STRATEGIES TO BOOST INDIA'S PICKLES & SAUCES EXPORTS

STRATEGIES TO BOOST INDIA'S PICKLES & SAUCES EXPORTS

SUVANGI RATH
TANAY SUNTWAL
KIRTI GOEL
ASHOK GULATI

STRATEGIES TO BOOST INDIA'S PICKLES AND SAUCES EXPORTS

Authors

1. **SUVANGI RATH**, Fellow, Indian Council for Research on International Economic Relations, New Delhi
2. **TANAY SUNTWAL**, Research Assistant, Indian Council for Research on International Economic Relations, New Delhi
3. **KIRTI GOEL,** Associate Trade Analyst, Agricultural and Processed Food Products Export Development Authority, New Delhi
4. **ASHOK GULATI**, Distinguished Professor, Indian Council for Research on International Economic Relations, New Delhi

Published by: Indian Council for Research on International Economic Relations (ICRIER)
Core-6A, 4th Floor, India Habitat Centre, Lodhi Road, New Delhi – 110003

ISBN: 978-81-998893-8-5

TABLE OF CONTENTS

LIST OF FIGURES, TABLES, & ANNEXURES

FIGURES

TABLES

ANNEXURES

ABBREVIATIONS

AAGR	Annual Average Growth Rate
AEZ	Agri-Export Zone
APEDA	Agricultural & Processed Food Products Export Development Authority
ASEAN	Association of South East Asian Nations
BEDF	Basmati Export Development Fund
BIS	Bureau of Indian Standards
BRCGS	Brand Reputation Compliance Global Standards
CAGR	Compound Average Growth Rate
CEPA	Comprehensive Economic Partnership Agreement
CETA	Comprehensive Economic and Trade Agreement
DGFT	Directorate General of Foreign Trade
EU	European Union
FDA	Food and Drug Administration
FPO	Farmer Produce Organisation
FSA	Food Standards Agency
HACCP	Hazard Analysis and Critical Control Points
HSN	Harmonized System of Nomenclature
ICAR	Indian Council of Agricultural Research
ICD	Inland Container Depot

ICRIER	Indian Council for Research on International Economic Relations
IEC	Importer Exporter Code
IFP	Investor Facilitation Portal
INR	Indian National Rupee
ISO	International Organization for Standardization
ITC	International Trade Centre
JNPT	Jawaharlal Nehru Port Trust
MEA	Ministry of External Affairs
MOFPI	Ministry of Food Processing Industry
MRL	Maximum Residue Levels
MSAMB	Maharashtra State Agriculture Marketing Board
MSME	Micro-Small-Medium Enterprises
NTB	Non-Tariff Barriers
ODOP	One District One Product
PMFME	Pradhan Mantri Formalisation of Micro Food Processing Enterprises
PMKSY	Pradhan Mantri Krishi Sinchai Yojana
RCA	Revealed Comparative Advantage
SME	Small-Medium Enterprises
TE	Triennium Ending (three-year average)
TSS	Total Soluble Solids
UAE	United Arab Emirates
UK	United Kingdom

USA	United States of America
USAID	United States Agency for International Development
USD	United States Dollar
WBIDC	West Bengal Industrial Development Corporation

FOREWORD

The global agri-food trade landscape is characterized by dynamic shifts in consumer preferences, regulatory frameworks, and supply chain innovations. Within this context, the Indian pickles and sauces sector presents a unique combination of traditional food processing and modern export potential. Despite India's vast agro-climatic diversity and deep-rooted culinary heritage, the country's share in global exports of pickles (HSN 200190, 200599) and sauces (HSN 2103) remains suboptimal, especially when benchmarked against leading exporters such as Türkiye, China, and the USA.

This report, "Strategies to Boost India's Pickles and Sauces Exports", is a comprehensive technical analysis that synthesizes primary and secondary data to map value chains, assess export performance, and identify actionable interventions. The study leverages trade statistics, Harmonized System of Nomenclature (HSN) codes, and Revealed Comparative Advantage (RCA) indices to benchmark India's position in the global market. It further evaluates tariff and non-tariff barriers, quality compliance requirements, and the evolving regulatory landscape across major importing countries.

The report aims to be both timely and relevant. Developed under a knowledge partnership between APEDA and ICRIER, it offers an in-depth assessment of India's current export landscape and explores the critical issues facing the sector. Drawing on extensive research and broad-based stakeholder consultations, the study outlines strategic, actionable recommendations aimed at revitalizing India's competitiveness in the global pickles & sauces trade.

APEDA remain committed to working closely with state government, line ministries, industry partners, academia, research institutions, and other stakeholders to unlock the full export potential of India's pickles & sauces sector. Revitalizing this industry will not only boost foreign exchange earnings but also foster inclusive rural development and create substantial employment opportunities in Pickles and Sauces processing.

SHEKHAR AIYAR
Director & Chief Executive
ICRIER

ABHISHEK DEV
Chairman
APEDA

PREFACE

India's pickles and sauces sector, while deeply rooted in tradition, is at a critical juncture in its evolution as an export-oriented industry. Despite a rich domestic heritage and a diverse product portfolio, India's global market share in key categories remains modest. In 2024, India's exports of pickles under HSN 200190 stood at USD 98.5 million, representing just 4.8 percent of global exports, while exports under HSN 200599 were USD 40.4 million (1 percent of global share). For sauces (HSN 2103), India's exports reached USD 136.7 million, accounting for only 0.7 percent of the global market, despite global exports in this category totalling USD 19.5 billion (TE24).

This report, Strategies to Boost India's Pickles and Sauces Exports, was conceptualized to address the persistent gap between India's production capabilities and its export performance. The study systematically analyses the domestic and international value chains, leveraging trade data, Harmonized System of Nomenclature (HSN) codes, and Revealed Comparative Advantage (RCA) indices to benchmark India's position against leading exporters such as Türkiye, China, and the USA. Key findings from the report also reveals underperformance in other pickle categories (HSN 200190 and 200599) and sauces (HSN 2103), despite a strong domestic value chain and rising global demand. Major bottlenecks identified include a low processing rate, fragmented supply chains, and persistent challenges in meeting international food safety standards. The report further highlights the pivotal contribution of small and medium enterprises, especially in states such as Andhra Pradesh, Tamil Nadu, and Punjab, to the sector's export growth.

The report utilizes a multi-method approach, combining quantitative trade analysis, state-wise and port-wise export mapping, and qualitative insights from stakeholder consultations. Comparative assessments of unit value realization, tariff and non-tariff barriers, and global competitor strategies provide a robust framework for actionable policy recommendations.

Our objective is to provide policymakers, exporters, and agri-business stakeholders with a data-driven roadmap to enhance India's export competitiveness in pickles and sauces. By addressing structural inefficiencies, improving compliance, and leveraging India's unique product diversity, the sector can significantly increase its global footprint.

We extend our gratitude to all contributors, data providers, and industry partners whose insights were invaluable to this study. We hope this report will serve as a catalyst for strategic interventions and collaborative efforts aimed at unlocking the full export potential of India's pickles and sauces sector.

AUTHORS

ACKNOWLEDGEMENT

We are sincerely thankful to the Agricultural and Processed Food Products Export Development Authority (APEDA) for involving ICRIER as a knowledge partner in this important study. We express our sincere gratitude to the APEDA for their invaluable support throughout the preparation of this report. In particular, we would like to thank **Mr. Abhishek Dev**, Chairman, **Dr. Sudhanshu**, Secretary, **Mr. Tarun Bajaj**, Senior Consultant, BEDF, **Mr. Man Prakash Vijay**, Deputy General Manager, **Ms. Simi Unnikrishnan**, AGM, and **Mr. S. K. Mandal**, Regional Head (East), APEDA for their guidance, encouragement, and constructive feedback at every stage of this study.

We are deeply appreciative of the insights and experiences shared by all stakeholders and exporters who participated in our consultations. We thank **Mr. Samarendra Kar** (Magma Foods Pvt. Ltd.), **Mr. Vinod Thacker** and Ms Mausami Maity (Elmac Group), **Mr. Subrata Sarkar** (Mida's Compant Pvt. Ltd.), **Mr. Sarang Selote** (GA Foods, Surat), **Mr. Arun Kumar** (Good Grains India), **Mr. Madhavan** (Payu Group of Companies, Tamil Nadu), **Mr. Balraj** (Desai Foods – Mother's Recipe), **Mr. Abhishek** (Adinath Agro Pvt. Ltd.), and **Mr. Neel Shah** (Madhav Agri-Food Pvt. Ltd.) for the valuable inputs during the meeting. Their practical perspectives and candid inputs were instrumental in shaping the analysis and recommendations presented in this report.

We acknowledge and thank **Mr. Rahul Arora**, Programme Manager, ICRIER for his administrative support and assistance in formatting this document, and **Ms. Shibani Chattopadhyay** from ICRIER for her editorial assistance, both of which greatly enhanced the clarity and coherence of the final document.

The successful completion of this report would not have been possible without the collective contributions and unwavering support of all the individuals and organizations mentioned above.

EXECUTIVE SUMMARY

Introduction

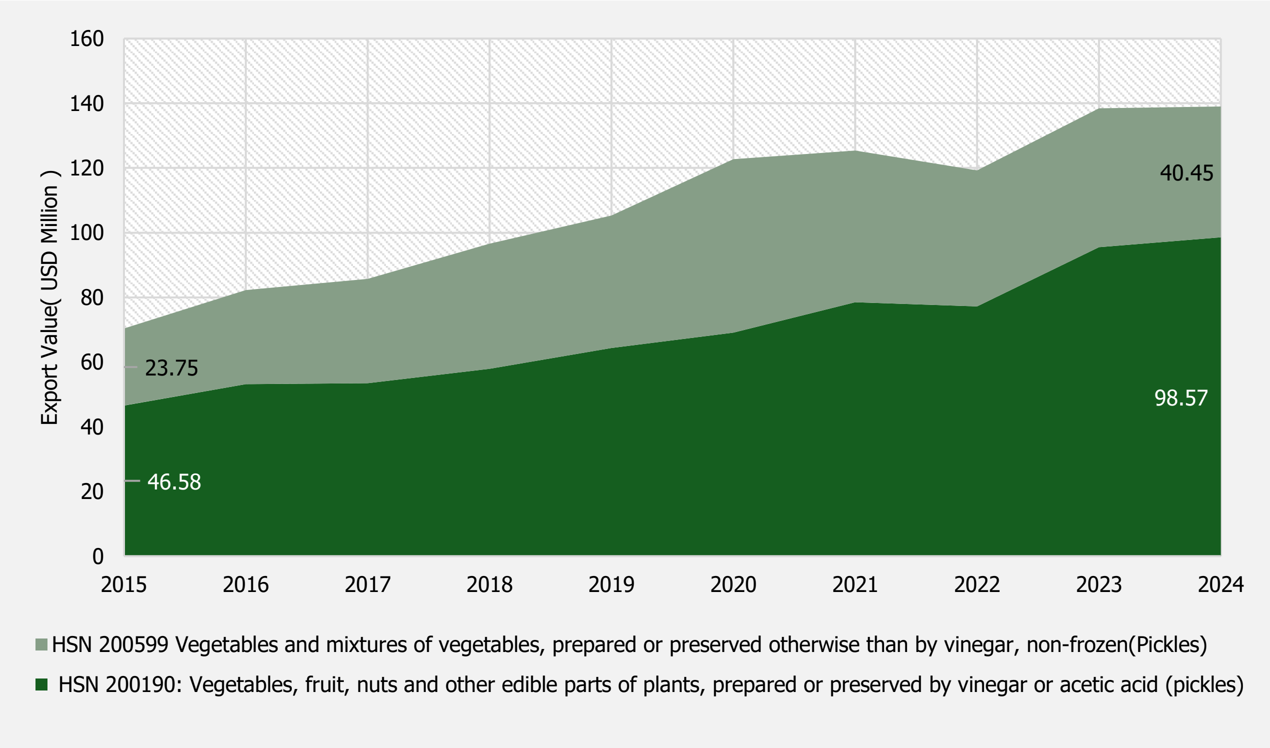
India's pickles and sauces sector, much like other traditional agri-food industries, is at a transformative juncture. With roots deeply embedded in the country's culinary heritage, these products have evolved from household staples to globally recognized condiments. Recent years have seen increasing demand for ethnic and fusion foods worldwide, positioning Indian pickles and sauces as products with significant export potential. However, this potential remains largely untapped due to persistent challenges across the value chain, regulatory hurdles, and limited global market penetration.

Market Intelligence

India is one of the world's largest producers of fruits and vegetables, providing a robust raw material base for the pickles and sauces industry. The sector is characterized by a diverse product range spanning traditional mango and lime pickles to innovative sauces and chutneys tailored for international palates. Despite this diversity and a strong domestic market, India's share in the global export market for pickles and sauces remains modest, especially when compared to its leadership in categories like cucumbers and gherkins.

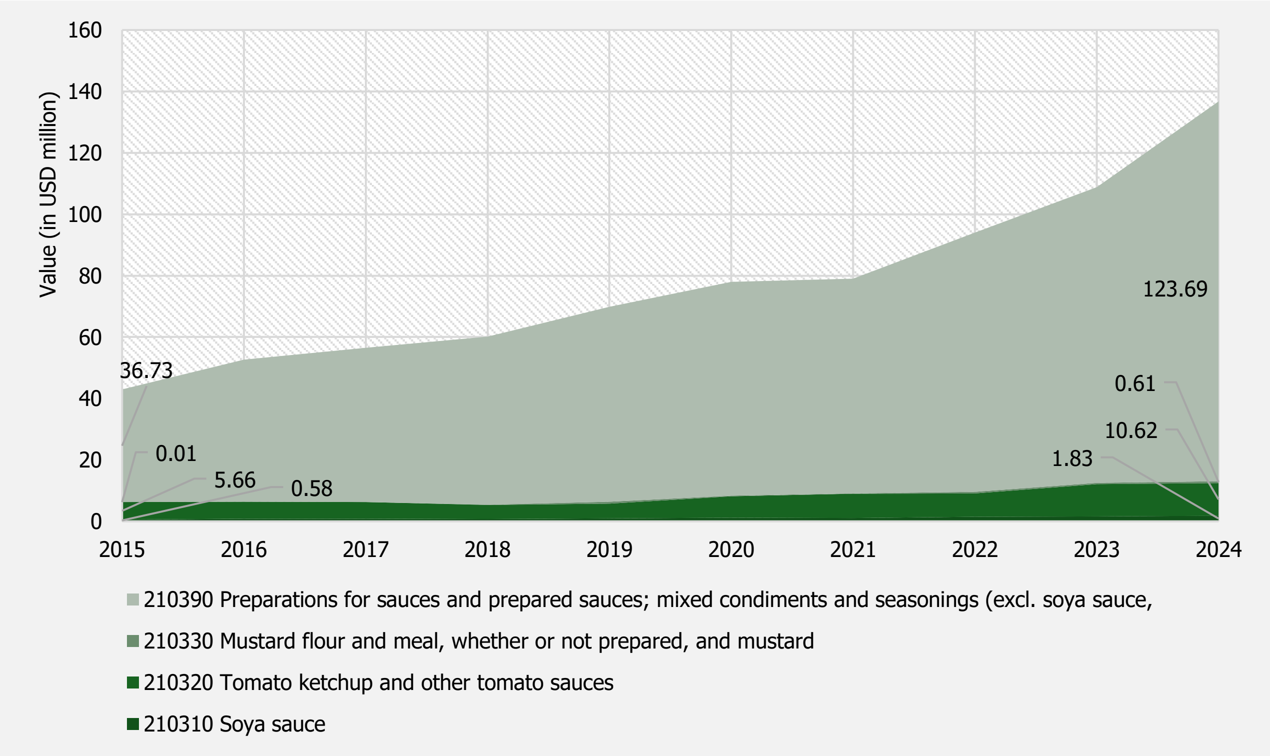
The growing global appetite for authentic, natural, and region-specific condiments which is driven by diaspora communities and consumers that offers India a unique opportunity to reposition its pickles and sauces as premium, value-added exports. The sector's ability to capitalize on this opportunity will depend on its capacity to modernize production, ensure quality and compliance, and build strong international brands.

India's export performance under HSN 200190 & HSN 200599 in last 10 years



Source: ITC Trade Map, 2024

India's Export Performance of sauces (under HSN 2103) in last 10 years



Source: ITC Trade Map, 2024

This structure leaves Indian exporters vulnerable to shocks from tariff and regulatory actions of dominant buyers.

Key Challenges

- **Fragmented Value Chains:** Sourcing of raw materials is often unorganized, leading to inconsistencies in quality and supply. The lack of integrated clusters and contract farming arrangements further weakens traceability and efficiency.
- **Processing and Technology Gaps:** Many micro and small enterprises rely on traditional methods, resulting in variable product quality and limited scalability. Mechanization and adoption of food safety standards are uneven across the sector.
- **Compliance and Certification:** Exporters face complex regulatory requirements, including stringent food safety, labelling, and packaging standards in major markets. The absence of a single window export clearance mechanism increases transaction costs and delays.
- **Market Access and Branding:** Indian pickles and sauces are primarily consumed by diaspora populations, with limited penetration into mainstream retail channels abroad. Weak branding and lack of consumer awareness hinder premium positioning.
- **Logistics and Infrastructure:** High logistics costs, inadequate cold chain facilities, and underdeveloped port infrastructure, particularly in Eastern India that raise the cost of exports and reduce competitiveness.

Focussed Strategies

i. Inconsistent Quality Raw Materials & Lack of Processing Units

Issue: Exporters struggle with sourcing consistent, high-quality inputs and face cost/quality issues due to distant processing units.

Action Points

- Promote contract farming via FPOs/cooperatives (Eg. The case of gherkins).
- Train farmers on global standards and sustainability.
- Provide agri inputs and pest control support.
- Set up processing units near key clusters (AP, Rajasthan, Nagaland, Assam).

ii. Lack of Processable Raw Material Varieties

Issue: Existing varieties have high water content, low pulp/TSS, poor shelf life and export quality.

Action Points

- Develop low-water, high-pulp, high-TSS varieties in collaboration with ICAR and other research institutes.
- Distribute improved seeds to farmers and FPOs.
- Educate farmers on cultivating these varieties.
- Enable public-private partnerships for faster adoption.

iii. Technical Gaps & Food Safety Compliance

Issue: Limited know-how leads to pesticide residue issues and export rejections.

Action Points

- Hire technical experts for farmer training and monitoring the crops from sowing to harvesting.
- Enable ongoing collaboration with ICAR for pest/disease control.
- Implement robust food safety management systems.
- Conduct regular audits and compliance training.

iv. Limited Global Market Reach

Issue: Heavy focus on traditional diaspora-centric products narrows global opportunities.

Action Points

- Conduct market research to identify local preferences.
- Develop products for international taste profiles.
- Collaborate with local partners for product development and entry through super markets.

Other Strategies

i. Brand Building and Market Promotion

- Launch international promotional campaigns in partnership with APEDA, Indian embassies, and industry associations to raise awareness of Indian pickles and sauces.
- Invest in clean, attractive, compliant packaging and multilingual labelling to appeal to diverse consumer segments.
- Collaborate with diaspora networks and global retailers (especially malls and super-markets) to expand distribution beyond ethnic stores.

ii. **Infrastructure and Logistics Enhancement**

- Encourage labs in the processing units.
- Upgrade cold chain and warehousing facilities, particularly in Eastern India and near key ports, to reduce spoilage and logistics costs.
- Improve last mile connectivity from production clusters to export hubs through targeted public and private investments.

iii. **SME Support and Capacity Building**

- Facilitate access to affordable finance, modern equipment, and export incentives for small and medium enterprises (SMEs).
- Organize training programs on export documentation, digital marketing, and international trade practices.
- Encourage SME participation in global food exhibitions and trade fairs.
- Upgradation, modernization of infrastructure, and development of newer products for mainstream market.

iv. **Policy and Institutional Support**

- Continue negotiations for establishing FTAs and PTAs with target nations.
- Ensure convergence of central and state government schemes (e.g., PMFME, PMKSY) for holistic sector development.
- Foster Public Private Partnerships (PPP) for R&D, infrastructure, and market development.

CONCLUSION

While India's pickles and sauces have a strong export potential, unlocking new markets requires adapting products to suit international tastes, investing in quality control, and upgrading export infrastructure. Policymakers should support SMEs with easier access to finance, single line certification processes, and targeted incentives for innovation and marketing. Improving port facilities and logistics, especially in Eastern India, will reduce costs and boost competitiveness. From 2010 to 2024, Indian pickles and sauces export has been growing at an AAGR of 7.1 percent and 16.3 percent respectively. With these focused efforts and following some important strategies, India can strengthen its position as a global leader in the pickles and sauces export market, thereby increasing the exports considerably in the future.

INTRODUCTION

1.1 MARKET OVERVIEW

When vegetables and fruits are preserved through "pickling" (either anaerobic fermentation in a salty brine or immersion in acidic vinegar), they develop into foods known as "pickles". This extends the shelf life by creating an environment hostile to spoilage-causing microorganisms, typically through high acidity (pH below 4.6) or high salt concentration. The pickling process preserves and transforms the texture and imparts distinctive tangy, sour, or spicy flavours to the food.

Humans have strived for food habits that enhance their taste and flavour. Hence, many products were developed to act as taste enhancers or digestive aids, often eaten with the main food, while maintaining food preservation and safety. Pickles and sauces are two such categories of condiments that enhance the flavour, texture, and preservation of various dishes worldwide.

Pickles can be made from a wide range of ingredients including cucumbers, mangoes, lemons, cabbage, garlic, ginger, chili, olives, and even eggs or meats. Their flavour is enhanced by seasonings like mustard seed, garlic, cinnamon, and chili (Leo, 2013; Food Preservation: Making Pickled Products, 2024). Pickles vary in taste, texture, and aroma depending on the method and ingredients used.

"Sauces" are liquid or semi-liquid preparations used to add moisture, flavour, texture, and visual appeal to foods. They complement contrast tastes, enhance the natural flavours of dishes, add sharpness or tanginess, and improve the overall presentation by adding colour and sheen.

