaged in the struggle for a new one.

Objective and Research Methodology

The main objective of this research paper is to find out the India's Export Potential and Product Diversification with Brazil, Russia, China and South Africa. The Export Potential Indicator assesses the potential export value for each exporter in a specific product and target market based on an economic model that incorporates the exporter's supply, the target market's demand, market access conditions, and the two countries' bilateral relationships. Using historical export performance data, the supply of current export products is calculated. By comparing potential export values to actual export values, one can identify exporters, products, and markets with room to grow. The export potential was utilized by Cheong et al. (2018) to provide job possibilities in developing nations. Supply is estimated using the Product Space technique, which creates links between commodities based on how often they occur in countries' export baskets. Products that are regularly supplied together are thought to have comparable manufacturing capacities. To give export-ready products a good chance of success, supply is combined with demand and market access conditions in the target market. Gozgor and Can (2016) investigated how export product diversification affected revenue at various economic development phases.

Analysis of India's Export Potential and Product Diversification

India has significant export potential with Brazil, Russia, China, and South Africa, especially in areas like pharmaceuticals, IT, agriculture, and renewable energy. However, there is room for diversification

into higher-value-added sectors, such as technology, defense, and advanced manufacturing. By strengthening bilateral relations, improving infrastructure, and focusing on innovation, India can leverage its trade relations with these BRICS countries to expand its global presence.

India's Export Potential with Brazil

Brazil and India have a lot of unrealized export potential because of their strong diplomatic ties, complementary economies, and joint membership in multilateral organizations like BRICS.

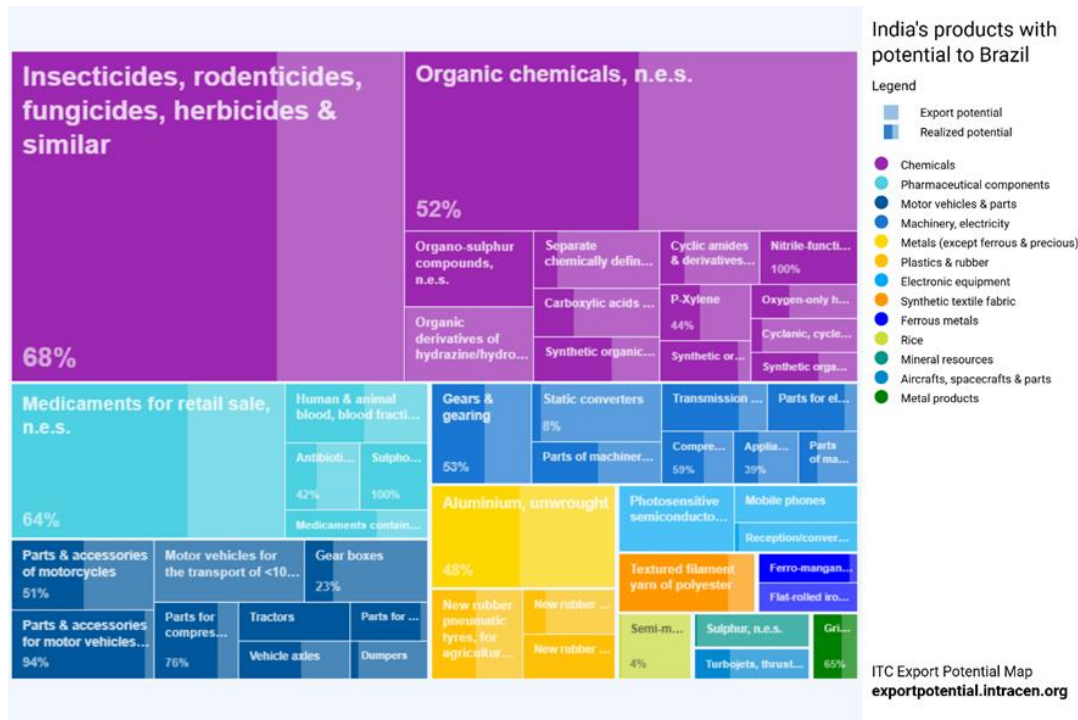


Fig1.1 India's Export Potential with Brazil

Source: exportpotential.intracen.org

The products with greatest export potential from India to Brazil are Insecticides, rodenticides, fungicides, herbicides & similar, Organic chemicals, n.e.s., and Medicaments for retail sale, n.e.s.. Insecticides, rodenticides, fungicides, herbicides & similar shows the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth \$399 mn.