Sauces range from creamy, mayonnaise-based dressings to spicy, tangy, or sweet varieties, and are used as dips, marinades, or accompaniments to a wide array of foods. Their diversity reflects global culinary traditions, with sauces tailored to specific cuisines and dishes to elevate the eating experience. As the fast-food industry in the world is mushrooming, the demand for sauces is increasing making it a potential commodity worldwide (Pickles, Jams, and Sauces – the Wise Kitchen, 2014).

1.2 GLOBAL SCENARIO

In the international trade, Pickles and Sauces are categorised into several Harmonized System of Nomenclature (HSN) codes:

Pickles

a) 200190: Vegetables and other edible parts of plants, prepared or preserved by vinegar or acetic acid (excl. cucumbers and gherkins).
b) 200599: Vegetables and mixtures of vegetables, prepared or preserved otherwise than by vinegar, non-frozen.
c) 200110: Cucumbers and gherkins, prepared or preserved by vinegar or acetic acid (This HSN code has been covered a separate report).

Sauces

a) 2103: Sauce and preparations therefore; mixed condiments and mixed seasonings.

Pickles and sauces are some of the most widely enjoyed condiments globally, each deeply rooted in their respective culinary cultures and favoured for their unique flavour profiles and versatility. The global exports for HSN 200190 (pickles) stand at USD 1.87 billion in TE24, with Türkiye, Mexico, and China being the major global exporters and USA, Germany, and UK being the major importers (ITC trade map, 2024). For the HSN code 200599, global exports stand at USD 4.56 billion (TE24) with China, Netherlands, and Peru being the major exporters and USA, Germany and Japan being the major importers (ITC trade map, 2024).

The global trade of sauces falls under the 4-digit HSN code 2103, which includes tomato-based sauces, soya sauce, mustard flour and meals, preparations of sauces, prepared sauces, mixed condiments, and seasonings. USA, Italy, and Netherlands are the top three global exporters while USA, UK, and France are the top importers of sauces. Global exports of sauces were valued at USD 19.5 billion in TE24.

Annexure 1 details the shares of global exporters and importers of different pickles and sauces and shows the share of different varieties of sauces in the global market.

Popular varieties of pickles worldwide include (Ringhus, 2024; Workman, n.d.):

a) **Indian Pickles (Achaar):** India is the largest producer and consumer of pickles, with an extraordinary variety. The most popular Indian pickles include:
    - Mango Pickle: Raw mangoes pickled with spices like fenugreek, mustard seeds, and chili.
    - Lime/Lemon Pickle: Tangy and spicy, often sun-cured.

- Chili Pickle: Made with various types of chili peppers.
- Garlic Pickle, Ginger Pickle, Mixed Vegetable Pickle: Each with distinct regional spice blends.
- Regional favourites such as Punjabi Mango Pickle (Aam ka Achar), Andhra Gongura Pickle (sorrel leaves), Gujarati Chhundo (sweet-spicy mango), Kashmiri Dum Aloo Pickle (baby potatoes), Kerala Naranga Achar (lime), and Tamil Nadu Vadu Mangai (baby mango) are well-loved domestically and among the diaspora worldwide.

b) **Chinese Pickles:** Known as suan cai, these include pickled cabbage, mustard greens, radishes, and cucumbers, often fermented and used as side dishes or cooking ingredients. Sichuan cuisine is famous for its spicy pickled vegetables.

c) **Korean Pickles:** Kimchi is the most famous, made from fermented napa cabbage and radish with garlic, ginger, chili, and other spices. Korea also pickles vegetables in soy sauce, vinegar, or fermented seafood brines.

d) **Turkish Pickles (Turşu):** Türkiye is one of the largest exporters of pickles and produces a wide range of pickled vegetables such as cucumbers, eggplants, peppers, carrots, and cauliflower, integral to their cuisine and culture.

e) **Eastern European Pickles:** Countries like Russia and Poland have strong traditions of pickling cucumbers, cabbage (sauerkraut), tomatoes, mushrooms, and more, using brine fermentation.

f) **American Pickles:** The USA is known especially for cucumber pickles, including dill pickles, bread-and-butter pickles, and sweet pickles, which are widely consumed and produced commercially.

Popular sauces varieties worldwide include (Bomzer, 2025):

a) French Sauces:

- Hollandaise: A buttery, lemony sauce often served with eggs benedict.
- Tartare Sauce: Mayonnaise-based with chopped gherkins, capers, and herbs, popular with fish dishes.
- Garlic Aioli: Garlic-flavoured mayonnaise, commonly served with fries or kebabs.

b) **Moroccan Chermoula:** An herb and spice sauce with parsley, smoked paprika, and ginger, used with grilled or roasted dishes.

c) **Italian Agrodolce:** A sweet and sour sauce made from sugar and vinegar, used as a glaze or condiment for meats and vegetables.

d) **Chinese Ginger and Spring Onion Sauce:** A savoury sauce with a strong onion flavour, used for stir-fries, noodles, and as a dipping sauce.

e) **Georgian Tkemali:** A plum-based sauce with a balance of sour and tangy flavours, often served with potatoes and meats.

f) **Japanese Ponzu:** A light soy sauce with citrus, used for sushi, dumplings, and summer rolls

1.3 DOMESTIC SCENARIO

Pickle-making has been an important part of India's culinary heritage, carried out by women in households. Although India has a wide range of climate suitable for fruit and vegetable production, only a small portion, about 2.2 percent, is currently processed, with pickles making up a significant share. This sector is expected to grow, with processing rates projected to reach 25 percent by 2025 (MOFPI Handbook). Sauces and condiments, ranging from spices and herbs to seasonings and various sauces, are central to India's rich culinary traditions, adding layers of flavour, aroma, enhancing the taste of the meals. It's worth noting that while all ketchups are considered sauces, not every sauce is ketchup, though this distinction is sometimes unclear in India. Indian sauces and condiments are becoming increasingly popular worldwide due to their unique tastes and versatility, allowing cooks to personalize dishes and play an important role in traditional and contemporary recipes.

India has a rich heritage of creating a wide variety of pickles and sauces using locally sourced fruits, vegetables, and spices, combined with traditional preservation techniques. This diversity has helped Indian condiments gain popularity not just at home but also internationally, especially in countries with large Indian diaspora like the USA, UK, Canada, UAE, and Australia. India is also expanding its export basket in other regions such as Southeast Asia, Africa, and parts of Europe. Popular exports include mango and lime pickles, mixed vegetable pickles, tamarind sauce, mint chutney, and spicy curry sauces that are enjoyed by retail consumers and the food service sector. Indian producers have improved packaging, labelling, while meeting global food safety standards that has boosted consumer confidence and expanded access in international markets. Small and medium-sized enterprises, along with agro-processing units in Andhra Pradesh, Tamil Nadu, and Punjab, play a crucial role in driving these exports, supported by government initiatives and incentives.

Despite being a country where every state has its unique pickles and sauces, India's position in the global market is not very promising. India's share in the global exports of the pickles in 2024 (ITC trade map, 2024; DGFT, 2024) is given below:

Pickles

a) 200190: Vegetables and other edible parts of plants, prepared or preserved by vinegar or acetic acid (excl. cucumbers and gherkins) - USD 98.5 million (4.8 percent).
b) 200599: Vegetables and mixtures of vegetables, prepared or preserved otherwise than by vinegar, non-frozen- USD 40.4 million (1 percent).
c) 200110: Cucumbers and gherkins, prepared or preserved by vinegar or acetic acid- USD 189.1 million (19.4 percent) (This HSN code has been dealt in a separate chapter).

Sauces

a) 2103: Sauce and preparations; therefore, mixed condiments and mixed seasonings- USD 136.7 million (0.7 percent).

India is the largest exporter of cucumbers and gherkins (200110) and the seventh largest exporter of pickles in the HSN code 200190. However, India has a lot of scope for improvement for other pickles (200599) and sauces (2103).

1.4 DOMESTIC VALUE CHAIN

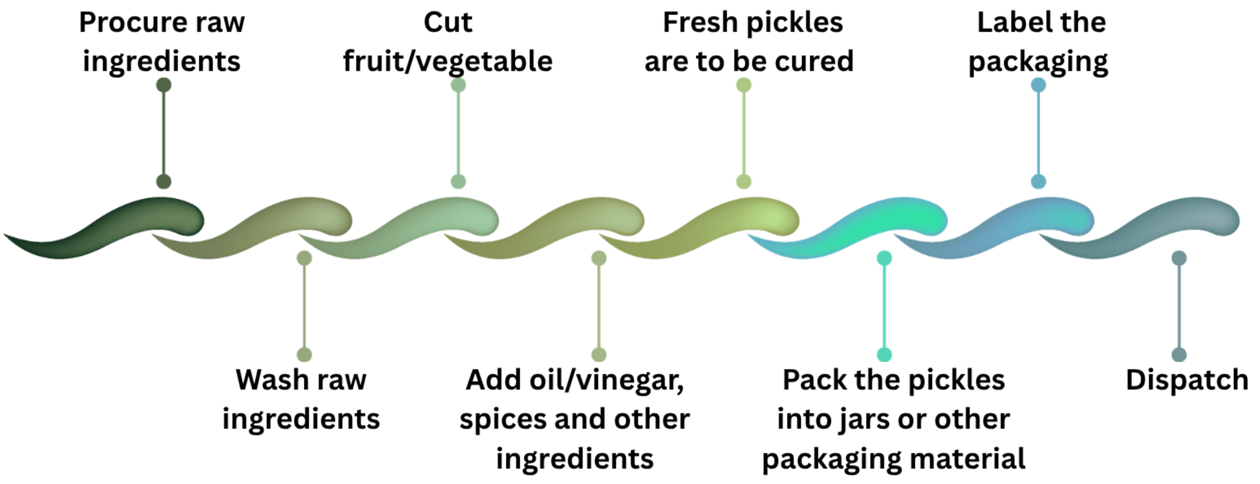
The journey of pickles in India starts at the farms, where fresh fruits and vegetables like mangoes, lemons, and chilies are carefully selected, sourced from local farmers and cooperatives. These ingredients are then cleaned, peeled, and cut to prepare them for the next step. Then these fresh produces are mixed with a blend of spices, salt, vinegar, and oils, usually mustard oil, to create the rich and unique flavours that Indian pickles and sauces are famous for. To keep them fresh and tasty for longer time, traditional preservation methods like pickling or fermentation are used, sometimes with natural preservatives.

The preparation of sauces involves a series of carefully controlled steps designed to ensure consistency, quality, and safety on a large scale. The sauce production process starts with collecting and checking the ingredients for quality. Vegetables and fruits are washed, sorted, and damaged pieces are removed. Then, the ingredients are chopped into small pieces. Next, the mixing process depends on the sauce type. For tomato-based sauces, ingredients are mixed in large tanks and heated to blend and cook them. For cream-based sauces like Alfredo, ingredients are blended until smooth. Further, heating is important to cook the sauce and kill harmful bacteria. The sauce is heated to a specific temperature for a set time. After heating, the sauce is cooled using a heat exchanger to prevent spoilage. Finally, the cooled sauce is stored in large tanks until packaging.

Once prepared, the pickles and sauces are packed into sterilized jars or bottles and sealed tightly to lock in the freshness. Packaging and labelling are done to ensure safety, maintain quality, and help consumers identify their favourite products easily. Throughout processing, quality checks as per Bureau of Indian Standards (BIS) are undertaken to ensure that every batch meets taste, hygiene, and compositional benchmarks. In addition, the Food Safety and Standards Authority of India (FSSAI) regulations, particularly the Food Products Standards and Food Additives Regulations, 2011, as consolidated in the 2022 compendium which lays down norms for permissible additives, contaminant limits, hygiene practices, microbiological standards, labelling, and sampling, thereby providing a comprehensive framework to maintain product quality and safety (fssai,2022).

Many small and medium-sized businesses work closely with farmers to secure a steady supply of quality ingredients, while partnering with spice growers. After production, these condiments make their way through various distribution channels, local shops, supermarkets, and online stores, from where they can reach kitchens all across India. Supported by government initiatives, this entire system, from farm to table, is a well-coordinated effort that brings a wide variety of pickles and sauces to millions of people, celebrating India's rich culinary heritage. **Figure 1.1** describes the domestic value chain in India.

Figure 1.1: Domestic value chain of Pickles in India



Source: Foodbuddies.org

1.5 EXPORT VALUE CHAIN

The export value chain of pickles and sauces from India involves several critical steps, starting with sourcing high-quality raw materials like mangoes, lemons, garlic, and chilies from key producing states such as West Bengal, Maharashtra, Andhra Pradesh, Tamil Nadu, Gujarat, Punjab, Haryana, and Uttar Pradesh. These ingredients are processed using traditional recipes combined with modern food safety standards, ensuring authentic flavours while meeting international quality requirements.

Indian exporters comply with mandatory certifications and documentation such as Food Safety and Standards Authority of India (FSSAI) registration, import-export codes, and spice board certifications to facilitate smooth customs clearance. The pickles and sauces are distributed through a global network of importers, wholesalers, retailers, and online platforms, reaching over 54 countries including major markets like the United States, United Arab Emirates, Vietnam, UK, Canada, Australia, and South Africa.

Indian exporters comply with mandatory certifications and documentation such as Food Safety and Standards Authority of India (FSSAI) registration, import–export codes, and Spice Board certifications to facilitate smooth customs clearance. For export consignments, adherence to the Codex Standard for Pickled Fruits and Vegetables (CXS 260-2007, with amendments up to 2023) and the specific regulatory requirements of importing countries is also essential to ensure market access and compliance with international food safety benchmarks.

The main steps in India's pickle export value chain from production to shipment are:

a. **Raw Material Sourcing**: Fresh fruits and vegetables like mangoes, lemons, and chilies are procured primarily from key producing states such as West Bengal, Maharashtra, Andhra Pradesh, Tamil Nadu, Gujarat, Punjab, Haryana, and Uttar Pradesh.
b. **Processing**: The raw materials are cleaned, peeled, cut, and mixed with spices, salt, vinegar, and oils (often mustard oil) to prepare the pickles, following traditional recipes while ensuring compliance with international food safety standards.
c. **Preservation and Packaging**: Products are preserved through pickling or fermentation and then filled into sterilized jars or food-grade containers, which are sealed airtight to maintain freshness during transit.
d. **Certification and Compliance**: Exporters obtain necessary licenses and certificates such as the Importer Exporter Code (IEC), FSSAI registration, Agricultural and Processed Food Products Export Development Authority (APEDA) license, and comply with the Foreign Trade Policy and food safety regulations to meet global standards.

e. **Quality Control**: Rigorous quality checks are done to ensure consistency in taste, texture, hygiene, and packaging integrity.
f. **Logistics and Shipment**: Finished products are shipped through major export ports like JNPT, Mundra, Madras, and Tuticorin, leveraging efficient logistics and supply chain management to reach international markets.
g. **Distribution and Marketing**: Pickles and sauces are distributed via importers, wholesalers, retailers, and online platforms in over 50 countries, with major markets including the USA, UAE, UK, and Germany.

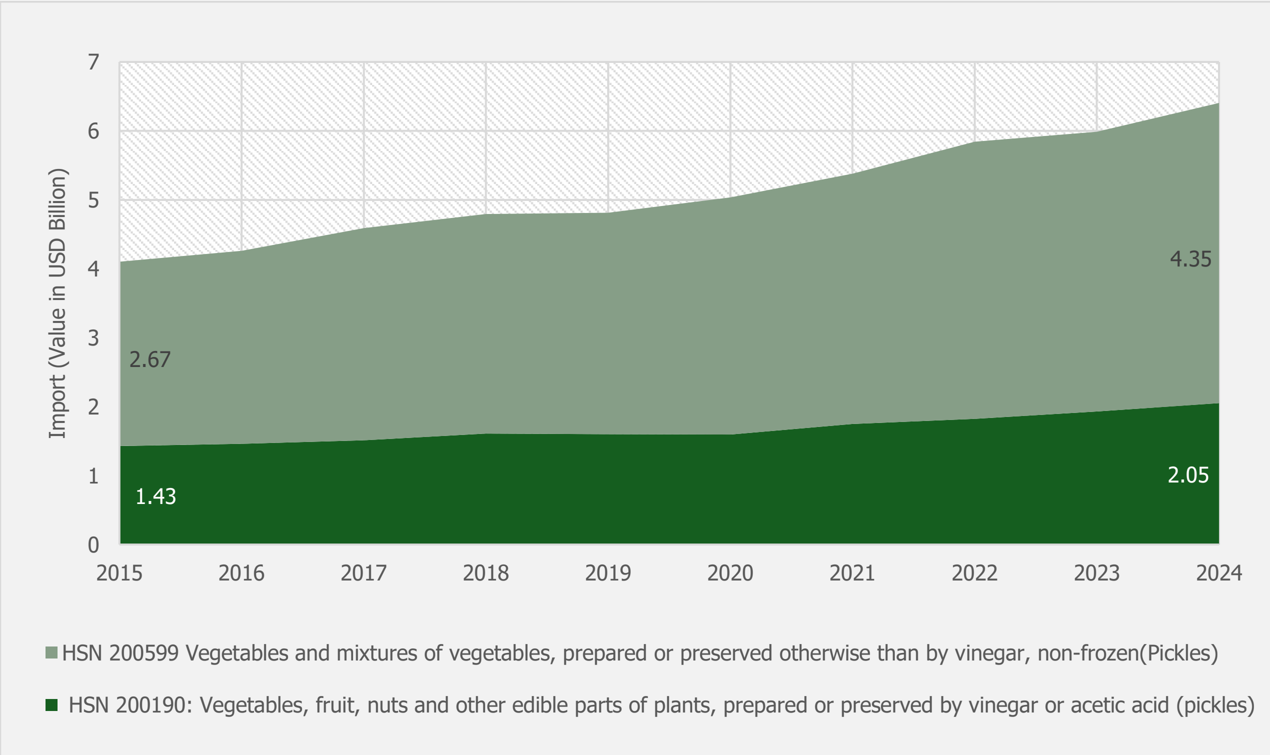
This value chain integrates traditional manufacturing with modern compliance and logistics to position India as a global exporter of pickles and sauces (Pickle Exports from India-Volza, 2025).

MARKET INTELLIGENCE

2.1 GLOBAL MARKET TRENDS

Global demand for pickles, categorized under HSN codes 200190 and 200599, has shown a steady upward trend over the past decade, offering promising export opportunities (**Figure 2.1**). HSN 200190 covers vegetables, fruits, nuts, and other edible plant parts preserved using vinegar or acetic acid, including popular varieties like mango, lime, and chili pickles. HSN 200599 includes vegetables and vegetable mixtures prepared or preserved without vinegar and in non-frozen form. Between 2015 and 2024 (**Figure 2.1**), the global demand for HSN 200190 products increased from USD 1.4 billion to USD 2.05 billion, registering a Compound Annual Growth Rate (CAGR) of 3.67 percent, while the demand for HSN 200599 products rose from USD 2.7 billion to USD 4.3 billion, at a higher CAGR of 5.00 percent (ITC Trade Map, 2024). Larger market size and faster growth rate of HSN 200599 indicate stronger global preference and greater export potential in this category, highlighting a significant opportunity for Indian pickle exporters to expand their presence in international markets.

Figure 2.1: Global demand of HSN 200190 & HSN 200599 in last 10 years



Source: ITC trade map, 2024

a) Leading Importers of Pickles

HSN 200599 (Vegetables and vegetable mixtures prepared or preserved without vinegar and not frozen):

The leading importers in the trade year ending TE 2024 were the USA (USD 754 million), Germany (USD 419 million), Japan (USD 372 million), South Korea (USD 281 million), France (USD 242 million), United Kingdom (USD 220 million), Belgium (USD 176 million), Spain (USD 136 million), and the Netherlands (USD 127 million). Together, these top importers accounted for approximately 70 percent of global imports under this category, underscoring their dominant role in the international pickle market.

HSN 200190 (Vegetables, fruits, nuts, and other edible plant parts preserved with vinegar or acetic acid, including mango, lime, and chili pickles):

The main importers during the same period were the USA (USD 530 million), Germany (USD 202 million), United Kingdom (USD 110 million), Canada (USD 91 million), Netherlands (USD 68 million), Japan (USD 62 million), France (USD 54 million), Saudi Arabia (USD 54 million), Belgium (USD 41 million), and Poland (USD 39 million). These ten countries collectively accounted for around 65 percent of global imports under this HSN code, reflecting their significant share in the international market.

b) Leading Exporters of Pickles

HSN 200599 (Vegetables and vegetable mixtures preserved without vinegar and not frozen):

The leading exporters during the three-year period ending in 2024 were China (USD 1,483 million), Netherlands (USD 342 million), Peru (USD 285 million), Italy (USD 249 million), Spain (USD 201 million), France (USD 193 million), South Korea (USD 167 million), Belgium (USD 155 million), and Türkiye (USD 120 million). Collectively, the top exporters accounted for approximately 70 percent of global exports under this category, reflecting their strong presence in the international market.