India's Export Potential with Russia

India and Russia have a robust export market with plenty of room to grow, especially given the shifting nature of international trade.

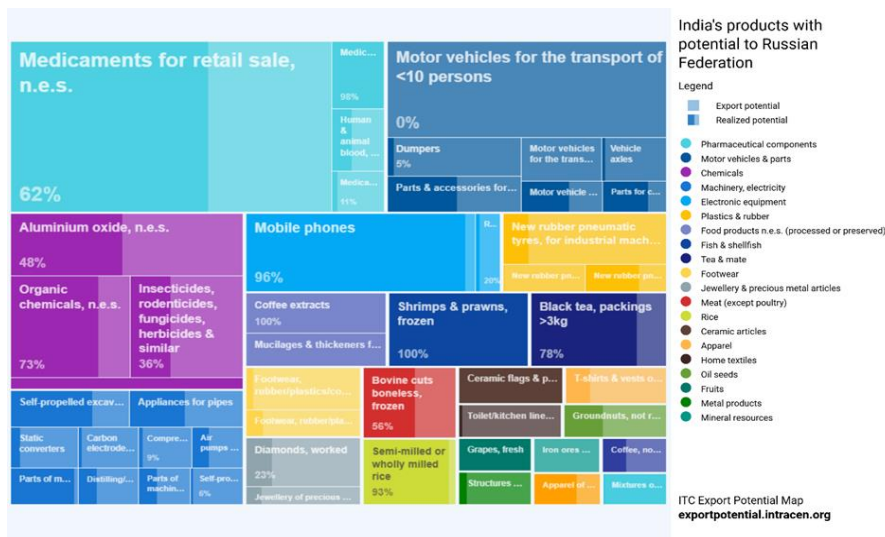


Fig 1.2 India's Export Potential with Russia

Source: exportpotential.intracen.org

The products with greatest export potential from India to Russian Federation are Medicaments for retail sale, n.e.s., Motor vehicles for the transport of <10 persons, and Mobile phones. Motor vehicles for the transport of <10 persons shows the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth \$277 mn.

India's Export Potential with China

Despite obstacles like trade imbalances and geopolitical difficulties, India and China have immense export potential because of their complementary economies.

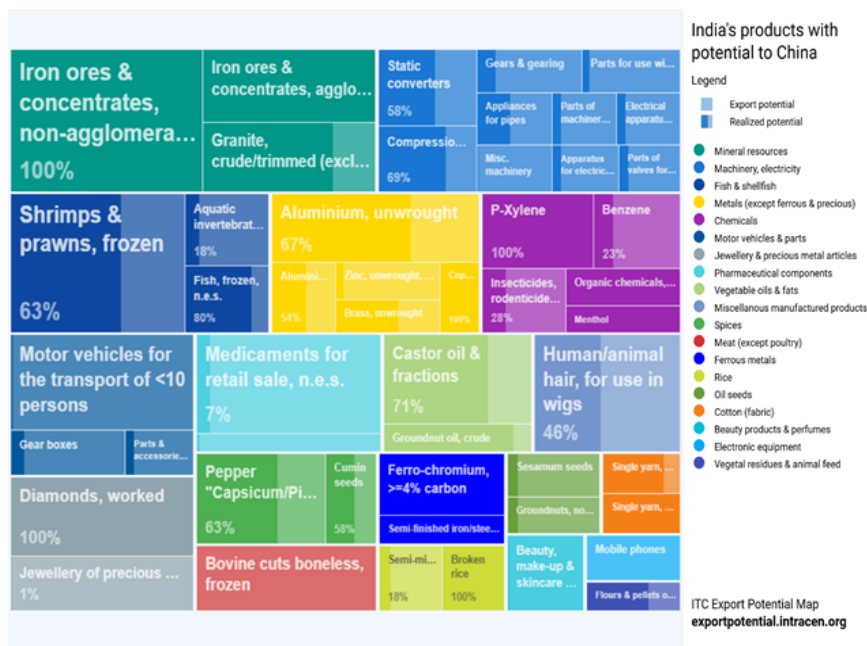


Fig 1.3 India's Export Potential with China

Source: exportpotential.intracen.org

The products with greatest export potential from India to China are Iron ores & concentrates, non-agglomerated, Shrimps & prawns, frozen, and Medicaments for retail sale, n.e.s.. Motor vehicles for the transport of <10 persons shows the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth \$880 mn.

India's Export Potential with South Africa

India has significant export potential with South Africa, leveraging both countries' complementary trade profiles and their shared membership in BRICS.

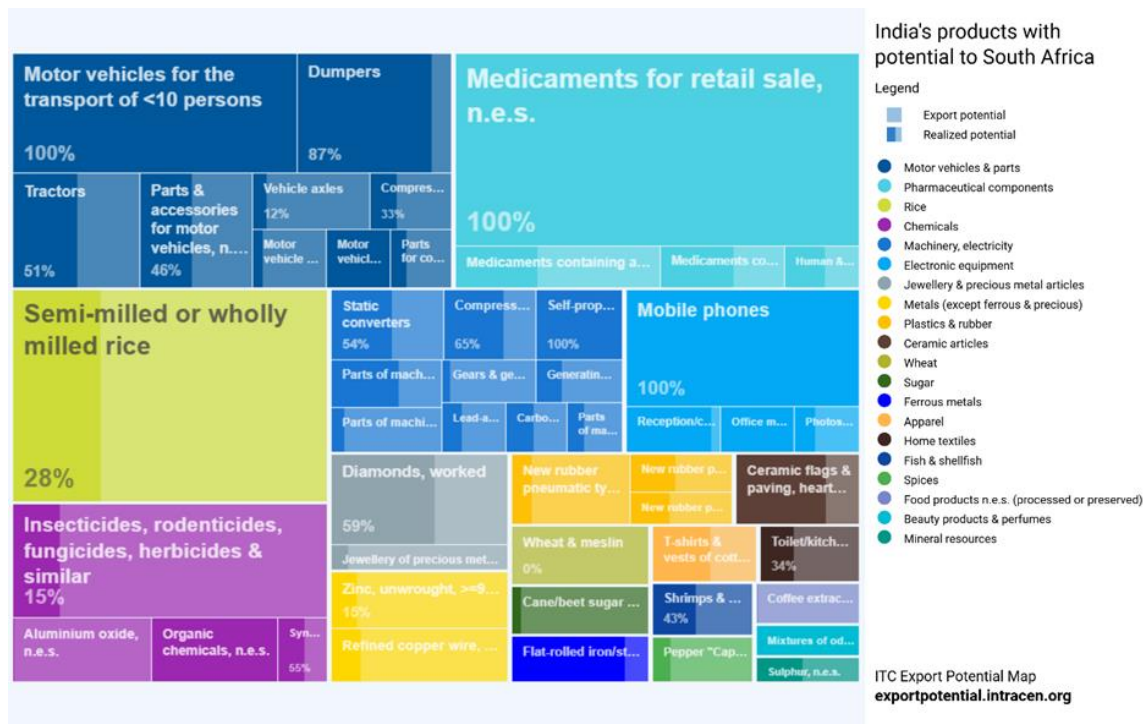


Fig 1.4 India's Export Potential with South Africa

Source: exportpotential.intracen.org

The products with greatest export potential from India to South Africa are Medicaments for retail sale, n.e.s., Semi-milled or wholly milled rice, and Insecticides, rodenticides, fungicides, herbicides & similar. Semi-milled or wholly milled rice shows the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth \$271 mn.