HSN 200190 (Vegetables, fruits, nuts, and other edible plant parts preserved or prepared with vinegar or acetic acid, including mango, lime, and chili pickles):

The main exporters during the same period were Mexico (USD 240 million), Türkiye (USD 245 million), Greece (USD 130 million), Germany (USD 123 million), China (USD 138 million), Spain (USD 100 million), India (USD 90 million), Peru (USD 88 million), and the

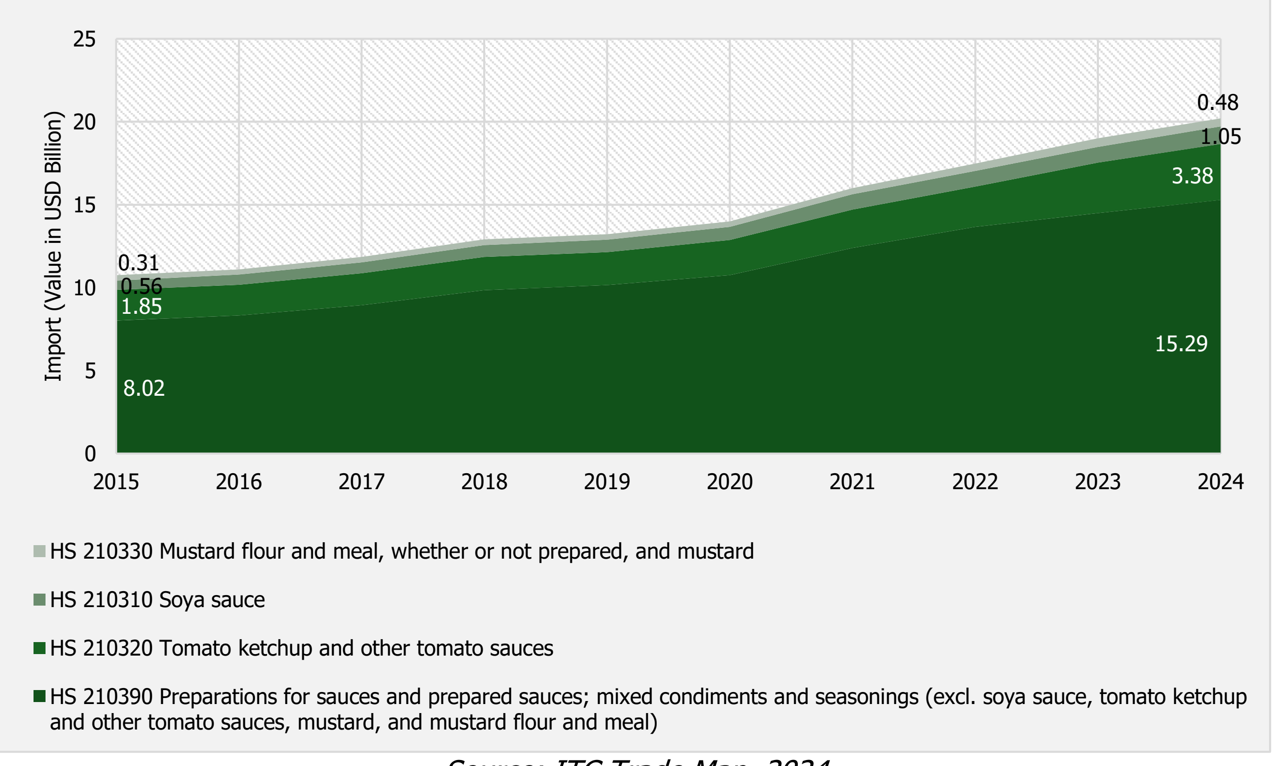
USA (USD 68 million). Together, these countries made up about 65 percent of global exports in this category, underlining their key role in the global market.

c) Global market for Sauces

The global demand for sauces, classified under HSN codes 210390, 210330, 210320, and 210310, has steadily increased over the past decade, presenting strong export opportunities (**Figure 2.2**). Specifically, HSN 210390 covers various sauce preparations, mixed condiments, and seasonings; HSN 210320 includes tomato ketchup and other tomato-based sauces; HSN 210310 refers to soy sauce; and HSN 210330 relates to mustard flour and meal, whether prepared or not. From 2015 to 2024, the global market for HSN 210390 products grew from USD 8,017.60 million to USD 15,287.95 million, with a CAGR of 6.67 percent. Demand for HSN 210320 products increased from USD 1,850.82 million to USD 3,378.25 million at a CAGR of 6.20 percent, while HSN 210310 products rose from USD 564.85 million to USD 1,053.30 million, growing at a CAGR of 6.43 percent (ITC Trade Map, 2024). The larger market size and faster growth of HSN 210390 highlight a stronger global preference and greater export potential in this category, offering significant opportunities for Indian sauce exporters to expand their international footprint.

Beyond volume growth, consumer preferences in importing countries shape market opportunities. For instance, the United States and EU show rising demand for healthier sauces i.e., low-sugar, organic, and clean-label condiments. East and Southeast Asian markets (Japan, South Korea, Thailand) have strong demand for soy-based sauces and umami-rich seasonings, while Middle Eastern countries prefer spice-infused sauces tailored to local palates. In Africa and Latin America, the demand for tomato ketchup, chili sauces, and affordable multipurpose condiments is expanding with the growth of quick-service restaurants. Indian exporters, with their capability to produce customized flavors and spice blends, are well positioned to adapt to these requirements and capture niche segments in specific markets.

Figure 2.2: Global demand of HSN 210390, HSN 210320, HSN 210310 and HSN 210330 in last 10 years



Source: ITC Trade Map, 2024

d) Top Importers of Sauces

HSN 210390 (Sauce preparations, mixed condiments, and seasonings):

The leading importers during TE 2024 were the USA (USD 1,949 million), United Kingdom (USD 954 million), France (USD 738 million), Canada (USD 730 million), Germany (USD 701 million), Netherlands (USD 533 million), Hong Kong (USD 400 million), Australia (USD 388 million), Mexico (USD 355 million), and Japan (USD 336 million). Together, these countries accounted for approximately 50 percent of global sauce imports, reflecting their significant role in the international market.

HSN 210320 (Tomato ketchup and other tomato sauces):

Top importers in the same period included the USA (USD 331.80 million), United Kingdom (USD 276.03 million), France (USD 255 million), Germany (USD 252 million), Canada (USD 198 million), Netherlands (USD 72 million), Mexico (USD 70 million), Switzerland (USD 68 million), Belgium (USD 61 million), and Austria (USD 53 million). These countries collectively made up over half of the global import volume under this category.

HSN 210330 (Mustard flour and meal):

Primary importers were the USA (USD 49 million), Canada (USD 35 million), United Kingdom (USD 28 million), France (USD 28 million), Belgium (USD 23 million), Germany (USD 21 million), Japan (USD 21 million), Spain (USD 18 million), Netherlands (USD 18 million), and South Korea (USD 15 million). These ten countries represented roughly 50 percent of global imports in this segment.

HSN 210310 (Soy sauce):

Main importers included the USA (USD 133 million), France (USD 59 million), United Kingdom (USD 51 million), Canada (USD 53 million), Germany (USD 53 million), Netherlands (USD 46 million), Australia (USD 42 million), Italy (USD 30 million), Spain (USD 29 million), and Hong Kong (USD 27 million). These countries played a key role in shaping the global demand for soy sauce.

e) Top Exporters of Sauces

HSN 210390 (Other sauces and preparations):

The top exporters during the reference period were China (USD 1,752 million), USA (USD 1,674 million), Italy (USD 1,446 million), Germany (USD 1,003 million), Thailand (USD 907 million), Netherlands (USD 831 million), Belgium (USD 653 million), Mexico (USD 546 million), Canada (USD 477 million), and the United Kingdom (USD 464 million). These countries collectively accounted for around 60 percent of global exports under this category.

HSN 210320 (Tomato ketchup and sauces):

Leading exporters included the Netherlands (USD 419 million), Italy (USD 415 million), USA (USD 385 million), Spain (USD 171 million), Germany (USD 136 million), Belgium (USD 121 million), Poland (USD 105 million), Portugal (USD 78 million), Costa Rica (USD 52 million), and Egypt (USD 52 million). These countries together contributed approximately 75 percent of the total export volume in this segment.

HSN 210330 (Mustard flour and meal):

The primary exporters were France (USD 107 million), USA (USD 90 million), Germany (USD 52 million), Canada (USD 45 million), Belgium (USD 24 million), Netherlands (USD 24 million), United Kingdom (USD 18 million), Poland (USD 17 million), Thailand (USD 8 million), and the Czech Republic (USD 7 million). These ten countries accounted for approximately 80 percent of global exports under this HSN code.

HSN 210310 (Soy sauce):

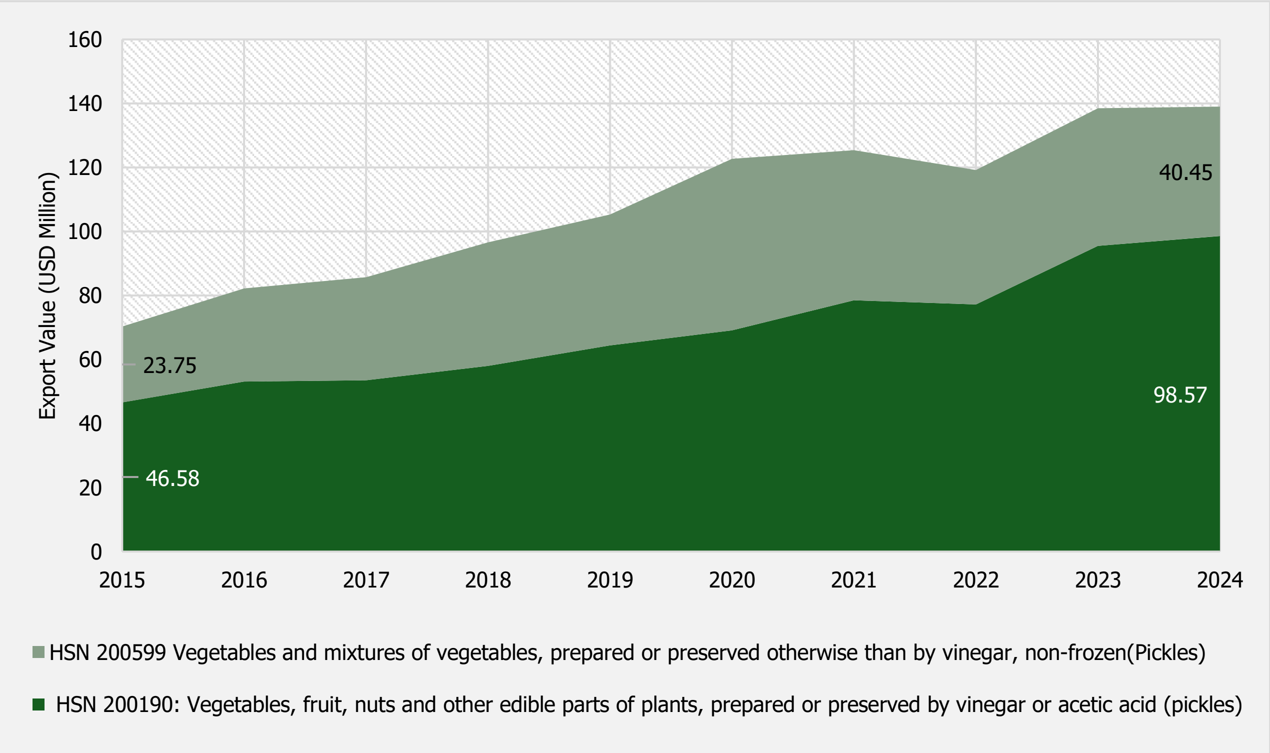
Top exporters included China (USD 200 million), Netherlands (USD 184 million), USA (USD 75 million), Japan (USD 75 million), Singapore (USD 56 million), Thailand (USD 51 million), Hong Kong (USD 31 million), Taipei (USD 30 million), Indonesia (USD 26 million), and Malaysia (USD 25 million). These countries represented over 80 percent of the export volume in this category.

2.2 INDIA'S EXPORT PERFORMANCE

Pickles

Under the (HSN) code 200190, which covers vegetables, fruits, nuts, and other edible plant parts preserved or prepared using vinegar or acetic acid (commonly known as pickles), India's export value grew from USD 46 million in 2015 to USD 98 million in 2024. This reflects a CAGR of 7.8 percent over the past decade. In comparison, exports under HSN code 200599, which includes vegetables and vegetable mixtures preserved without vinegar and not frozen, also classified as pickles, increased from USD 23 million in 2015 to USD 40 million in 2024, registering a CAGR of 5.5 percent during the same period (**Figure 2.3**).

Figure 2.3: India's export performance under HSN 200190 & HSN 200599 in last 10 years



Source: ITC Trade Map, 2024

HSN 200190 (Pickles preserved in vinegar or acetic acid):

For products classified under the HSN code 200190, which includes pickles made from vegetables, fruits, nuts, and other edible plant parts preserved in vinegar or acetic acid, India's leading export markets are the United Kingdom (USD 22 million), United States (USD 8 million), Germany (USD 7.6 million), Canada (USD 7.1 million), United Arab Emirates (USD 6.3 million), Australia (USD 5.4 million), Spain (USD 5.0 million), Netherlands (USD 4.4 million), Saudi Arabia (USD 2.8 million), and Sweden (USD 1.9 million) (Annexure 2). Together, these ten countries account for 78 percent of India's total exports in this category.

HSN 200599 (Pickles preserved without vinegar and not frozen):

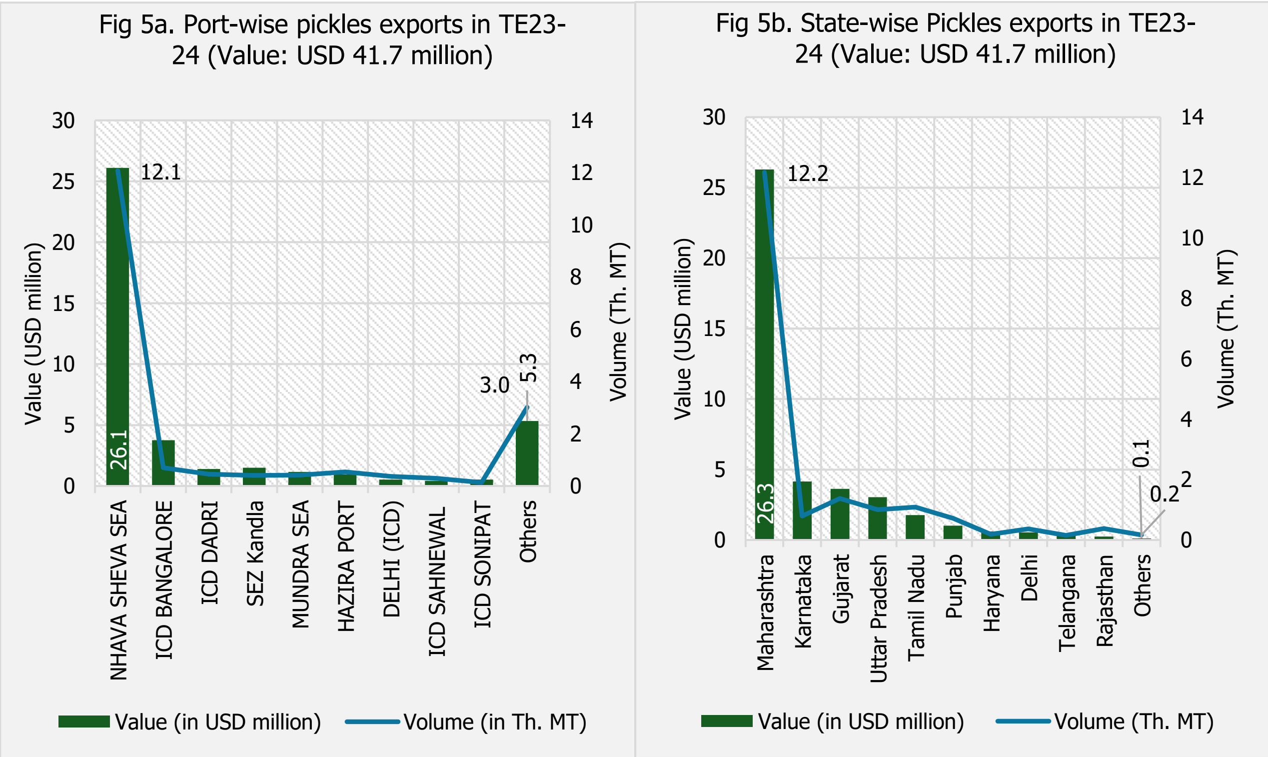
In the case of HSN code 200599, which covers pickles made from vegetables and vegetable mixtures preserved without vinegar and not frozen, the top export destinations include the United States (USD 27.8 million), Canada (USD 2.9 million), United Kingdom (USD 2.5 million), United Arab Emirates (USD 1.7 million), Australia (USD 1.4 million), Netherlands (USD 0.8 million), Belgium (USD 0.4 million), Maldives (USD 0.4 million), Algeria (USD 0.4 million), and New Zealand (USD 0.3 million) [Annexure 2]. Collectively, these markets represent 93 percent of India's total exports in this segment.

Pickles (HSN 200599) represent a significant segment of India's agri-processed exports, with shipments primarily routed through key seaports and Inland Container Depots (ICDs). Among these, Jawaharlal Nehru Port Trust (JNPT), also known as Nhava Sheva, emerges as the leading export gateway, handling over half of the country's total pickle exports (**Figure 2.4**). Its proximity to Maharashtra's production hubs, advanced container handling infrastructure, and frequent international shipping services make it the top choice for exporters aiming for speed, efficiency, and global connectivity.

In addition to JNPT, ports like Mundra, Hazira, and Kandla in Gujarat manage substantial export volumes, particularly from nearby production areas in Gujarat and Rajasthan. Inland exporters benefit from ICDs such as Bangalore and Dadri (Uttar Pradesh) that facilitate shipment consolidation and cost-effective rail transport to seaports. Southern states like Karnataka, leveraging ICD Bangalore, also play a vital role in the country's pickle export ecosystem. This network of ports and ICDs enables exporters to choose optimal routes based on production proximity, destination markets, and logistical efficiency.

India is among the leading global exporters of pickles, with mango pickle forming the bulk of shipments, alongside significant exports of lemon/lime, mixed vegetable, chili, garlic, ginger, and amla pickles, as well as regional specialties like *Avakaya*, *Pachranga*, and *Gongura*. These products cater to diverse consumer tastes abroad, particularly in markets with a strong Indian diaspora such as the United States, United Arab Emirates, United Kingdom, and Canada, as well as in parts of Europe, Africa, and Southeast Asia. This wide product range and adaptability to regional preferences position Indian pickle exporters to maintain a strong presence in both traditional and emerging markets.

Figure 2.4: Major state-wise and port-wise exports of Pickles from India in TE23-24



Source: APEDA, 2024

Sauces

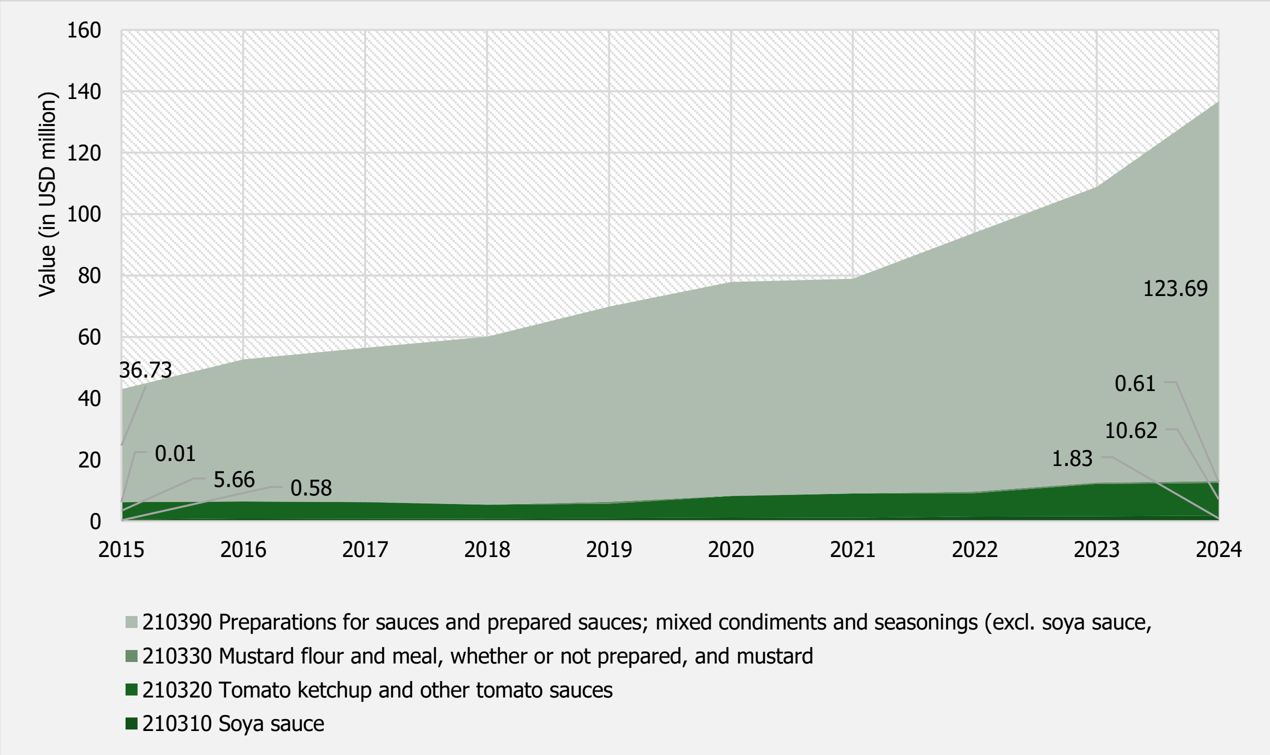
Various categories of sauces are present under HSN 2103. The major sauces market for India includes USA, UK, UAE, Australia, and Bangladesh (**Annex 2**). **Figure 2.5** shows India's export performance of sauces in the last ten years.

Under HSN code 210390 that covers various sauce preparations, including mixed condiments and seasonings, India's export value grew significantly from USD 36.73 million in 2015 to USD 123.69 million in 2024, reflecting a CAGR of 12.91 percent over the past decade.

India's exports of HSN 210330, which pertains to mustard flour and meal, have seen some growth over the same period, but their overall contribution to total exports remains minimal.

In the case of HSN 210320, which includes tomato ketchup and other tomato-based sauces, export increased from USD 5.66 million to USD 10.62 million, achieving a CAGR of 6.50 percent over ten years. Similarly, exports under HSN 210310 grew from USD 0.58 million to USD 1.83 million, registering a CAGR of 12.17 percent during the same timeframe.

Figure 2.5: India's Export Performance of sauces (under HSN 2103) in last 10 years



Source: ITC trade map, 2024

HSN 210390 (Sauce preparations, mixed condiments, and seasonings):

India's top export markets are the USA (USD 15.36 million), UK (USD 12.51 million), Australia (USD 9.14 million), UAE (USD 8.79 million), Oman (USD 6.73 million), Bangladesh (USD 7.90 million), Saudi Arabia (USD 5.92 million), Canada (USD 3.93 million), Netherlands [USD 2.24 million] and Kuwait (USD 1.85 million. These ten countries collectively account for over 70% percent of India's total exports in this category.