India's Product Diversification

India's Product Diversification with Brazil

The ability to broaden bilateral commerce outside conventional areas is demonstrated by India's product diversification with Brazil. Within the scope of BRICS and other international organizations, this diversification is in line with initiatives to deepen economic relations.

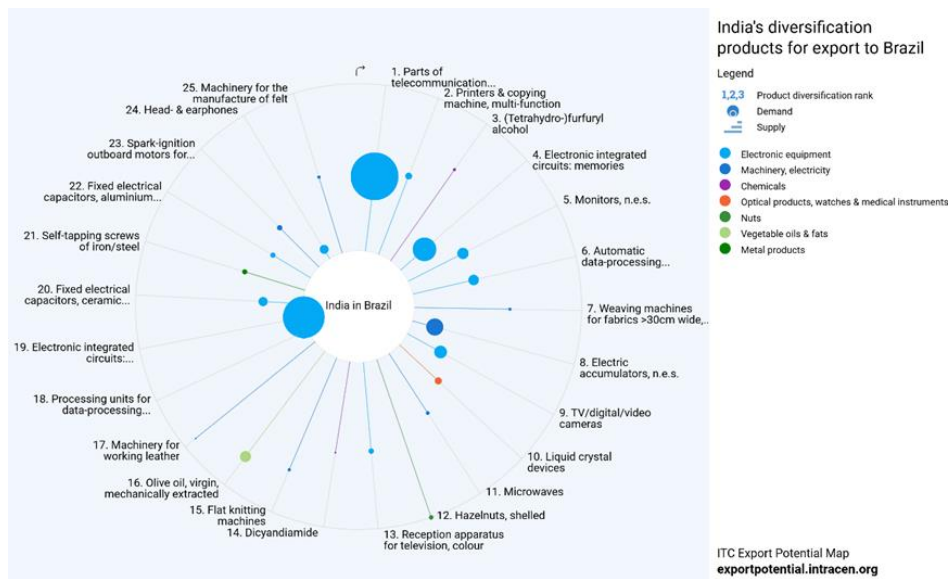


Fig 1.5 India's Product Diversification with Brazil

Source: exportpotential.intracen.org

India's best options for export diversification in Brazil are Parts of telecommunication devices, n.d.a., Printers & copying machine, multi-function and (Tetrahydro-)furfuryl alcohol. India finds Hazelnuts, shelled easiest to reach. Parts of telecommunication devices, n.d.a. is the product that faces the strongest demand potential in Brazil.

India's Product Diversification with Russia

India's product diversification strategy with Russia aims to expand trade beyond traditional sectors like oil, energy, and fertilizers. With bilateral trade growing significantly, opportunities abound in emerging areas that complement India's manufacturing and service strengths.

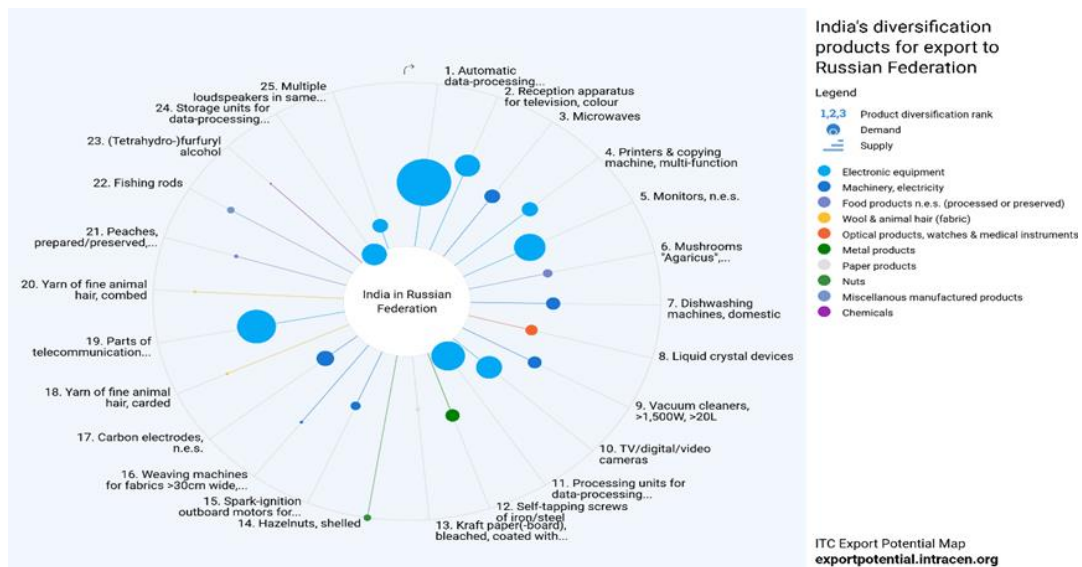


Fig 1.6 India's Product Diversification with Russia

Source: exportpotential.intracen.org

India's best options for export diversification in Russian Federation are Automatic data-processing machines, portable, <=1kg, Reception apparatus for television, colour and Microwaves. India finds Hazelnuts, shelled easiest to reach. Automatic data-processing machines, portable, <=1kg is the product that faces the strongest demand potential in Russian Federation.

India's Product Diversification with China

India's product diversification with China has significant potential, considering the complementary nature of their economies and the ongoing trade flows between the two countries. While China has long been a major source of imports for India, especially in electronics, machinery, and chemicals, India can also capitalize on various emerging sectors to diversify its exports to China.