HSN 210330 (Mustard flour and meal):

The primary export destinations include the USA (USD 0.16 million), Australia (USD 0.11 million), Gambia (USD 0.06 million), Nigeria (USD 0.04 million), Thailand (USD 0.03 million), Mali (USD 0.02 million), Lithuania (USD 0.02 million), and smaller volumes to Colombia, Nepal and Bulgaria. Together, these ten countries represent approximately 90% percent of India's exports in this segment.

HSN 210320 (Tomato ketchup and other tomato-based sauces):

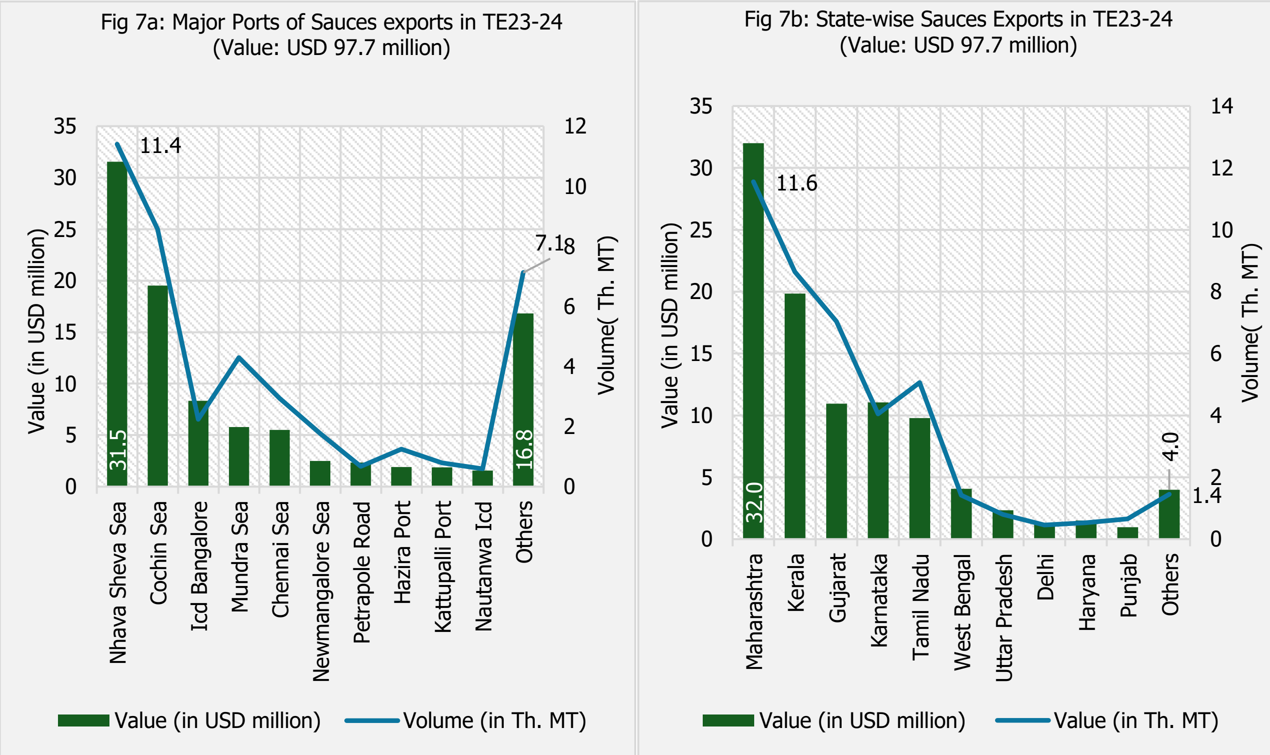
India’s leading export destinations are the USA (USD 1.74 million), Nepal (USD 1.09 million), Philippines (USD 1.01 million), UK (USD 0.70 million), Canada (USD 0.58 million), UAE (USD 0.52 million), Malaysia (USD 0.51 million), Spain (USD 0.34 million), Singapore (USD 0.30 million), and Australia (USD 0.28 million). These countries together account for 74 percent of India’s total exports in this category.

HSN 210310 (Soy sauce):

The main export markets for soy sauce are the USA (USD 0.41 million), UAE (USD 0.28 million), Nepal (USD 0.26 million), Bhutan (USD 0.13 million), Nigeria (USD 0.12 million), Canada (USD 0.11 million), Australia (USD 0.06 million), UK (USD 0.05 million), Qatar (USD 0.04 million), and Oman (USD 0.02 million). These ten destinations make up 90 percent of India’s total soy sauce exports.

India’s sauce exports (HSN 2103) are primarily routed through a network of well-connected ports and inland container depots that align with production clusters and international demand routes. JNPT or Nhava Sheva in Maharashtra, emerges as the dominant port, handling the highest volume of sauce exports (**Figure 2.6**). Its advanced container handling infrastructure, frequent global shipping lines, and proximity to major manufacturing units in western India make it the top choice for sauce exporters targeting diverse international markets. The Cochin Port in Kerala plays a pivotal role as the second-largest hub for sauce exports catering to exporters from southern India. With strong maritime connections to the Middle East and Southeast Asia, Cochin offers an ideal logistical gateway for southern manufacturers looking for efficient and cost-effective overseas delivery. Its strategic location and operational efficiency enhance its appeal for time-sensitive processed food exports. Mundra Port in Gujarat, India’s largest private port, supports substantial volumes of sauce exports due to its excellent infrastructure and connectivity to production hubs across Gujarat and northern India. The port's private management and efficient customs clearance procedures reduce turnaround times and export costs. ICD Bangalore acts as a key inland node for consolidating shipments from Karnataka and nearby states, enabling smooth movement of goods to major ports like JNPT and Cochin via rail. Ports in Tamil Nadu, including Chennai and Tuticorin contribute to India’s sauce export logistics. These ports support exporters from Tamil Nadu and surrounding states by offering robust sea routes and access to global markets. The distribution of sauce exports across these ports reflects a synergy of infrastructure, connectivity, and proximity to manufacturing clusters that collectively drive India's growing footprint in the global sauce markets.

Figure 2.6: Major state-wise and port-wise exports of sauces from India in TE23-24



Source: APEDA, 2024

2.3 MAJOR FIRMS INVOLVED IN GLOBAL TRADE OF PICKLES AND SAUCES

Cremica Food Industries is a well-established Indian brand renowned for its quality bakery products, sauces, and condiments. With roots dating back to the 1980s, Cremica has built a strong presence in both retail and food service segments. Known for its commitment to taste, innovation, and food safety, the brand offers a diverse product range including mayonnaise, ketchup, and cookies. Cremica also emphasizes quality manufacturing, global standards, and long-standing partnerships with leading fast-food chains.

Veeba Foods is a leading Indian brand known for its wide range of sauces, dressings, and spreads. Founded in 2013, it has built strong brand recognition and a growing distribution network across India. With a focus on health-conscious products like low-fat and no-added-sugar options, Veeba caters to modern consumers. It also serves major food service chains and promotes sustainability through clean-label practices and community initiatives.

Mt. Olive Pickle Company is the largest independent pickle producer in the US, known for its wide range of pickles, relishes, and peppers. Founded in 1926 in North Carolina, the company has built a strong brand recognition and a vast distribution network across all 50 states. Its innovation in flavours and packaging, such as No Sugar Added pickles and single-serve cups attract diverse consumer segments. Mt. Olive also emphasizes community involvement and sustainable practices through partnerships and local initiatives.

ADF Foods Limited is a prominent player in the global packaged foods industry, known for its wide range of ethnic and international food products. With a strong presence in key export markets, ADF Foods manufactures and distributes a variety of ready-to-eat items, condiments, and pickles, catering to the tastes of Indian and global consumers alike. The company has established itself as a leader in the pickle segment, leveraging its expertise in international flavours and recipes to offer unique and high-quality products. Its strategic focus on niche markets and innovation in product development enables it to maintain a competitive edge and expand its global footprint.

Del Monte Foods Private Limited is a key player in the canned and pickled foods market, offering a variety of pickled vegetables for both local and global consumers. The company emphasizes sustainability by sourcing produce locally, reducing emissions, and using tech like CropTrak for supply chain transparency. Its certified upcycled products reflect a strong commitment to environmentally conscious practices.

The Kraft Heinz Company is a global leader in the pickles market, offering a wide range of products under brands like Heinz and Claussen. Known for quality and innovation, the company delivers unique offerings like Pickle Ketchup and refrigerated pickles. With a strong global distribution network, Kraft Heinz ensures broad market reach and consumer convenience.

Desai Foods Pvt. Ltd. (Mother's Recipe) is known for its authentic, region-specific Indian pickles such as Madras *Thokku* and Punjabi Mango. By blending traditional recipes with modern production, it appeals to Indian and global consumers across 45+ countries. Its product diversification helps target niche ethnic markets effectively.

G.D. Foods Pvt. Ltd. (Tops) has built a strong presence in the pickles segment with a wide range of offerings. Its advanced manufacturing facilities ensures product consistency, while innovation and sustainable practices support its growth. Operating in 25+ countries, the recent acquisition by Adani Wilmar is expected to help scale operations and expand its product base.

Table 2.1 gives an overview of the major firms dealing in pickles and sauces.

Table 2.1: Major firms involved in the global trade of pickles and sauces

Company	Established year	State/Country	Product
Cremica Food Industries	1978	Delhi	Sauces, Chutney and Pickles
Veeba Foods	2013	Delhi NCR (Gurugram)	Sauces, Chutneys
Mt. Olive pickles	1926	USA	Pickles, Juicers
ADF foods Ltd.	1990	Maharashtra	Pickles, Condiments, Frozen products
Del Monte foods	2004	Delhi NCR (Gurugram)	Pickles, Sauces, Frozen products
Kraft Heinz	1994	Gujarat	Sauces, Pickles, Frozen products
Desai Foods (Mother's Recipe)	2001	Gujarat	Sauces, Pickles, Chutney, cooking paste, Cereal prep., Ready to Cook products
GD foods Pvt. Ltd. (Tops India)	1997	Delhi	Sauces, Pickles, Frozen products

Source: Mordor Intelligence, 2024

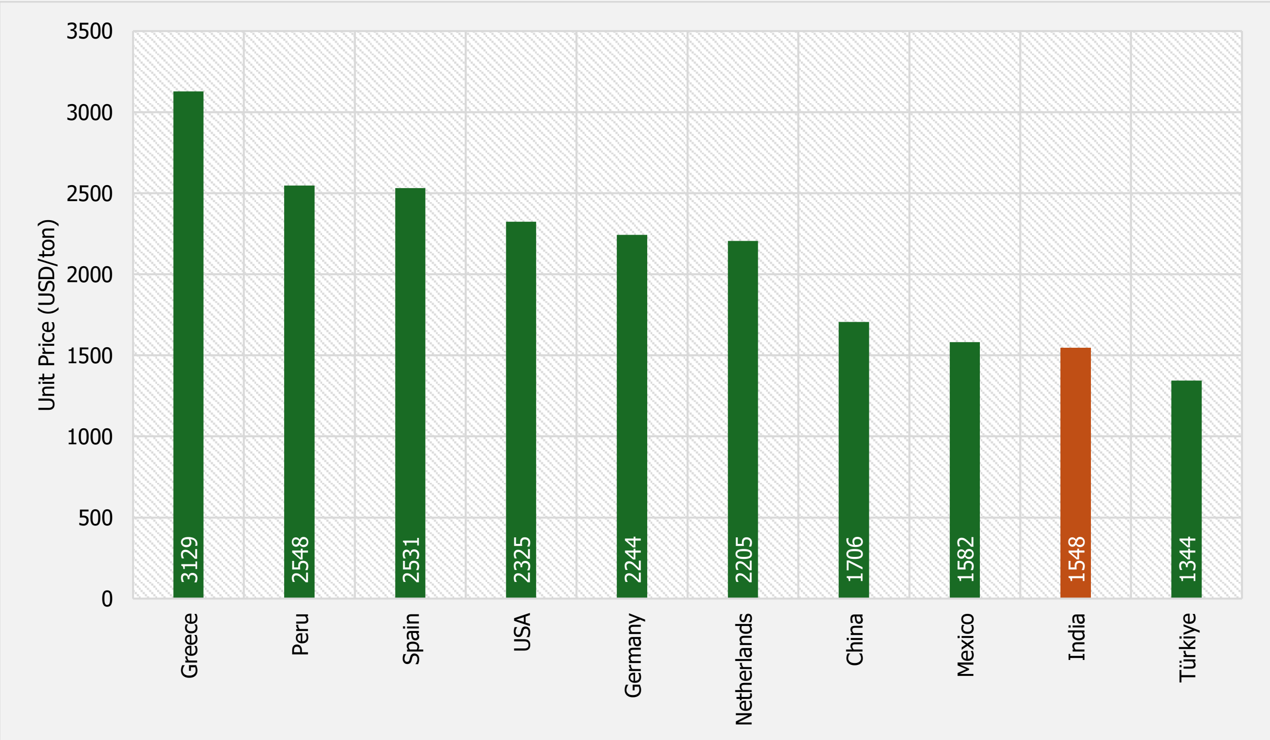
ASSESSING COMPETITIVENESS

3.1 GLOBAL PRICE SCENARIO THROUGH UNIT VALUE PRICE (UVP)

Pickles

In the triennium ending 2024 (TE 2024), the global average unit value for products under HSN code 200190, which includes vegetables, fruits, nuts, and other edible plant parts preserved in vinegar or acetic acid, such as mango, lime, and chili pickles, was USD 1,876 per ton. India exported at a competitive rate of USD 1,548 per ton, positioning it below the global average and making it one of the more cost-effective suppliers in the international market. Among the top 10 exporters, only Türkiye offered a lower unit value at USD 1,344 per ton, making it India's closest price-based competitor. Other major exporters included Mexico (USD 1,582), China (USD 1,706), Germany (USD 2,244), the Netherlands (USD 2,205), the USA (USD 2,325), Spain (USD 2,531), Peru (USD 2,548), and Greece (USD 3,129), highlighting the broad range of pricing and India's strong position in terms of affordability (**Figure 3.1**).

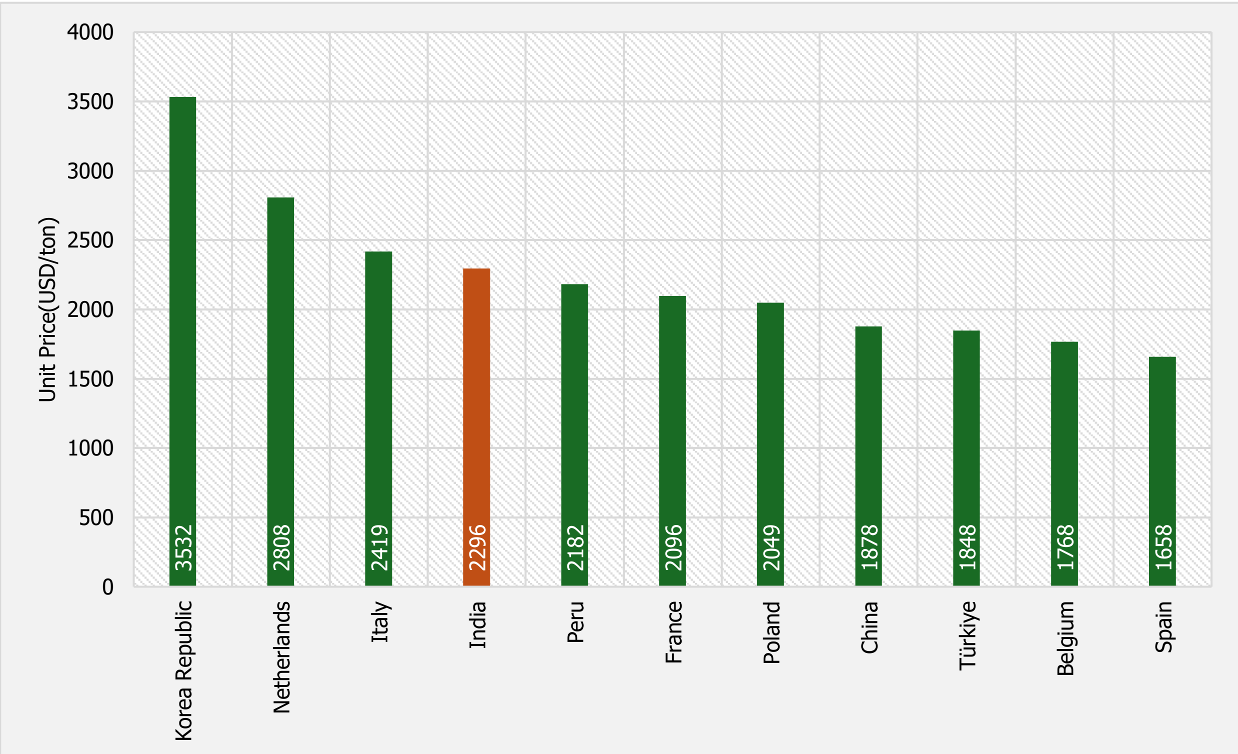
Figure 3.1: Unit Value Price of HSN 200190 of major exporters in global market



Source: ITC trade map, 2024

In TE24, the global average unit value for products under HSN code 200599, which includes pickled vegetables and vegetable mixtures preserved without vinegar and in a non-frozen state, stood at USD 2,053 per ton. India's average export price was USD 2,296 per ton, placing it above the global average and indicating a relatively less competitive position in terms of pricing. Among the top global exporters, Spain offered the lowest unit value at USD 1,658 per ton, followed by Belgium at USD 1,768 per ton. Other key exporters and their unit values included China (USD 1,878), Türkiye (USD 1,848), the Netherlands (USD 2,808), Peru (USD 2,182), Italy (USD 2,419), France (USD 2,096), Poland (USD 2,049), and the Republic of Korea, which had the highest unit value at USD 3,532 per ton (**Figure 3.2**). This pricing landscape highlights the need for India to reassess its export strategy to enhance competitiveness in the global pickle market.

Figure 3.2: Unit Value Price of HSN 200599 of major exporters in the global market



Source: ITC trade map, 2024

Sauces

HSN 210390: Sauces, Mixed Condiments, and Seasonings

In the TE 2024, (the global average unit value for products under HSN 210390, covering preparations of sauces, mixed condiments, and seasonings, was USD 2,998 per ton. India exported at a competitive rate of USD 2,592 per ton, which is lower than the global average, positioning it favourably in international markets. Among the top global exporters, only Thailand offered a lower price at USD 2,161 per ton, making it India's closest price-based competitor. Other major exporters included the USA (USD 2,947), China (USD 2,894), the Netherlands (USD 2,835), Belgium (USD 2,787), Mexico (USD 2,633), Italy (USD 3,722), Germany (USD 3,856), and Canada (USD 3,635).

HSN 210320: Tomato Ketchup and Other Tomato Sauces

For HSN 210320, which includes tomato ketchup and related sauces, the global average unit value was USD 1,581 per ton in TE 2024. India's export price stood at USD 1,570 per ton, slightly below the global average, indicating a competitive position in the market. While countries like the USA (USD 1,125), Netherlands (USD 1,441), and Portugal (USD 1,263) offered lower prices, India remained well-positioned among major exporters. Other key players included Italy (USD 2,346), Germany (USD 2,092), Austria (USD 2,010), Belgium (USD 1,835), Poland (USD 1,668), Spain (USD 1,548), and Costa Rica (USD 1,785).

HSN 210310: Soya Sauce

In the soya sauce category (HSN 210310), the global average unit value was USD 1,517 per ton. India exported at USD 1,334 per ton, making its pricing competitive on the global stage. While countries like China (USD 973) and Taipei (USD 1,221) offered lower prices, India remained below the global average. Other major exporters included the Netherlands (USD 2,431), Japan (USD 1,507), USA (USD 1,621), Singapore (USD 2,173), Thailand (USD 1,511), Hong Kong (USD 1,613), Indonesia (USD 1,537), and Malaysia (USD 1,512).

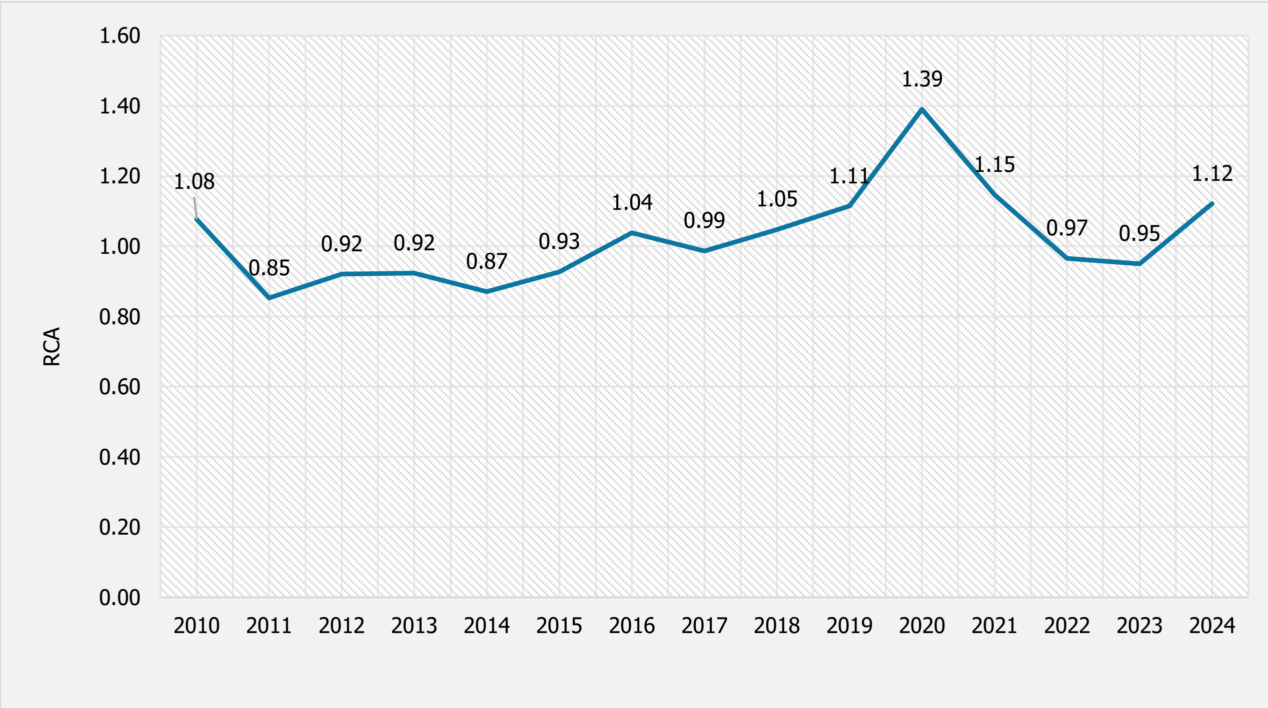
HSN 210330: Mustard Flour and Meal

For HSN 210330, which includes mustard flour and meal, the global average unit value was USD 2,241 per ton in TE 2024. India's export price was USD 2,097 per ton, slightly below the global average, indicating moderate competitiveness. While countries like the USA (USD 1,526), Netherlands (USD 1,884), and Czech Republic (USD 872) offered lower prices, India remained competitive compared to higher-priced exporters such as France (USD 3,010), Canada (USD 3,539), Belgium (USD 3,036), the UK (USD 4,079), Poland (USD 2,499), and Thailand (USD 2,771).