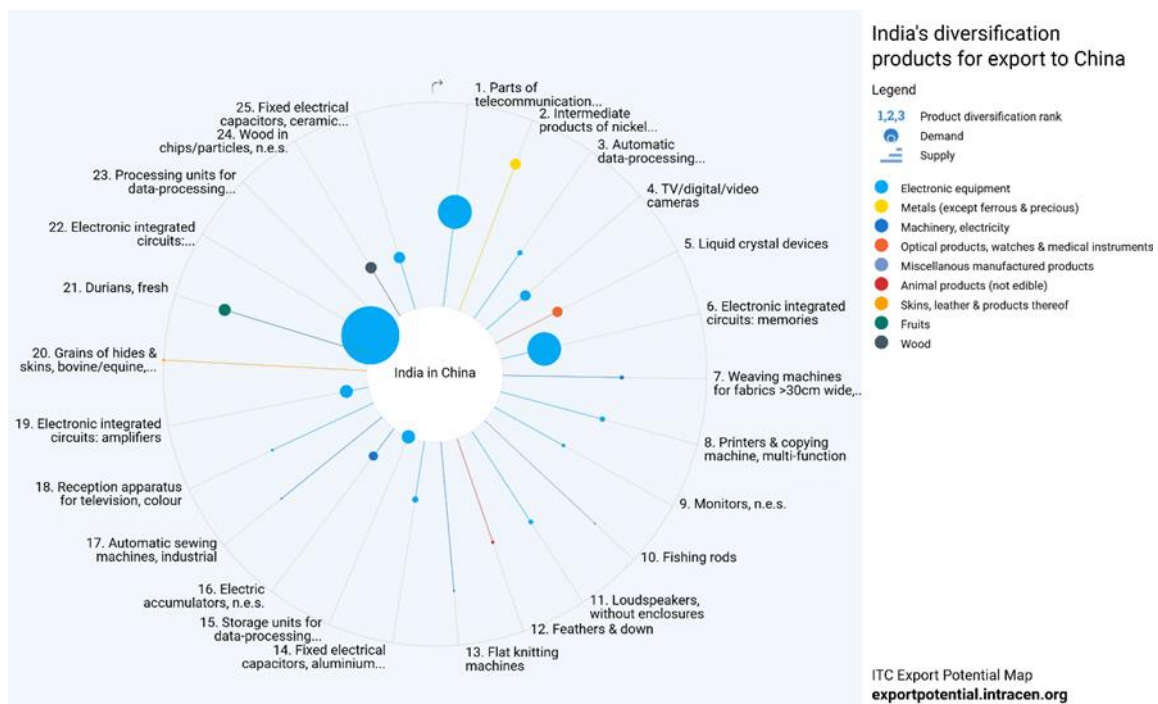


Fig 1.7 India's Product Diversification with China

Source: exportpotential.intracen.org

India's best options for export diversification in China are Parts of telecommunication devices, n.d.a., Intermediate products of nickel metallurgy, n.e.s. and Automatic data-processing machines, portable, <=1kg. India finds Grains of hides & skins, bovine/equine, dry state, hairless easiest to reach. Electronic integrated circuits: processors/controllers is the product that faces the strongest demand potential in China.

India's Product Diversification with South Africa

India's product diversification with South Africa offers immense growth potential in sectors like pharmaceuticals, IT, renewable energy, agri-tech, and automobiles. By addressing challenges such as tariffs, logistics, and regulatory compliance, India can further strengthen its trade relations with South Africa, paving the way for long-term economic cooperation.