3.2 ASSESSING COMPARATIVE ADVANTAGE THROUGH RCA

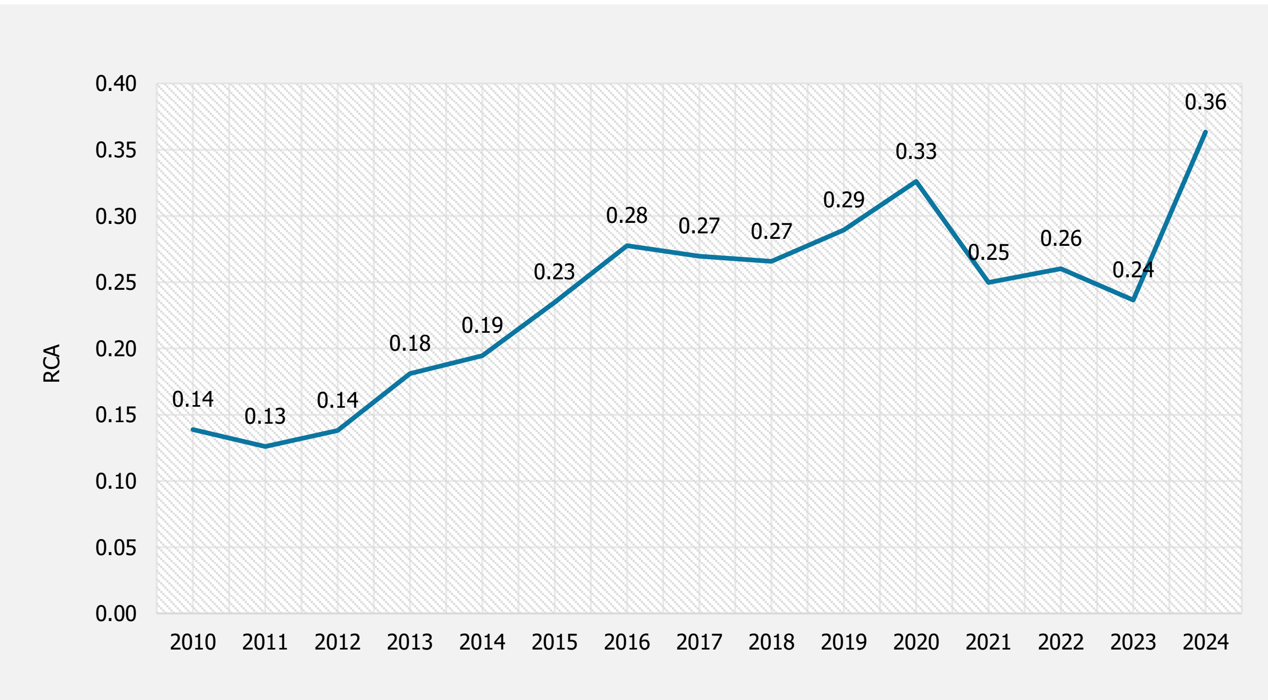
The Revealed Comparative Advantage (RCA) Index is a tool used in international economics to evaluate a country's relative advantage in exporting a specific commodity. It measures whether a country is more or less specialized in the export of a particular good compared to the global average. An RCA value greater than 1 indicates that the country has a comparative advantage in that commodity, meaning it exports more of it relative to the world average. Conversely, an RCA value less than 1 suggests a comparative disadvantage.

Figure 3.3: RCA of pickles (HSN: 200599 and 200190)



Source: ITC trade map, 2024, Analysis: Authors' own

Figure 3.4: RCA of sauces (HSN: 2103)



Source: ITC trade map, 2024, Analysis: Authors' own

Over the past 15 years, India's RCA values for pickle exports have shown a fluctuating trend (**Figure 3.3**). In 7 out of these 15 years, the RCA value remained below 1, indicating that India did not hold a comparative advantage in pickle exports during those periods. The highest RCA values were observed between 2019 and 2021, reflecting a strong competitive position for Indian pickles in the global market relative to other products. However, in the years following 2021, the RCA values experienced noticeable fluctuations. These variations can be attributed to several factors. Firstly, global demand for pickled products has been inconsistent, influenced by changing consumer preferences and dietary trends. Secondly, India has faced increasing competition from other pickle-exporting countries that has affected its market share. Thirdly, trade policies and tariff changes in key importing countries have impacted export volumes. Additionally, domestic challenges such as irregular agricultural output due to climate variability and supply chain disruptions have also played a role in affecting export performance. Despite these challenges, the average RCA value over the last five years has been 1.15. This indicates that Indian pickles have maintained a comparative advantage in the international market, underscoring their continued relevance and competitiveness in global trade.

In the last 15 years, India's RCA values for sauces exports have shown a gradual upward trend (**Figure 3.4**). Throughout this period, the RCA value remained below 1, indicating that India did not possess a comparative advantage in sauces exports. The highest RCA values were recorded between 2020 and 2024, reflecting a relatively stronger competitive position for Indian sauces in the global market compared to earlier years. The increasing trend in RCA values in recent years is attributed to several factors. Firstly, there has been a growing global demand for ethnic and spicy condiments that has benefited Indian sauces due to their unique flavour profiles. Secondly, Indian food products have gained popularity in international markets, supported by the expanding Indian diaspora and the global rise in interest in Indian cuisine. Thirdly, improvements in food processing technology and packaging have enhanced the shelf life and quality of sauces, making them more competitive internationally. Government initiatives promoting food exports and the rise of e-commerce platforms have helped Indian manufacturers reach broader markets. Despite these positive developments, the average RCA value over the last five years has been 0.28. This indicates that while India's position in the global sauces market is improving, it still does not hold a strong comparative advantage in this product category.

3.3 CHALLENGES

India has been exporting pickles and sauces to various parts of the world, especially the ones with a larger Indian diaspora. However, Indian exporters face a number of challenges that are limiting their pickles and sauces export to the global market. These challenges pertain to ingredient compliance, industrial scale, and stringent international quality standards.

Some of the pressing issues are:

a. **Stringent International Regulations**: Exporters must comply with diverse food safety and quality standards set by different countries (like FDA in the US or EFSA in Europe). This includes restrictions on preservatives, colouring agents, and packaging materials that can complicate export logistics. Certain ingredients traditionally used in Indian pickles and sauces are restricted or prohibited in various importing countries, especially developed nations. Such ingredient-specific limitations affect market access and the ability to export these products, limiting the expansion of Indian exports in these regions.
b. **Shelf Life and Preservation**: Pickles and sauces are sensitive to storage conditions. Ensuring long shelf life without compromising the taste or quality, especially in natural or organic products, is a major technical and logistical challenge. There are limitations on the use of additives and processing aids by many Western countries. Control of contaminants and heavy metals like arsenic also pose a major problem.
c. **Inconsistent Quality of Raw Material**: Variability in the quality of fruits, vegetables, spices, and oils due to seasonal and regional differences can affect the consistency and taste of final products, impacting brand reputation abroad. Pest infestation in plants (raw materials) leads to high usage of pesticides and pesticide residue testing is quite costly for many exporters.
d. **Lack of a single regulatory body**: Pickles and sauces undergo multiple checks and tests by various authorities like EIC, FSSAI, Spice Board, USAID, all of which increases the cost and delays the process. Exporters also expressed concern about "non-availability" of a "definition of pickles". Recently, the Spice board removed pickles from their categories. Thus, there is no body to specify the spice regulations in pickles. Further, there are a number of standards like ISO 9000, ISO 22000, and others which the Indian manufacturers are not following. All these are aggravated due to the absence of a single window system for processed products in India.
e. **High Freight and Logistic Costs**: Rising costs of international shipping, delays at ports, and cold chain infrastructure limitations hinder timely delivery and increase the overall export expenses. Eastern India ports are not well developed and non-availability of vessels/containers and lack of smooth segment delays shipments and increases the cost of transportation.
f. **Limited Brand Recognition**: While Indian pickles and sauces are popular among the diaspora, there is limited awareness or acceptance in mainstream global markets, making it difficult for Indian brands to scale outside niche ethnic stores.

g. **Competition from Other Countries**: Countries like Türkiye, China, Mexico, Greece, etc., also export a wide range of sauces and condiments, often with strong marketing strategies, putting competitive pressure on Indian exporters in key markets.

Note: *India faces intense competition in the global pickles and sauces market from countries such as Türkiye, China, Mexico, and Greece. These nations not only offer a wide range of sauces and condiments but also deploy aggressive and well-calibrated export strategies. For instance, Mexico's salsa exports are backed by vibrant, modern packaging, multilingual labelling, and targeted campaigns positioning their products as mainstream choices rather than just ethnic foods. Similarly, China's condiment companies like Lee Kum Kee have captured global markets through early entry, partnerships with restaurants and retail chains, and recipe localization strategies to appeal to diverse palates. Türkiye and Greece promote sauces linked to cultural heritage and protected Geographical Indications (GI), which builds consumer trust and a premium image. These exporters also comply extensively with global food safety certifications such as ISO 22000, HACCP, and BRC, which facilitates smooth entry into regulated markets. In contrast, Indian exporters have largely remained limited to diaspora-driven demand and struggle with fragmented branding, inconsistent quality standards, and weak global outreach. To remain competitive, India must recalibrate its strategy by incentivizing export-oriented product reformulation, encouraging global certifications, supporting labelling compliance, and launching strong global campaigns (e.g., under Brand India Food) to promote Indian sauces and pickles beyond ethnic aisles. Investments in cold chain infrastructure, a single-window export clearance mechanism, and active participation in international food expos and supermarket chains could help Indian exporters widen their reach and reduce the competitive gap.*

h. **Labelling and Packaging Barriers**: Adapting product labels to local languages, units of measurement, and consumer preferences for specific dietary and allergen information adds to production complexity. Also, damping issues leading to product damage cause a problem for the exporters.

EXPORT POTENTIAL

4.1 INDIA'S MAJOR EXPORT DESTINATIONS AND COMPETITORS OF PICKLES AND SAUCES

India's major export markets for pickles are located in the western region, particularly the USA and Canada. Significant volumes are exported to the UAE and Saudi Arabia in the Middle East, Germany, the Netherlands, and Spain in the European Union, as well as Australia and the UK. This demand is driven by the presence of the Indian diaspora in these regions. For sauces, key export destinations include the USA and Canada in the West, UAE, Saudi Arabia, and Oman in the Middle East, and Malaysia from the ASEAN region. The UK and Australia serve as prominent markets for Indian sauces.

To strengthen its position and expand exports in these regions, India must adopt improved processing techniques, diversify product varieties, and address existing challenges that hinder competitiveness. A deeper understanding of the specific requirements of importing countries is crucial. Importing countries have specific and often stringent requirements when it comes to processed food products like pickles and sauces. These requirements typically revolve around food safety, labelling, ingredient compliance, packaging, and certification. Developed markets such as the USA, Canada, and the European Union mandate strict adherence to food safety standards set by authorities like the US FDA and EFSA, which include limits on pesticide residues, heavy metals, and banned preservatives or colouring agents. Products must also conform to allergen declarations, nutritional labelling norms, and the use of approved packaging materials that do not interact with food contents. Additionally, importing countries often require certifications such as ISO 22000, HACCP, BRC, and in some cases Halal or Kosher, depending on the consumer base. There is also a growing demand for clean-label products, those free from artificial additives, GMO ingredients, and synthetic preservatives, especially in Europe and North America. For countries in the Middle East, certification for Halal compliance is essential. Moreover, accurate and locally adapted labelling in the local language, inclusion of date of manufacture and expiry, and units of measurement according to the importing country's norms are mandatory. Meeting these specific requirements not only ensures market access but also builds consumer trust and brand credibility.

By enhancing the quality and consistency of its pickles and sauces, and adopting competitive pricing strategies, India can better capitalize on these high-potential markets. A region wise analysis for exports of pickles and sauces from India is given below:

a. **North America:** Indian pickles and sauces have gained traction, primarily catering to a diaspora population of 5.40 million in the USA and 2.87 million in Canada (MEA, 2025). However, India faces strong competition (**Table 4.1**) with China (24.2 percent), Peru (22.2 percent), and Mexico (11.1 percent) leading pickle imports in the USA, while Canada sources largely from the USA (46.7 percent), Spain (6 percent), and Mexico (5.8 percent). India's market share under HSN 200599 (**Table 4.1**) stands at 6.8 percent in the USA and 4 percent in Canada. In HSN 200190, India's presence in the USA is marginal at 0.6 percent, whereas its Canadian market share is a more promising 8.1 percent. The sauces segment (HSN 2103) presents an even greater challenge (**Table 4.3**), with India holding just 1 percent market share in the USA, trailing Italy (22.5 percent), Canada (21 percent), and Mexico (17.2 percent). Despite these challenges, India's potential for expansion remains strong. Product differentiation through organic certifications, and improved packaging can enhance market competitiveness. Furthermore, aligning offerings with North American food safety standards and leveraging online marketplaces and ethnic retail channels will be critical for growth.

b. **Middle-east:** The Middle East, particularly the UAE, is a well-established market for Indian pickles and sauces, backed by a large Indian diaspora of 3.56 million (MEA, 2025). India commands a 10.2 percent share in the UAE pickle market (HSN 200599), trailing the USA (12.4 percent) (**Table 4.1**) while outperforming Türkiye and China. In HSN 200190, India is the market leader with an 18.3 percent share, ahead of Egypt (**Table 4.2**), Pakistan, and Italy. India's sauces exports (HSN 2103) account for 4 percent of the UAE market (**Table 4.3**), competing against the USA (26 percent) and Oman (12.7 percent). The Middle East presents a strategic opportunity for further expansion if Indian exporters strengthen Halal-certified production, enhance packaging quality, and improve convenience formats to align with consumer preferences. Establishing partnerships with regional distributors, retail chains, and Hotels, Restaurants, Catering (HORECA) networks will facilitate India's market growth.

c. **United Kingdom:** Indian pickles and sauces maintain a niche but growing presence, supported by an Indian diaspora of 1.86 million (MEA, 2025). India's market share in pickles (HSN 200599) is 4.3 percent (**Table 4.1**), behind Italy (20.7 percent), the Netherlands (12 percent), France (10.5 percent), and Spain (8.6

percent). However, in pickles (HSN 200190), India is more competitive with 20 percent market share (**Table 4.2**), closely trailing Türkiye (20.7 percent). Conversely, India's sauces segment (HSN 2103) remains underdeveloped, holding just 1.3 percent share, compared to market leaders such as the Netherlands (23 percent) and Italy (13.5 percent). The increasing UK consumer interest in international flavours presents an opportunity for Indian exporters to promote regional specialties, GI-tagged products, and clean-label certifications. Strengthening collaborations with specialty food retailers and online distribution platforms will help in expanding market reach.

d. **European Union:** India's presence in the EU market for pickles and sauces is currently limited but holds potential. The EU is dominated by Mediterranean suppliers, including Italy, Spain, France, Greece, and the Netherlands, which have well-established consumer preferences and regulatory advantages. In Germany, a key EU market, India's market share for pickles (HSN 200190) stands at 4.2 percent, competing with Türkiye (**Table 4.2**), Greece, South Africa, and the Netherlands. However, India's presence in pickles (HSN 200599) is less pronounced (**Table 4.1**). The Indian diaspora in Germany, estimated at 0.26 million (MEA, 2025), provides a niche consumer base. To expand its footprint, India must secure organic and quality certifications, enhance regulatory compliance, and target premium food segments. Leveraging health-conscious trends and specialty food channels will further support India's market positioning.

e. **Australia:** Australia presents an emerging market for Indian pickles and sauces, particularly due to its increasing multicultural population and rising interest in ethnic foods. India currently holds a small market share in pickles (HSN 200599) at 1.4 percent (**Table 4.1**), with China (25.4 percent), Italy (17.8 percent), New Zealand (11 percent), and Thailand (7.8 percent) as dominant suppliers. Similarly, in sauces (HSN 2103), India accounts for 2.6 percent of the market (**Table 4.3**), trailing Thailand (15.4 percent), Italy (11.1 percent), China (10.7 percent), and the USA (8.7 percent). Australia's Indian diaspora, estimated at 0.97 million (MEA, 2025), presents an opportunity for growth. Strengthening branding, introducing organic and fusion flavours, and leveraging online retail platforms will be essential for capturing diaspora and mainstream consumers.

Overall, India's export potential for pickles and sauces remains significant across North America, the Middle East, the UK, the EU, and Australia, driven by diaspora influence, evolving consumer preferences, and growing demand for ethnic and plant-based foods. To maximize success, India must emphasize product differentiation, regulatory compliance, strategic retail partnerships, and effective branding to establish a competitive foothold in the global markets.

Table 4.1: Major competitors of Indian pickles (non-frozen)

HSN 200599		
Country & their imports from India	**Exporting Countries**	**Competitor**
USA (67%)	China (24.2%), Peru (22.2%), Mexico (11.1%), **India (6.8%)**	China, Peru, Mexico
Canada (7%)	USA (46.7%), Mexico (5.8%), Spain (6%), China (5.4%), **India (4%)**	USA, Mexico, Spain, China
UK (6%)	Italy (20.7%), Netherlands (12%), France (10.5%), Spain (8.6%), **India (4.3%)**	Italy, Netherlands, France, Spain, Türkiye
UAE (4%)	USA (12.4%), **India (10.2%)**, Türkiye (9.2%), China (8.8%), Italy (7.8%)	USA
Australia (3%)	China (25.4%), Italy (17.8%), New Zealand (11%), Thailand (7.8%), **India (1.4%)**	China, Italy, New Zealand, Thailand, Türkiye

Source: ITC Trade Map, 2024

Table 4.2: Major competitors of Indian pickles (frozen)

HSN 200190		
Country & their imports from India	**Exporting Countries**	**Competitor**
UK (24%)	Türkiye (20.7%), **India (20%)**, Poland (9.5%), Italy (5.6%), Mexico (5%)	Türkiye
USA (10%)	Mexico (48.6%), Peru (13.1%), Türkiye (9%), Greece (4%), **India (0.6%)**	Peru, Türkiye, Greece, Spain, China
Germany (8%)	Türkiye (27%), Greece (13.6%), South Africa (9%), Netherlands (8%), **India (4.2%)**	Türkiye , Greece, South Africa, Netherlands
Canada (8%)	USA (33.7%), Greece (10.2%), Mexico (9.8%), **India (8.1%)**, Türkiye (6.7%)	USA, Greece, Mexico
UAE (7%)	**India (18.3%)**, Egypt (14.1%), Italy (8.4%), Pakistan (9%), Jordan (6%)	No competitor

Source: ITC Trade Map, 2024

Table 4.3: Major competitors of sauces

HSN 2103		
Country & their imports from India	**Exporting Countries**	**Competitor**
USA (16%)	Italy (22.5%), Canada (21%), Mexico (17.2%), China (6.9%), **India (1%)**	Italy, Canada, Mexico, China, Thailand, Japan
UK (12%)	Netherlands (23%), Italy (13.5%), Germany (7.8%), Spain (6%), **India (1.3%)**	Netherlands, Italy, Germany, Spain, France, Belgium, Thailand
UAE (8%)	USA (26%), Oman (12.7%), Philippines (6%), Italy (5.7%), **India (4%)**	USA, Oman, Italy, Philippines, Egypt
Australia (8%)	Thailand (15.4%), Italy (11.1%), China (10.7%), USA (8.7%), **India (2.6%)**	Thailand, Italy, China, New Zealand, Japan
***Bangladesh (7%)**	Malaysia (32%), Singapore (18.5%), **India (15%)**, Thailand (13.6%), China (8.6%)	Malaysia, Singapore

**TE15; Source: ITC Trade Map, 2024*

Box 4.1: Best practices and strategic approaches of different regions of the world

Region	Best practices and strategic approach
North America	The intense competition faced by Indian pickles and sauces in global markets stems from the early market entry, robust branding, and high compliance standards maintained by countries like China, Mexico, Peru, Spain, and the USA. These countries have successfully positioned their condiments not just as ethnic products but as mainstream culinary staples, appealing to a wider consumer base beyond diaspora communities. They invest heavily in attractive, localized packaging, multilingual labelling, and ensure adherence to international food safety standards such as ISO, HACCP, and BRC, which facilitates seamless entry into regulated markets. Additionally, their manufacturers adopt standardized industrial-scale production techniques, ensuring consistent quality and extended shelf life, which enhances reliability and builds brand loyalty. Strategic use of Geographical Indications (GIs) and integration of products into global fast-food and fusion cuisines through tie-ups with retailers and restaurants further strengthen their global presence. These proactive measures give them a competitive edge over

	Indian exporters, whose products remain largely confined to ethnic shelves due to fragmented branding and regulatory hurdles.
UK	India's limited market share in the global pickle segment, particularly in Europe, is a result of strong competition from countries like Italy, the Netherlands, France, and Spain, which have established dominance through well-developed agro-processing industries, standardized production methods, and deep integration with European retail supply chains. These countries benefit from regional trade agreements, faster logistics, and strong compliance with EU food safety and labelling standards, enabling smoother and more cost-effective market access. Moreover, their products often carry Protected Geographical Indication (PGI) tags, reinforcing perceptions of authenticity and premium quality. European competitors also emphasize local tastes and dietary preferences, offering a wide range of pickled vegetables, olives, and gherkins tailored to mainstream European consumers. Their attractive branding, clean-label packaging, and strategic shelf placement in major supermarket chains give them a competitive advantage, whereas Indian pickles remain largely confined to ethnic food aisles, limiting visibility and cross-cultural appeal.
Middle-East	Countries like the USA and Oman, which lead the UAE sauces market, have adopted a demand-driven, consumer-centric export model focused on customization, regulatory alignment, and strategic distribution. The USA's dominance is driven by its ability to offer a diverse range of sauces tailored to both Western and Middle Eastern palates, backed by strong branding, aggressive marketing, and established retail partnerships. American exporters ensure compliance with Gulf food safety norms, including Halal certification, and invest in multilingual labelling and attractive packaging, making their products accessible across consumer segments. Oman leverages geographical proximity, lower logistics costs, and deep trade ties within the Gulf Cooperation Council (GCC), along with competitive pricing and familiarity with regional taste profiles. India can follow a hybrid model that combines the USA's premium branding and product diversification with Oman's regional integration and price competitiveness. This includes investing in product innovation (e.g., sauces with local flavours or clean-label variants), ensuring 100% Halal compliance, improving packaging and labelling standards, and forging retail and HORECA partnerships in the UAE. Participation in GCC food expos, collaborative marketing under Brand India, and leveraging FTAs with Gulf countries can also enhance India's visibility and scale in this high-potential market.