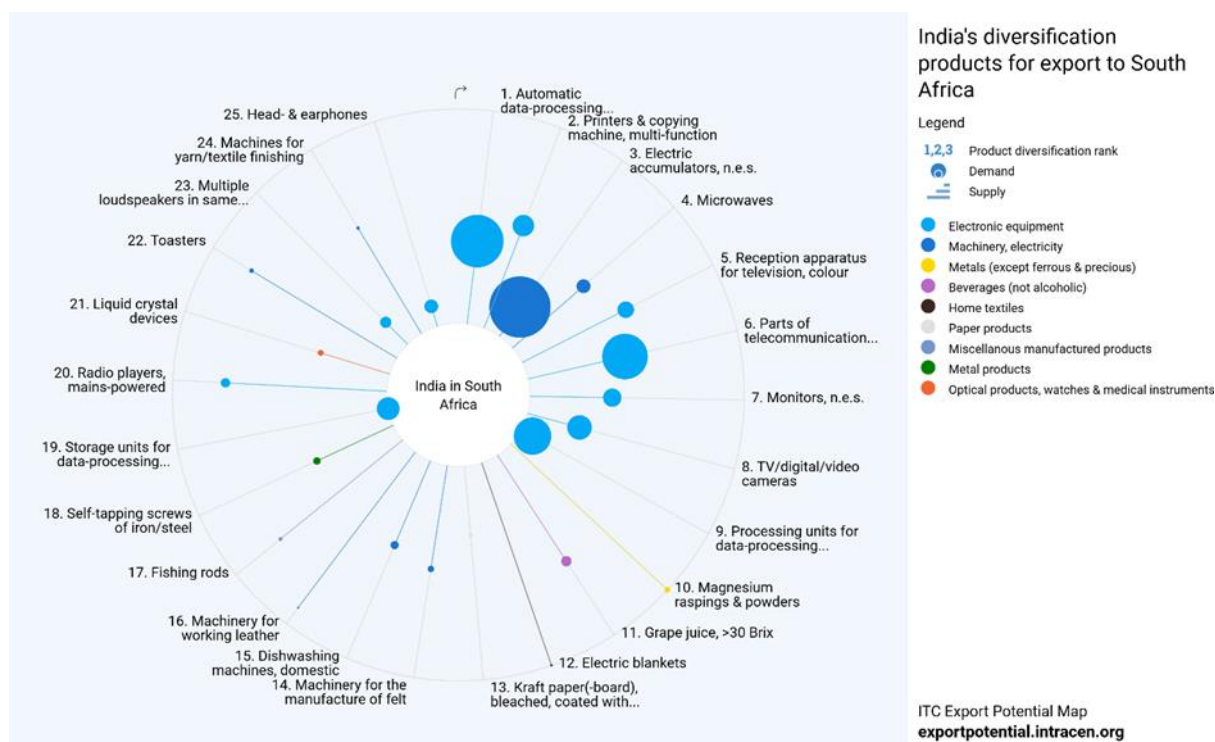


Fig 1.8 India's Product Diversification with South Africa

Source: Source: exportpotential.intracen.org

India's best options for export diversification in South Africa are Automatic data-processing machines, portable, $\leq 1\text{kg}$, Printers & copying machine, multi-function and Electric accumulators, n.e.s.. India finds Electric blankets easiest to reach. Electric accumulators, n.e.s. is the product that faces the strongest demand potential in South Africa.

Challenges Faced by India, Brazil, Russia, China and South Africa

- **Infrastructure and Logistics:** Poor infrastructure and logistical challenges are widespread in many BRICS countries, leading to high costs and inefficiencies that hinder export diversification. (Rajeev Jayaswal, 2024)
- **Trade Barriers:** High tariffs, non-tariff barriers, and regulatory complexities create additional hurdles to global trade, particularly in sectors like agriculture, technology, and pharmaceuticals. (Rekhi, 2024)
- **Over-reliance on Commodities:** Several BRICS countries, especially Brazil, Russia, and South Africa, rely heavily on commodity exports, which makes them vulnerable to price fluctuations and limits efforts to diversify into more high-value-added goods. (Rajeev Jayaswal, 2024)
- **Geopolitical Risks:** Ongoing geopolitical tensions, whether related to border disputes or international sanctions, create uncertainty and can disrupt trade flows. (Rekhi, 2024)

Suggestions and Recommendations

- **Invest in Infrastructure:** Improved logistics and infrastructure investments (e.g., ports, railways, and digital infrastructure) across the BRICS nations can drastically reduce export costs, enhance competitiveness, and boost overall trade. (Rajeev Jayaswal, 2024)

- Expand Digital and E-Commerce Exports: Leveraging digital trade platforms and e-commerce could help BRICS countries tap into global demand for digital goods and services, offering easier access to markets without the limitations of traditional trade. (Prata, 2024)
- Collaborate in Research and Development (R&D): Greater investment in R&D across various sectors, such as AI, biotechnology, and clean energy, can drive innovation and open new markets for export diversification. (Prata, 2024)
- Diversify Trade Partners: BRICS nations should expand their trade networks by negotiating free trade agreements (FTAs) and improving ties with emerging economies in Africa, Southeast Asia, and Latin America. (Abhishek PRactice, 2024)

Conclusion:

Brazil and India have a lot of unrealized export potential because of their strong diplomatic ties, complementary economies, and joint membership in multilateral organizations like BRICS. Despite obstacles like trade imbalances and geopolitical difficulties, India and China have immense export potential because of their complementary economies. India has significant export potential with South Africa, leveraging both countries' complementary trade profiles. The ability to broaden bilateral commerce outside conventional areas is demonstrated by India's product diversification with Brazil. India's product diversification with China has significant potential, considering the complementary nature of their economies and the ongoing trade flows between the two countries. While China has long been a major source of imports for India, especially in electronics, machinery, and chemicals, India can also capitalize on various emerging sectors to diversify its exports to China. India's product diversification with South Africa offers immense growth potential in sectors like pharmaceuticals, IT, renewable energy, agri-tech, and automobiles. By addressing challenges such as tariffs, logistics, and regulatory compliance, India can further strengthen its trade relations with South Africa, paving the way for long-term economic cooperation.

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