POLICY ANALYSIS

5.1 TARIFF MEASURES

Tariff policies have a profound impact on the global trade dynamics. When import tariffs are high, they raise the cost of foreign goods, making them less competitive in the domestic market. This discourages imports and protects local industries. On the flip side, exporters facing such tariffs find it difficult to sustain their market share abroad, as higher prices reduce the demand for their products leading to a decline in export volumes. In contrast, low or zero tariffs promote trade by lowering costs, making goods more accessible and attractive to international buyers. As a result, tariff structures play a pivotal role in shaping trade flows, influencing the volume and direction of imports and exports between countries.

a. *Tariff Structure of Pickles*

Table 5.1: Global tariff scenario for HSN 200190*

Major Markets/Importers	Major Exporters (Tariff)				India
USA	Mexico (0%)	Peru (0%)	Türkiye (7%)	Spain (7%)	1.8%
Germany	Türkiye (0.6%)	Greece (0%)	South Africa (0.7%)	Netherlands (0%)	9.6%
United Kingdom	Türkiye (0.6%)	**India** (9.6%)	Poland (0%)	Italy (0%)	9.6%
Canada	USA (0%)	Greece (0%)	Mexico (0%)	**India** (4%)	4%
Netherlands	Türkiye (0.6%)	Germany (0%)	Belgium (0%)	Thailand (13.7%)	9.6%
Japan	China (10.8%)	Mexico (1.2 %)	Spain (1.2%)	Viet Nam (0.5%)	2.4%
France	Germany (0%)	Morocco (0%)	Spain (0%)	Italy (0%)	9.6%
Saudi Arabia	Syrian Arab Republic (0%)	Jordan (0%)	Egypt (0%)	**India** (5%)	5%
Belgium	Netherlands (0%)	Germany (0%)	Türkiye (0.6%)	Greece (0%)	9.6%
Korea, Republic	China (26.9%)	Mexico (30%)	Türkiye (26.7%)	Vietnam (10.2%)	30%

** Vegetables and other edible parts of plants, prepared or preserved by vinegar or acetic acid (excl. cucumbers and gherkins).*

Source: ITC Trade Map, 2024

Under HSN code 200190, the United States, Germany, the United Kingdom, Canada, and the Netherlands are key import markets for pickles. India faces varying average tariffs on its pickle exports in key international markets such as the USA, Germany, the UK, Canada, the Netherlands, Japan, France, Saudi Arabia, Belgium, and South Korea, which makes Indian pickles less competitive in these markets. Notably, the European Union countries impose an average tariff of 9.6 percent, while South Korea applies the highest duty among the top 10 global importers at 30 percent (**Table 5.1**).

Table 5.2: Global tariff scenario for HSN 200599*

Major Markets/Importers	Major Exporters (Tariff)				India
USA	China (7.2%)	Peru (0%)	Mexico (0%)	India (3.1%)	3.1%
Germany	Poland (0%)	Netherlands (0%)	Türkiye (0%)	France (0%)	10.8%
Japan	China (13.8%)	Korea Republic (13.8%)	Thailand (4%)	USA (13.8%)	5%
Korea, Republic	China (17.8%)	Vietnam (4%)	Netherlands (0%)	USA (0%)	17.5%
France	Spain (0%)	Netherlands (0%)	Belgium (0%)	Italy (0%)	10.8%
United Kingdom	Italy (0%)	Netherlands (0%)	France (0%)	Spain (0%)	10.8%
Belgium	Netherlands (0%)	France (0%)	Türkiye (0%)	Germany (0%)	10.8%
Spain	Peru (0%)	Netherlands (0%)	Germany (0%)	France (0%)	10.8%
Canada	USA (0%)	Mexico (0%)	Spain (0%)	Korea Republic (0%)	7.6%
Netherlands	Belgium (0%)	Poland (0%)	Germany (0%)	Korea Republic (0%)	10.8%

** Vegetables and mixtures of vegetables, prepared or preserved otherwise than by vinegar, non-frozen.*

Source: ITC Trade Map, 2024

Under HSN Code 200599, the United States is the largest importer and currently imposes an import duty of 3.6percent on India. In contrast, Peru and Mexico benefit from zero-duty access to the US market under preferential trade agreements. Additionally, India faces varying levels of import tariffs in several other key markets: Germany (10.8 percent), Republic of Korea (17.5 percent), France (10.8percent), the United Kingdom (10.8 percent), Belgium (10.8 percent), Spain (10.8 percent), Canada (7.6percent), and the Netherlands (10.8 percent) (**Table 5.2**). These tariff differentials, coupled with limited preferential access, render India less competitive in these markets for products under HS 200599.

b. Tariff Structure of Sauces:

Table 5.3: Global tariff scenario for HSN 210390

Major Markets/ Importers	Major Exporters (Tariff)				India
USA	Canada (2.2%)	Mexico (0%)	Italy (6.1%)	Thailand (2.2%)	2.2%
UK	Netherlands (0%)	Italy (0%)	Poland (0%)	Germany (0%)	2.1%
France	Belgium (0%)	Italy (0%)	Germany (0%)	UK (0%)	2.1%
Canada	USA (0%)	China (9.5%)	Thailand (9.5%)	Germany (0%)	9.5%
Germany	Italy (0%)	Netherlands (0%)	Poland (0%)	Thailand (7.7%)	2.1%

Source: ITC Trade Map, 2024

Under HSN code 210390 (preparation of sauces and prepared sauces, mixed condiments and seasonings), the United States, United Kingdom, France, Canada, and Germany are among the primary importers of sauces. However, Indian exporters face notable tariff barriers in key markets. The USA charges a 2.2% import duty on Indian sauces, while the UK, France, and Germany each charge 2.1%. Canada has a higher duty of 9.5%. Because of these import duties, Indian sauces find it difficult to compete on price in these countries (**Table 5.3**).

This limits India's ability to compete on price, underscoring the importance of pursuing favourable trade agreements or exploring product repositioning strategies to improve market access and competitiveness.

Table 5.4: Global tariff scenario for HSN 210320

Major Markets/ Importers	Major Exporters (Tariff)				India
USA	Italy (8.8%)	Canada (0%)	Mexico (0%)	Costa Rica (0%)	5.8%
UK	Netherlands (0%)	Portugal (0%)	Italy (0%)	Germany (0%)	6.7%
France	Spain (0%)	Italy (0%)	Belgium (0%)	Germany (0%)	6.7%
Germany	Italy (0%)	Netherlands (0%)	Poland (0%)	Austria (0%)	6.7%
Canada	USA (0%)	Italy (0%)	Mexico (0%)	Philippines (12.5%)	12.50%

Source: ITC Trade Map, 2024

Under HSN code 210320 that includes tomato ketchup and other tomato-based sauces, the United States, United Kingdom, France, Canada, and Germany are key import markets. However, Indian exporters face notable tariff barriers in these regions. The US imposes a 5.8 percent import duty on Indian sauces, while Canada levies a significantly higher duty of 12.5 percent. This puts Indian products at a competitive disadvantage compared to countries like Mexico, Costa Rica, and Italy that enjoy zero-duty access under their respective trade agreements.

Indian sauce exports struggle to remain price-competitive in these markets. In the EU, Indian products face a 6.7 percent import duty, while several competing nations benefit from duty-free access. This disparity underscores the need for India to pursue strategic trade negotiations or consider repositioning its products to improve competitiveness and expand market access (**Table 5.4**).

Table 5.5: Global tariff scenario for HSN 210310

Major Markets/ Importers	Major Exporters (Tariff)				India
USA	China (3%)	Japan (3%)	Hong Kong (3%)	Canada (0%)	0%
France	Netherlands (0%)	China (7.7%)	Japan (7.7%)	Thailand (7.7%)	4.2%
UK	Netherlands (0%)	China (7.7%)	Poland (6%)	Japan (7.7%)	4.2%
Canada	USA (0%)	China (9.5%)	Korea republic (0%)	Philippines (9.5%)	9.5%
Germany	Netherlands (0%)	China (7.7%)	Japan (7.7%)	Thailand (7.7%)	4.2%

Source: ITC Trade Map, 2024

Under HSN code 210310 that includes soya sauce, the United States, United Kingdom, France, Canada, and Germany are key import markets. In place this para." Indian soya sauce faces average import duties of 4.2% in France, the UK, and Germany, and 9.5% in Canada. However, there is no import duty in the USA. These higher duties in most markets make Indian soya sauce less competitive in terms of price (**Table 5.5**).

Table 5.6: Global tariff scenario for HSN 210330

Major Markets/ Importers	Major Exporters (Tariff)				India
USA	Canada (0%)	France (0.5%)	UK (0.5%)	Germany (0.5%)	0%
Canada	USA (0%)	France (0%)	Germany (0%)	Poland (0%)	6.3%
UK	France (0%)	USA (6%)	Germany (0%)	Canada (0%)	3.7%
Belgium	France (0%)	Netherlands (0%)	Germany (0%)	UK (0%)	3.7%
France	Canada (0%)	Netherlands (0%)	Belgium (0%)	UK (0%)	3.7%

Source: ITC Trade Map, 2024

Under HSN code 210330 that includes mustard flour and meal, the United States, United Kingdom, France, Canada, and Belgium are key import markets. Indian exports currently enjoy zero import duty in the US, offering a level playing field. In Canada, Indian products face a 6.3 percent import duty (**Table 5.6**).

These tariff disparities hinder India's price competitiveness and highlight the need for strategic trade negotiations or product repositioning to improve market access and strengthen India's presence in these key regions.

c. *Leveraging FTAs and Strengthening SME Compliance for Global Market Access*

India's expanding trade agreements, covering key markets across the Middle East, Africa, developed economies, and regional blocs offer a strong foundation for enhancing exports of pickles and sauces. The existing and recently concluded Free Trade Agreements (FTAs) and Comprehensive Economic Partnership Agreements (CEPAs) provide tariff preferences, quota access and regulatory dialogues that can significantly lower market entry barriers. One of the most consequential arrangements has been the India–UAE Comprehensive Economic Partnership Agreement (CEPA), which came into force in May 2022. The India–UAE CEPA offers zero duty on a large majority of tariff lines used by processed foods, including many pickles and sauces. The UAE is not only one of India's largest export destinations for processed food but also a critical re-export hub for West Asia and East Africa. Post-CEPA, Indian exporters have reported improved order flows in products such as mixed vegetable pickles and hot sauces due to more competitive pricing vis-à-vis third-country suppliers.

In December 2022, the India–Australia Economic Cooperation and Trade Agreement (ECTA) entered into force. Australia represents an important middle-income market with a diasporic consumer base and rising interest in ethnic and fusion culinary products. Under ECTA, tariff lines relevant to sauces and processed condiments were granted preferential or duty-free access, enabling Indian exports to compete more effectively against producers from Europe and Southeast Asia. With Australia's annual food imports exceeding USD 16 billion, even incremental gains through enhanced tariff access can substantially uplift Indian market share. The India–ASEAN Free Trade Agreement, active since 2010, supports tariff reduction across Southeast Asia, including Singapore, Malaysia, Thailand, Indonesia and Vietnam. ASEAN's combined GDP of over USD 3.6 trillion positions it as a critical market for sauces and condiments, where Indian flavours can meet both diaspora demand and growing local appetite for diverse food tastes. The SAARC-level South Asian Free Trade Area (SAFTA) similarly facilitates tariff-reductions for shipments to Bangladesh, Nepal and Sri Lanka, reducing landed costs in these proximate markets.

Trade arrangements with higher-income economies further expand opportunities. The India–Japan Comprehensive Economic Partnership Agreement, under which tariffs on many processed food categories are reduced or eliminated over time, offers preferential access to a quality-sensitive market with annual food imports totalling over USD 65 billion. Although India's current exports of pickles and sauces to Japan remain modest, tariff advantage combined with targeted quality positioning and compliance with Japanese Food Sanitation Law can open niche segments. In 2025, India signed FTA with UK, Oman while India- EFTA came into force. India also concluded FTA with New Zealand in December 2025 and with EU in January 2026. The India–Oman Comprehensive Economic Partnership Agreement (CEPA), signed in December 2025, grants duty-free access to Oman on over 98% of Indian exports, including processed foods such as pickles, sauces, chutneys, and mixed condiments. Earlier import duties of 5–10% on these products are eliminated, improving price competitiveness for Indian brands in Oman. The agreement also includes mutual recognition of Halal certification, which is crucial for sauces and pickles sold in the Omani and wider GCC markets. Growing demand from the Indian diaspora and food-service sector in Oman makes CEPA particularly beneficial for organized Indian pickle and sauce exporters.

The UK market represents a diaspora-led demand centre for Indian foods with strong artisanal, ethnic retail channels. Under the UK–India CETA (signed July 2025, under phased implementation), the UK has eliminated import duties (earlier ~8–20%) on Indian processed foods, including pickles, sauces, chutneys, and condiments. This zero-duty access significantly improves price competitiveness of Indian brands in UK ethnic and mainstream retail channels. The agreement maintains strict UK food safety and labelling standards, requiring compliance with UK FSA rules but provides better regulatory cooperation and trade facilitation. With strong demand from the Indian diaspora and growing interest in ethnic cooking, CETA creates clear export growth opportunities for organized Indian pickle and sauce manufacturers

The EU–India FTA, once ratified, is expected to provide India with duty-free or reduced duty access on a wide range of processed food categories. Given that the EU's food imports exceed EUR 160 billion annually, even fractional gains from tariff elimination would uplift exports substantially. Additionally, the ongoing India–Canada FTA discussions are particularly relevant for the sauces segment, where Canada imports more than USD 54.6 billion of food annually (ITC trade map, 2025) and has a strong South Asian diaspora base. Concessions on sauces and condiments linked to sensitive agricultural safeguards can create windows for market entry and growth.

To fully leverage these trade agreements, India must adopt a structured FTA-utilization strategy that goes beyond tariff reductions. Many exporters, especially Micro, Small and

Medium Enterprises (MSMEs), under-utilize preferential tariffs due to limited awareness of rules of origin, documentation requirements, and certification processes. Priority actions include digital integration of certificate of origin issuance, exporter training programs on FTA benefits, simplified data-sharing on tariff schedules, and proactive engagement with foreign buyers on tariff advantages. While market access creates opportunity, achieving sustainable export growth critically depends on strengthening quality systems and compliance among SME manufacturers of pickles and sauces. India's food processing sector comprises over 63 million MSMEs; however, many operate in semi-formal settings with uneven adoption of Food Safety and Standards Authority of India (FSSAI) requirements. Strengthening compliance with FSSAI licensing, Good Manufacturing Practices (GMP) under Schedule 4 of the FSS Regulations, and hygienic infrastructure is foundational. Cluster-based common testing facilities for microbiological and pesticide residue analysis can lower compliance costs for small units.

Domestic alignment with global standards, especially Codex Alimentarius standards (e.g., Codex Standard for Pickled Fruits and Vegetables – CXS 260-2007), is indispensable for exports to developed markets like the EU, UK, Japan, Canada and Australia. Many buyers in these regions mandate HACCP (Hazard Analysis and Critical Control Points)-based Food Safety Management Systems or certifications such as ISO 22000 and BRCGS as prerequisites for contracts. Adoption of these systems signals risk-based quality assurance and supports smoother customs clearances. Standardised labelling, reflecting nutritional information, allergens, ingredient origin and conformity with importing country requirements, also reduces shipment delays and rejections. Government support under the Pradhan Mantri Formalisation of Micro Food Processing Enterprises (PMFME) Scheme.

Institutional support structures such as common processing centres, technical collaboration with the Indian Council of Agricultural Research (ICAR) to manage raw material quality and residue profiles, and structured training modules on packaging, shelf-life validation, and export documentation will accelerate the formalisation of enterprises. Digital traceability systems incorporating batch coding, supplier trace-back mechanisms, and recall protocols are increasingly required by overseas buyers and will be essential for targeting premium segments.

Lastly, integration of compliant SMEs into e-commerce export channels and facilitation of participation in international trade fairs and buyer-seller meets under APEDA and the Export Promotion Councils can enhance visibility in new markets. Branding initiatives under national programmes such as "Brand India" can reposition Indian pickles and sauces from diaspora-oriented products to globally recognized, high-quality condiments.

In summary, India's expanding network of FTAs and CEPAs, including recent agreements with the UAE, Australia, UK, Oman, EFTA, EU, New Zealand and ongoing discussions with Canada offers strategic avenues for tariff-enhanced market entry in key global markets. Successfully leveraging these agreements will require a coordinated approach that combines tariff preference utilization, exporter education, quality upgrades aligned with FSSAI and global standards, and institutional support for MSME formalization. With such a strategy, India can meaningfully increase its export footprint in the USD 19.5 billion global sauces market and the multi-billion-dollar global pickles segment, enhancing competitiveness and generating sustained economic opportunity for food processing MSMEs nationwide.

5.2 NON-TARIFF MEASURES

Non-tariff barriers (NTBs) impact the export of pickles and sauces from India, posing challenges beyond traditional tariffs. Globally, these NTBs, such as strict food safety, hygiene, and quality standards, are imposed by importing countries to protect consumer health. For example, many countries require certifications like FSSAI, Hazard Analysis Critical Control Points (HACCP), or International Organization for Standardization (ISO) standards, along with detailed labelling and packaging compliance, which can be complex and costly for exporters to meet.

Other common NTBs include import licensing requirements, complex customs procedures, and restrictions on certain additives or ingredients used in pickles and sauces. Some countries enforce maximum residue limits (MRLs) on pesticides and contaminants, leading to rejections if Indian products exceed these thresholds. Additionally, varying standards across markets create challenges in harmonizing product specifications for global exports (Asian Development Bank, 2020).

From a global perspective, developed markets like the USA, EU, Canada, and Australia have particularly rigorous NTBs, including frequent inspections and testing that can delay shipments and increase compliance costs. Emerging markets impose sudden regulatory changes or require local testing complicating export processes. These barriers act as indirect protectionism, limiting market access for Indian exporters despite reduced tariff rates.

To navigate these challenges, Indian exporters of pickles and sauces must invest in quality control, certification, and supply chain transparency. Understanding and adapting to diverse international regulations is crucial to expanding India's presence in key global markets such as the USA, UAE, Vietnam, UK, Canada, and Australia that are among the largest importers of Indian pickles and sauces.

5.3 CONVERGENCE BETWEEN CENTRE AND STATE SCHEMES

Indian pickles and sauces have gained significant attention in recent years, driven by the rising demand in domestic and international markets. Deeply rooted in Indian culinary traditions, their unique and culturally rich taste appeals not only to the Indian diaspora but also to global consumers seeking authentic ethnic flavours. Recognizing this potential, both the Central and State Governments have introduced a range of schemes to promote the production and export of spice-rich Indian pickles and sauces. This report focuses on state-level initiatives in Gujarat and Maharashtra, as well as central-level schemes introduced by the Government of India.

a. Prime Minister's Formalization of Micro Food Processing Enterprises (PMFME Scheme)

The Pradhan Mantri Formalisation of Micro Food Processing Enterprises (PMFME) Scheme was launched by the Ministry of Food Processing Industries (MoFPI) in June 2020 under *the Atmanirbhar Bharat Abhiyan*. With a total outlay of INR 10,000 crore over five years (2020–25), the scheme aims to formalize and support micro food processing units, including enterprises involved in the production of pickles and sauces. It focuses on enhancing their competitiveness, improving market linkages, and promoting sustainable growth (PMFME-MOFPI, 2024).

Key components of the scheme include:

- **One District One Product (ODOP):** Development of food processing clusters based on a unique product identified in each district, some of the states with their districts for pickle processing have been given in **Table *5.7***.

Table 5.7: List of selected and approved ODOP districts for pickle processing

State	District
Arunachal Pradesh	Leparada
Assam	Kamrup, Nagaon
Jammu and Kashmir	Kulgam, Udhampur
Nagaland	Kohima
Punjab	Amritsar
Tamil Nadu	Tenkasi

Source: MOFPI annual report, 2023-24

- **Credit-Linked Subsidy:** Financial assistance of up to 35 percent of the project cost for eligible micro food processing units.
- **Capacity Building & Training:** Skill development programs and technical training for entrepreneurs and workers in the food processing sector.
- **Support to Farmer Producer Organizations (FPOs):** Encourages collective processing, branding, and marketing, especially relevant for rural-based pickle and sauce producers
- **Dedicated Online Portal:** Simplifies application and approval processes, ensuring transparent and efficient access to scheme benefits.

b. Pradhan Mantri Kisan SAMPADA Yojana (PMKSY)

The Pradhan Mantri Kisan SAMPADA Yojana (PMKSY) is a centrally sponsored scheme aimed at boosting the food processing sector through modern infrastructure and efficient supply chains. With an allocation of INR 4600 crore till March 2026, PMKSY supports various sub-schemes that are directly relevant to the processing and export of pickles and sauces (About PMKSY Scheme | Ministry of Food Processing Industries | GOI, 2024).

Key components of PMKSY applicable to pickles and sauces include:

- Integrated Cold Chain and Value Addition Infrastructure: Supports cold storage and logistics needed for preserving perishable raw materials like mango, chilli, garlic, onion, and lemon.
- Creation/Expansion of Food Processing and Preservation Capacities (Unit Scheme): Provides financial assistance for setting up and expanding units that manufacture processed foods like pickles, chutneys, and sauces.
- Infrastructure for Agro-processing Clusters: Promotes cluster-based development, encouraging small and medium pickle/sauce processors to benefit from shared facilities.
- Food Safety and Quality Assurance Infrastructure: Ensures that exported and domestic products meet required quality standards.
- Operation Greens: Initially for Tomato, Onion, and Potato (TOP), it now includes 22 perishables like Mango and Banana, commonly used in pickles and chutneys.

PMKSY aims to reduce wastage, increase processing levels, enhance exports of processed foods, and generate employment, making it highly relevant for entrepreneurs and exporters in the pickle and sauce segment.

c. State government schemes *(Source: World Food India, 2024)*

- **Gujarat:** Gujarat offers targeted support for the processing and export of pickles and sauces through a mix of cluster development, infrastructure, and financial incentives. The state has actively implemented the ODOP scheme, identifying key spice and fruit clusters essential for pickle and sauce manufacturing. For example, districts such as Bhavnagar (onion), Junagadh (coriander), Mehsana (cumin), and Gir Somnath and Navsari (mango) are designated for value-added processing. These clusters benefit from state-supported initiatives such as technical training, licensing assistance (like FSSAI), and marketing support. Additionally, Gujarat has established Agri Export Zones (AEZs) for mangoes, dehydrated onion and garlic, and vegetables. These AEZs enable processors and exporters of pickles and chutneys to access common infrastructure like packhouses, cold storages, and quality testing labs that are critical for meeting international food safety and packaging standards.

  Gujarat's Agro-Industrial Policy 2020 goes a step further by offering capital subsidies up to 25 percent for setting up export-oriented food processing units that include those manufacturing pickles and sauces. Moreover, it supports branding and promotional activities in foreign markets, reimburses costs for participation in international exhibitions, and promotes adoption of modern packaging techniques. Several firms involved in spice and vegetable processing have received support under state-backed infrastructure development programs, particularly in Mehsana, Surat, and Bhavnagar, where companies produce dehydrated onions, garlic, spice pastes, and chutneys—all crucial components of pickles and sauces. The Gujarat Investor Facilitation Portal (IFP) acts as a single-window clearance system to ease the regulatory and compliance process for food processors and exporters.

- **Maharashtra:** Maharashtra has developed strong institutional and infrastructural support for businesses involved in the export and processing of pickles and sauces. Through the Maharashtra Agro-Processing Policy 2018, the state provides a comprehensive set of incentives including interest subsidies, stamp duty waivers, and electricity duty exemptions for setting up agro-processing units, especially those that are export-oriented. These incentives are well-suited for enterprises dealing with value-added products like mango pickles, garlic chutney, chili sauces, and tamarind-based condiments. The state's commitment is reflected through the Maharashtra Industrial Development Corporation (MIDC) which has developed dedicated food parks in regions like Satara, Pune, Nashik, and Nagpur. These parks offer plug-and-play facilities including cold storage, effluent treatment, and product testing labs, significantly reducing the entry barrier for small and medium processors.

The Maharashtra State Agricultural Marketing Board (MSAMB) plays a pivotal role in facilitating exports of processed food items like pickles and sauces. MSAMB operates multiple export facilitation centres and supports exporters in meeting the stringent quality norms required in markets like the EU, Gulf countries, and ASEAN. It offers services such as residue testing, certification, barcoding, packaging advice, and coordination with APEDA. In terms of raw material sourcing, Maharashtra is rich in relevant crops such as mangoes (Ratnagiri, Sindhudurg), chillies (Kolhapur, Nagpur), garlic (Nashik, Ahmednagar), and tamarind (Nanded, Beed), many of which are cultivated under state-supported cluster programs or with assistance to FPOs. These clusters are increasingly being linked to processors and exporters to build integrated value chains for export-focused products like pickles, chutneys, and sauces.

- **West Bengal:** West Bengal provides targeted support for processing and exporting pickles and sauces through crop-specific clusters, state incentives, and infrastructure development. Under the ODOP framework, districts like Murshidabad (mango), Uttar Dinajpur (onion), Malda (chilli), and Cooch Behar (tomato) are promoted for value-added food processing. These ingredients form the core base for pickles, chutneys, and sauces. Processors in these regions benefit from state-backed initiatives including technology support, branding assistance, and packaging support, especially for micro and small enterprises. The state has prioritized horticulture processing infrastructure, particularly under the West Bengal Food Processing Incentive Scheme, offering capital subsidies and financial incentives for setting up small-scale units. These include common facility centres, cold storage, and packhouses near production zones for perishable fruits and vegetables used in chutneys and sauces.

  The Agri Export Facilitation Centres in Kolkata and Siliguri assist local processors in getting international certifications and ensuring quality compliance. These centres, coordinated by the West Bengal Industrial Development Corporation (WBIDC) and the Department of Food Processing Industries & Horticulture, help pickle and sauce exporters with barcoding, food safety testing, and international market access. The state's focus on promoting processed agri-products aligns with central schemes like PMKSY that West Bengal implements through its own processing clusters for mango, chilli, tomato, and garlic, critical ingredients for the pickle and sauce segment.

STRATEGIES AND CONCLUSION

6.1 FOCUSSED STRATEGIES

a. **Indian exporters of pickles and sauces face difficulty in consistently sourcing high-quality raw materials that meet international standards. This issue is worsened by the lack of processing units near major production clusters, leading to higher costs and quality loss.**

Rationale

- Consistent, quality raw materials are vital for export competitiveness.
- Contract farming, as seen in the successful gherkin industry, ensures better quality, traceability, and farmer capacity building.
- Setting up processing units close to production clusters (e.g., Andhra Pradesh for mango/chilli, Rajasthan for vegetables/chillies, Nagaland/Assam for king chilli) reduces spoilage and costs, and boosts local economies.

Action Points:

- **Promote contract farming** by connecting exporters with FPOs/cooperatives to secure quality raw materials through good agricultural practices (replicate the gherkin model).
- **Conduct farmer training and capacity building** on international standards and sustainable practices, especially on the use of pesticides and permitted chemicals.
- **Provide technical support** (seeds, inputs, pest management) to contracted farmers.
- **Establish processing units near key clusters** (e.g., Andhra Pradesh, Rajasthan, Nagaland, Assam) to minimize losses and ensure fresher inputs.

b. **Indian exporters lack access to processable varieties of raw materials, most current varieties have high water content, low pulp, and low Total Soluble Solids (TSS), resulting in poor shelf life and export quality.**

Rationale: Most varieties of fruits and vegetables in India have high water content, low pulp, and low TSS, resulting in poor shelf life and limited export competitiveness. Developing processable varieties is critical to meet global quality standards.

Action Points

- **R&D**: ICAR and research institutes should develop varieties with low water content, high pulp, and high TSS.
- **Seed/Sapling Distribution:** Provide improved planting material to contract farmers and FPOs.
- **Capacity Building:** Train farmers on the benefits and cultivation of these varieties.
- **PPP Models:** Promote public–private partnerships for faster adoption**.**

c. The pickle and sauce industry lacks technical know-how, leading to poor raw material quality and frequent export rejections, especially due to pesticide residues.

Rationale: Technical expertise is essential to train farmers on best practices from sowing to harvesting, proper pesticide use, and to ensure compliance with international standards. A robust food safety management system is also needed to guarantee supply chain integrity.

Action Points

- **Hire technical experts** (from agriculture, food technology, etc.) to train farmers on quality production and safe pesticide use.
- **Facilitate regular follow-up with ICAR and research institutes** for guidance on pest and disease management.
- **Implement a comprehensive food safety management system** in collaboration with research institutions to ensure traceability and compliance throughout the supply chain.
- **Conduct regular audits and training** to maintain international food safety standards.

d. The Indian pickle and sauce export industry is heavily focused on traditional products for the Indian diaspora, limiting its global market reach.

Rationale: Future growth depends on product diversification, adapting to the tastes and preferences of local communities in different countries and regions. Exporting region-specific pickles and sauces will open new markets and increase competitiveness.

Action Points

- **Conduct market research to identify** popular pickles and sauces in target countries.
- **Develop and export products tailored to local tastes**, using region-specific raw materials (**Table 6.1**).
- **Collaborate with Indigenous partners** for product development and market entry. Branding and market promotion of the traditional products for their taste and health benefits can increase the market outreach.

Table 6.1: Country/Region and their preferred pickles/ sauces

Country/Region	Popular Pickle/Sauce & its type	Key Raw Materials
US	Dill Pickle (sour), BBQ Sauce (sweet & tangy)	Cucumber, dill, **vinegar**, tomato, spices
EU	Gherkins (sweet or sour), Tartare Sauce (tangy)	Gherkin cucumber, capers, herbs, mayo, **vinegar**
Japan	Tsukemono (Pickled Vegetables) (sour or umami), Soy Sauce (salty or umami)	Daikon, cucumber, eggplant, soybeans, **salt, vinegar**
South Korea	Kimchi (sour & spicy)	Napa cabbage, radish, chilli, garlic, **salt**
Vietnam	Do Chua (Pickled Veg) (sweet & sour), Nuoc Cham (sweet, sour, umami))	Carrot, daikon, fish sauce, chilli, **vinegar, lime**
Indonesia	Acar (sweet & sour), Sambal (spicy)	Cucumber, carrot, chilli, shallot, **vinegar (with sugar & turmeric for Acar), oil or vinegar (sambhal)**
UK	Branston Pickle (sweet & tangy), Brown Sauce (sweet & tangy)	Rutabaga, carrot, onion, tomato, dates, **vinegar**
Africa	Atchar (South Africa) (spicy, sour & sweet at times)	Mango, chilli, **oil**, spices

6.2 OTHER STRATEGIES

a. **Indian pickles and sauces lack brand positioning in the global market, and labelling of the products often creates issues in exports.**

Rationale: Indian pickles and sauces are often consumed only by the Indian diaspora in the foreign countries and have not gained much popularity among the locals. Further, labelling of the packages are not aligned with the importing countries' requirements and languages, creating barriers to export.

Action points:

- Launch targeted promotional campaigns (e.g., under "Brand India Food") to showcase Indian pickles and sauces at international food expos and trade fairs. Collaborate with Indian embassies, trade bodies, and diaspora groups to boost visibility and brand trust in foreign markets.
- Exporters should comply with the importing countries' labelling regulations, including clear ingredient disclosures and adherence to clean-label standards, for broader market acceptance. Emphasize the unique taste profiles and potential health benefits of Indian pickles and sauces to enhance their global appeal.
- Additionally, offering free tasting samples in supermarkets can attract local consumers and help build a customer base beyond the Indian diaspora.
- Details on the country- specific labelling requirements may be available on APEDA-website as far as possible for reliable information dissemination.

b. Tariff and non-tariff barriers also affect the export industry.

Rationale: Indian exporters face high logistics costs due to multiple testing and compliance certifications. Tariffs, NTBs and rejections without physical examinations by the importing countries lead to losses to the exporters and often discourage them to continue trade.

Action Point:

- Negotiation for better tariff and non-tariff terms under bilateral and regional trade agreements may be done to ease market entry into developed countries.

c. The pickles and sauces sector in India predominantly consists of small and medium enterprises (SMEs). These SMEs often lack the financial resources and technological infrastructure needed for modernization and automation.

Rationale: Small and medium businesses in India's pickles and sauces export industry face several challenges. They struggle to meet strict international quality and safety standards, have trouble maintaining consistent product quality, and face difficulties in sourcing good raw materials and managing logistics. Limited access to funds and modern technology makes it hard for them to upgrade their operations or invest in better packaging. Also, they lack the expertise to market their products abroad and build strong brands, making it tough to compete with bigger companies in the global market.

Action points

- To achieve economies of scale and enhance product quality, substantial investments in upgrading production facilities and adopting advanced technologies are required. Without such investments, SMEs may struggle to remain competitive internationally.
- Expand PLISFPI Benefits for SMEs: Increase the reimbursement cap for branding and marketing under the Production Linked Incentive Scheme (PLISFPI) from 3 percent to 5 percent of annual sales for SMEs, prioritizing access to funds for innovative/organic products.
- MSME-Large Industry Partnerships: Encourage contract manufacturing ties between SMEs and larger PLISFPI beneficiaries to leverage economies of scale.

To compete in stringent markets such as the European Union and the United States, there is an urgent need for the pickles & sauces industry to upgrade the infrastructure and modernize the technology. This includes automated processing lines, improved laboratory testing facilities, cold chain integration, modern packaging systems, and adoption of traceability and ERP-based compliance systems.

Simultaneously, the sector must focus on developing newer products for mainstream global markets rather than remaining confined to ethnic niches. This involves creating fusion and health-oriented variants (low-sodium, preservative-free, organic), improving shelf stability, adopting convenient packaging formats, and building strong private-label and retail partnerships. Strategic modernization combined with product innovation and branding will enable Indian SMEs to move up the value chain, strengthen competitiveness, and expand their footprint in high-value export markets.

d. The pickles and sauces industry in India lacks adequate innovation and infrastructure that affects its global positioning. Poor infrastructure of the Eastern India ports adds to the complexities of exports.

Rationale: Indian pickles don't match the taste and dietary preferences of consumers in foreign markets, limiting their appeal abroad. To succeed internationally, manufacturers need to invest in research and innovation to adapt their products to local tastes. Additionally, there are significant infrastructure challenges, especially at Eastern Indian ports like Kolkata, which lack the capacity for direct exports. As a result, shipments have to be routed through ports like Colombo, leading to longer transit times and higher shipping costs due to the need for container transfers.

Action points

- Support R&D and Product Innovation: Encourage development of new variants (e.g., low-salt, organic, vegan-friendly pickles and sauces) to cater to global health-conscious consumers. Promote food tech start-ups working on traditional and fusion recipes suitable for export.
- Incentivize Infrastructure Development: Incentivise investments in food processing, cold chain logistics, and modern packaging facilities. Promote common facility centres in food clusters to support SMEs.
- Development of Eastern ports like Kolkata where hubs of pickle and sauces manufacturing are present. Infrastructure should include smooth segments for all products and proper vessel/container availability for direct exports to the destination port.

While India's pickles and sauces have a strong export potential, unlocking new markets requires adapting products to suit international tastes, investing in quality control, and upgrading export infrastructure. Policymakers should support SMEs with easier access to finance, single line certification processes, and targeted incentives for innovation and marketing. Improving port facilities and logistics, especially in Eastern India, will reduce costs and boost competitiveness. From 2010 to 2024, Indian pickles and sauces export has been growing at an AAGR of 7.1 percent and 16.3 percent respectively. With these focused efforts and following some important strategies, India can strengthen its position as a global leader in the pickles and sauces export market, thereby increasing the exports considerably in the future.

REFERENCES

About PMKSY Scheme | Ministry of Food Processing Industries | GOI. (2024). https://www.mofpi.gov.in/en/Schemes/about-pmksy-scheme

Aditijhala. (n.d.). *Current-Market-Trends-of-Indian-Pickle-Processing-*. Scribd. https://www.scribd.com/document/478882685/Current-Market-Trends-of-Indian-Pickle-Processing

Asian Development Bank. (2020). *Potential Exports and Nontariff Barriers to Trade: India National Study*. https://doi.org/10.22617/TCS190172-2

Bomzer, R. (2025). *15+ Popular Sauces from Around the World*. Carved Culture. https://www.carvedculture.in/blogs/articles/popular-sauces-from-around-the-world

DGFT. (2024). https://www.commerce.gov.in/trade-statistics/#:~:text=The%20trade%20data%20at%20item%20level%20such%20as,form%20of%20charts%20and%20tables%20are%20also%20available.

Food preservation: making pickled products. (2024, August 8). NDSU Agriculture. https://www.ndsu.edu/agriculture/extension/publications/food-preservation-making-pickled-products

Foodbuddies.org

International Trade Centre (ITC). (2024). Trade Map - Trade statistics for international business development. https://www.trademap.org/Index.aspx

Leo, A. (2013). *Pickles* [Slide show]. SlideShare. https://www.slideshare.net/slideshow/pickles-23837093/23837093

MEA. (2025). https://www.mea.gov.in/population-of-overseas-indians.htm

MINISTRY OF FOOD PROCESSING INDUSTRIES (MoFPI). (2023-24). ANNUAL REPORT. In ANNUAL REPORT [Report]. https://www.mofpi.gov.in/sites/default/files/apznzayj1aoj8q1y1jpoiev4ha9pcx7t6z-dq6e262pimynpqfnzak7qtuy7hefsjl282bcv2eywqntdreheuxvgehuudwj7m0edrzsaznyyielssseavi2a-vweacuucs3kgmekbypeeq214wrthtlonq7lmyr2njaiakqn0r-aeuyl33nbyb-b172ozrum2p-nsbacnyulod36lrifbrk6.pdf

Mordor Intelligence. (2024). *Pickles and pickle products market size | Mordor Intelligence*. (n.d.). https://www.mordorintelligence.com/industry-reports/pickles-and-pickle-products-market

Pickle Exports from India -Volza. (2025). https://www.volza.com/p/pickle/export/export-from-india/

Pickles, jams, and sauces – The Wise Kitchen. (2014, May 10). The Wise Kitchen. https://wisekitchen.wordpress.com/category/pickles-jams-and-sauces/

PMFME-MOFPI. (2024). https://pmfme.mofpi.gov.in/pmfme/#/Home-Page

Preparation of sauces: https://www.juiceprocessline.com/what-is-the-process-of-sauce-production-in-factory/

Ringhus, A. (2024, March 1). *Pickling Styles from around the globe*. Sylt Pickling. https://syltpickling.co.uk/blogs/the-pickle-blog/pickling-styles-from-around-the-globe

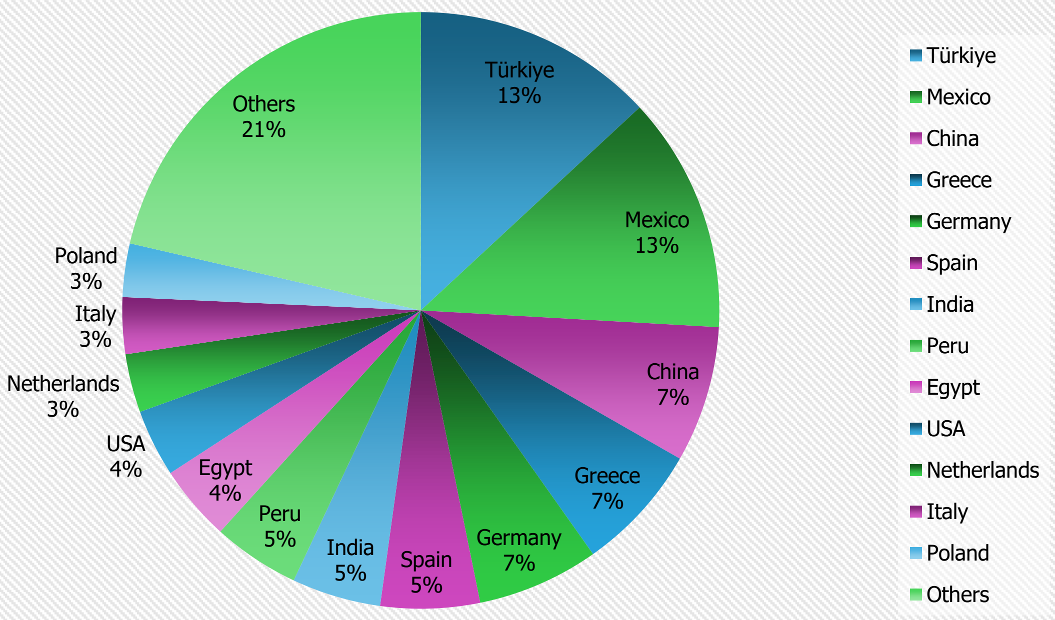
Workman, D. (n.d.). *Top pickles exporters by country*. https://www.worldstopexports.com/top-pickles-exporters-by-country/

World Food India. (2024). https://worldfoodindia.gov.in/knowledge

ANNEXURES

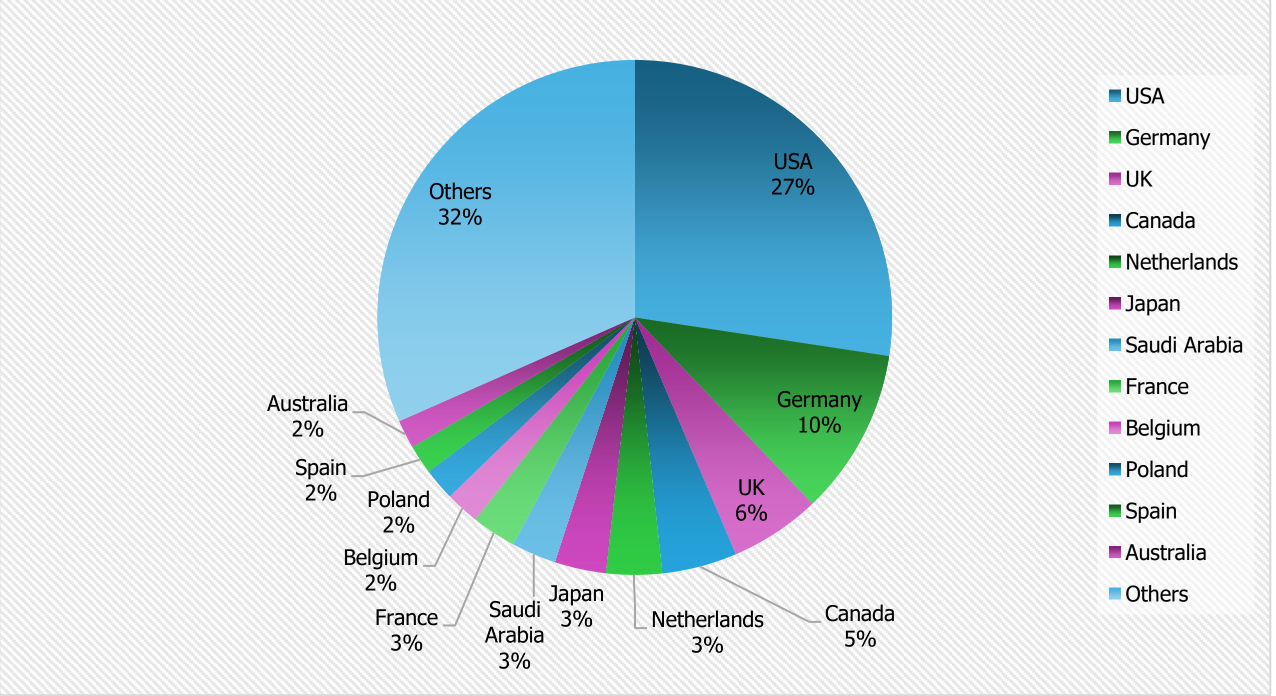
Annex 1: Global Scenario of pickles and sauces

Fig a. Global exporters of HSN 200190 in TE24; Value: USD 1.87 billion



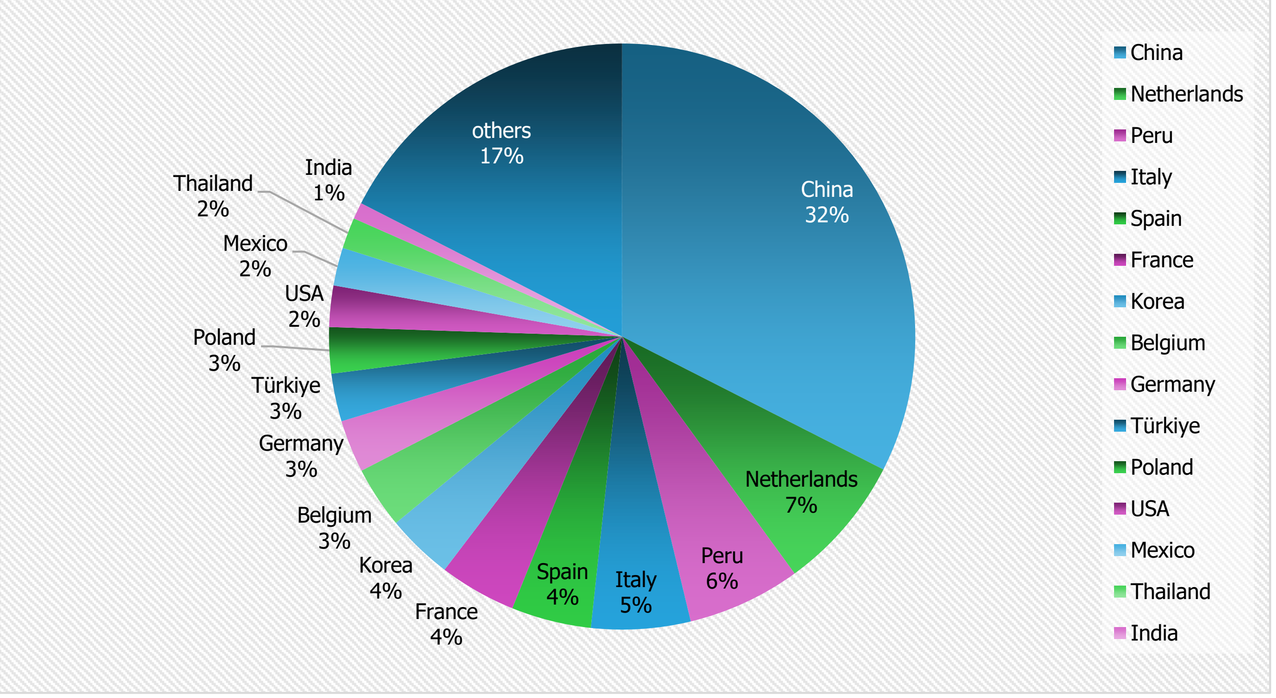
Source: ITC Trade Map, 2024

Fig b. Global importers of HSN 200190 in TE24; Value: USD 1.93 billion



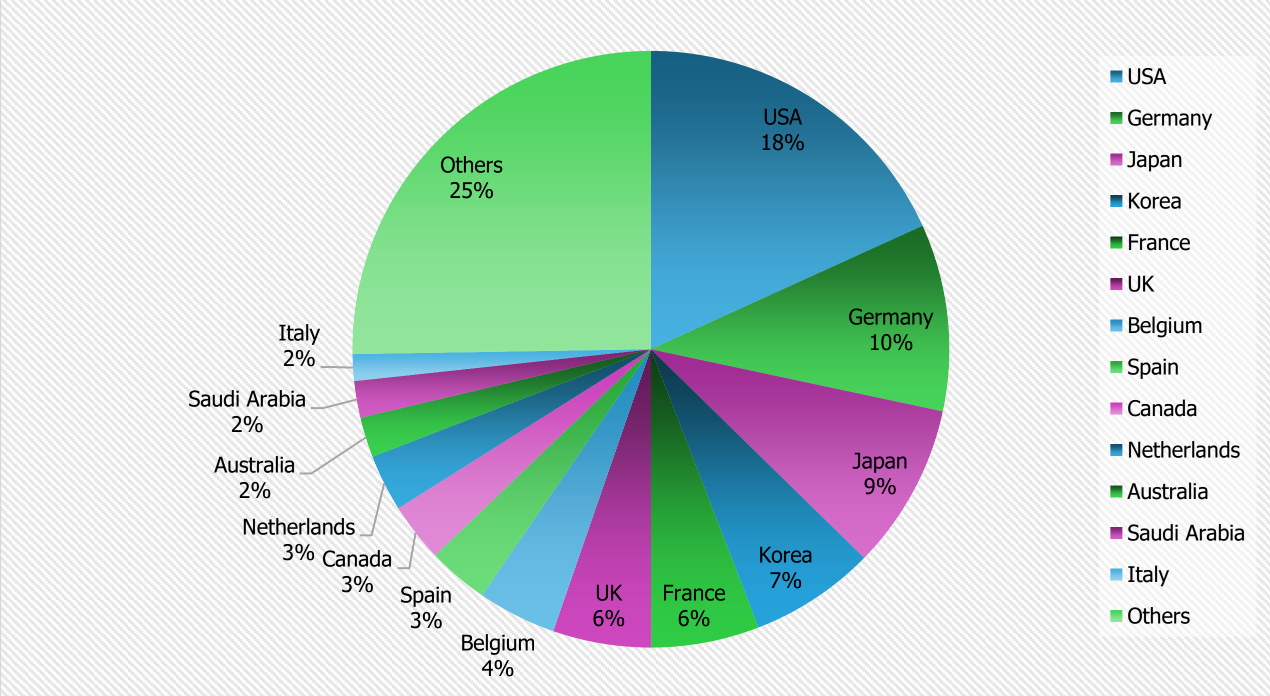
Source: ITC Trade Map, 2024

Fig c. Global exports of HSN 200599 in TE24; Value: USD 4.56 billion



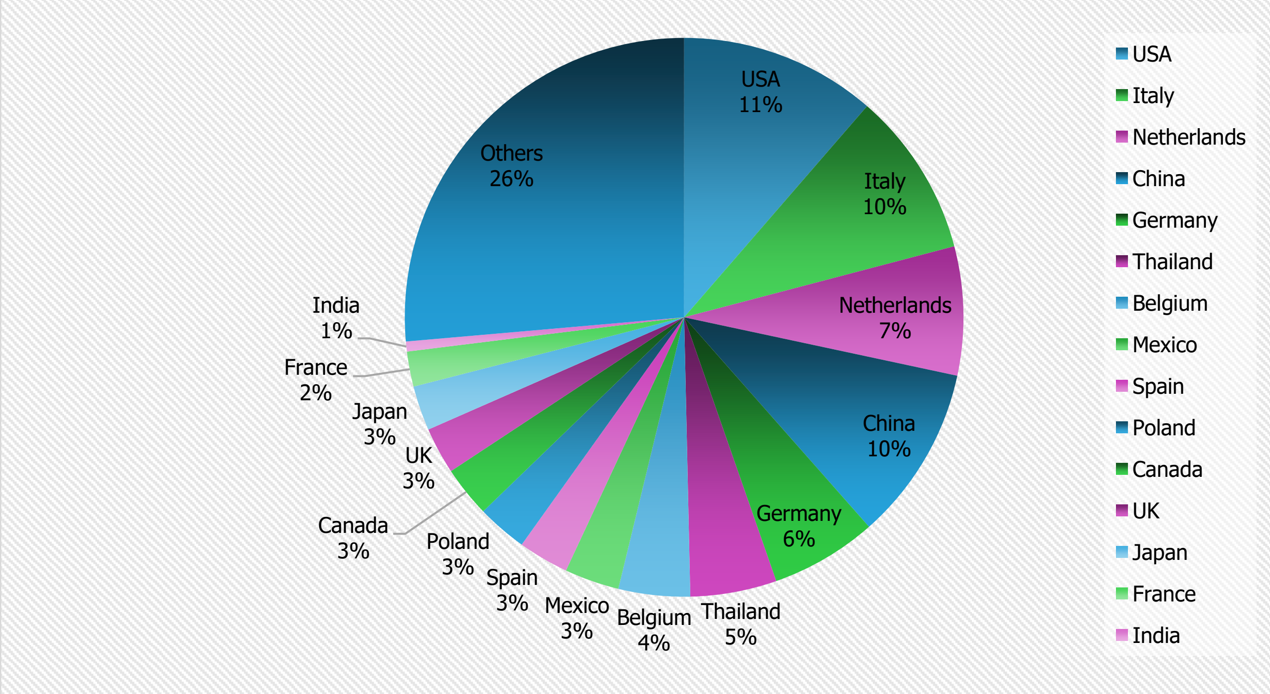
Source: ITC Trade Map, 2024

Fig d. Global imports of HSN 200599 in TE24; Value: USD 4.14 billion

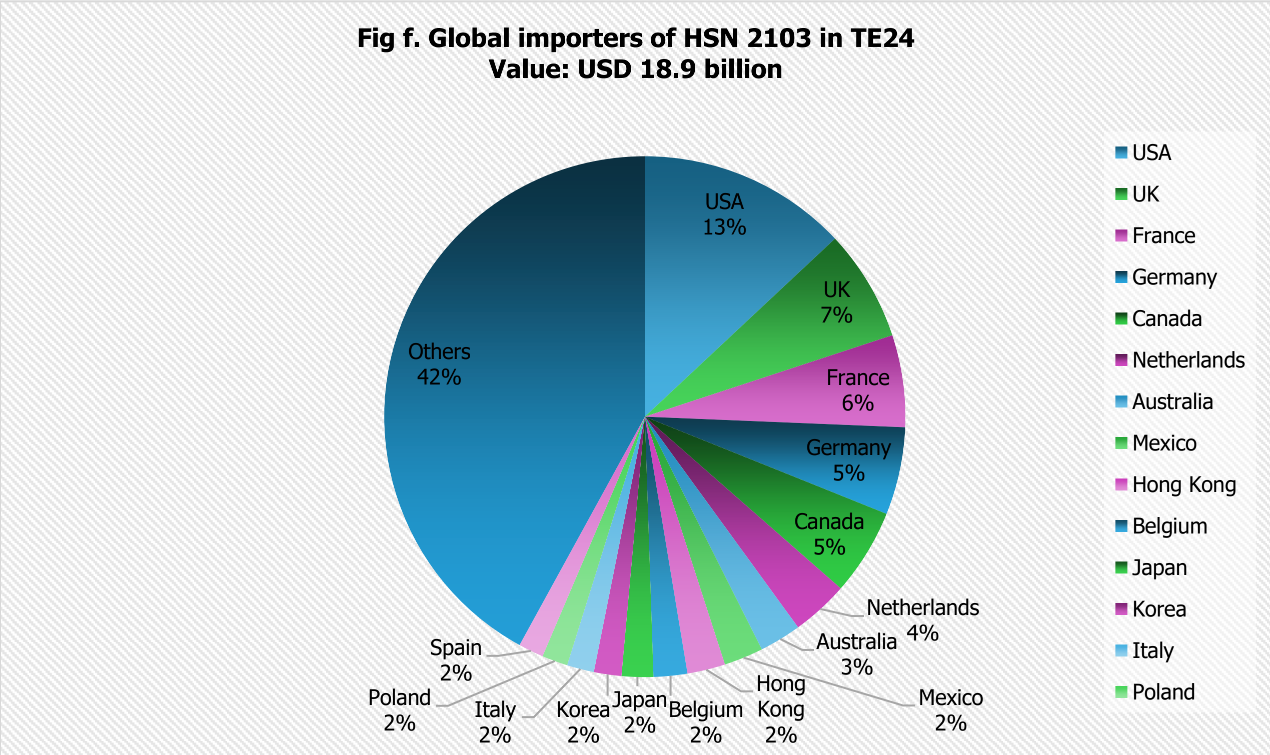


Source: ITC Trade Map, 2024

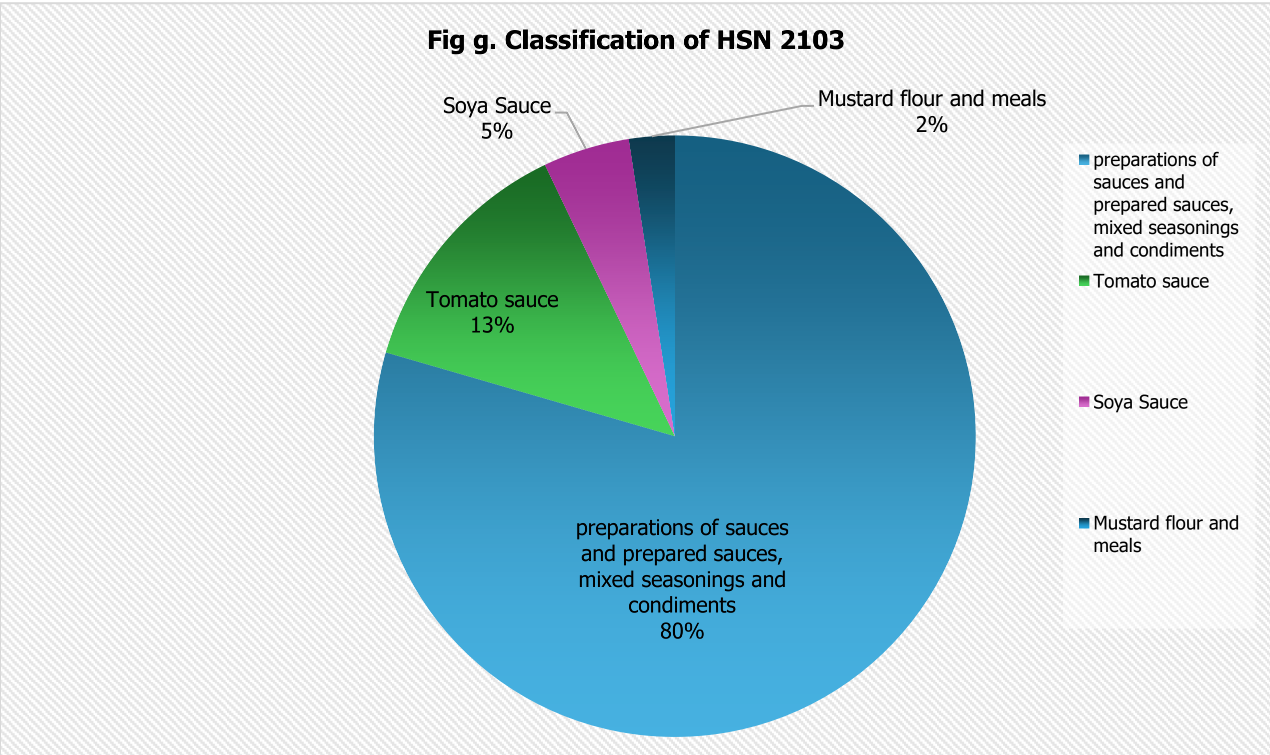
Fig e. Global exporters of HSN 2103 in TE24; Value: USD 19.5 billion



Source: ITC Trade Map, 2024



Source: ITC Trade Map, 2024



Source: ITC Trade Map, 2024

Annex 2: Pickles and Sauces export Scenario of India

Fig a. India's exports of HSN 200190 in TE24
value: USD 90.4 million

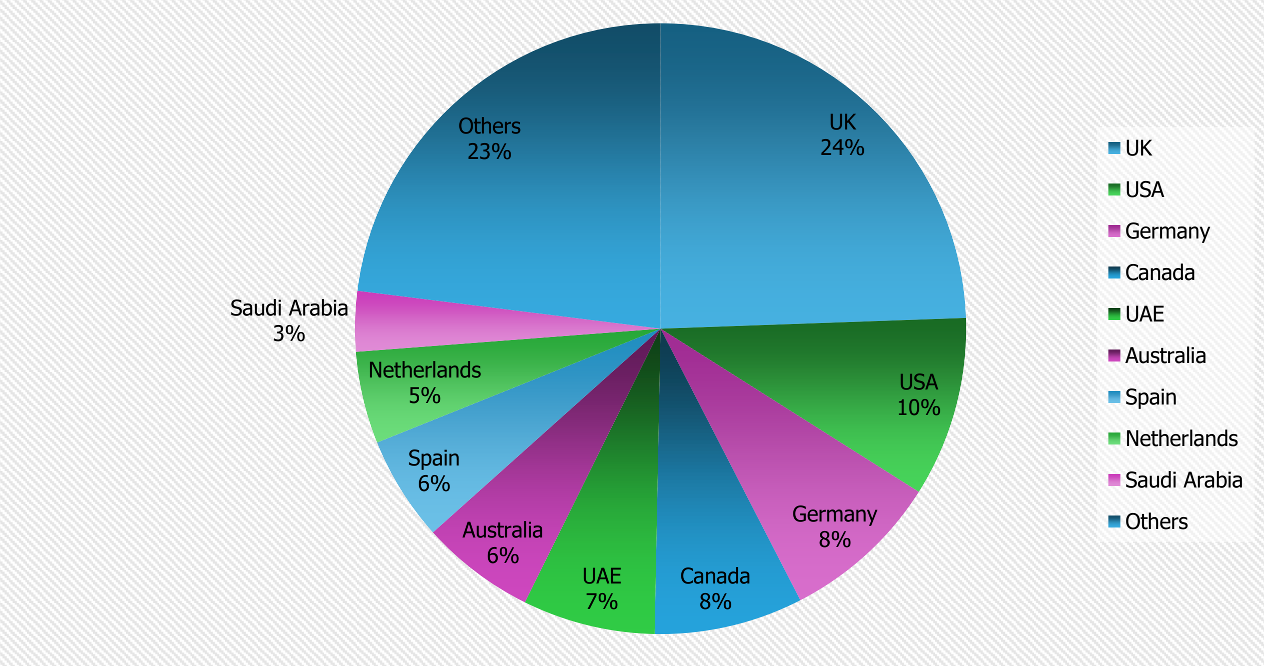
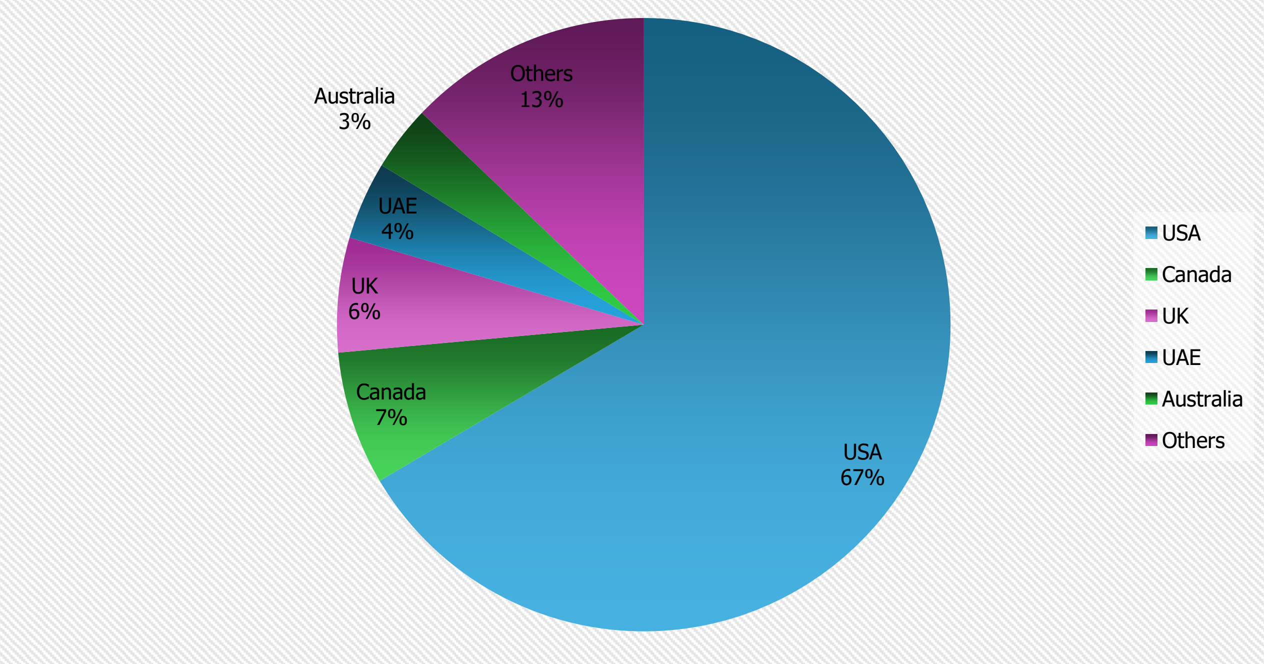
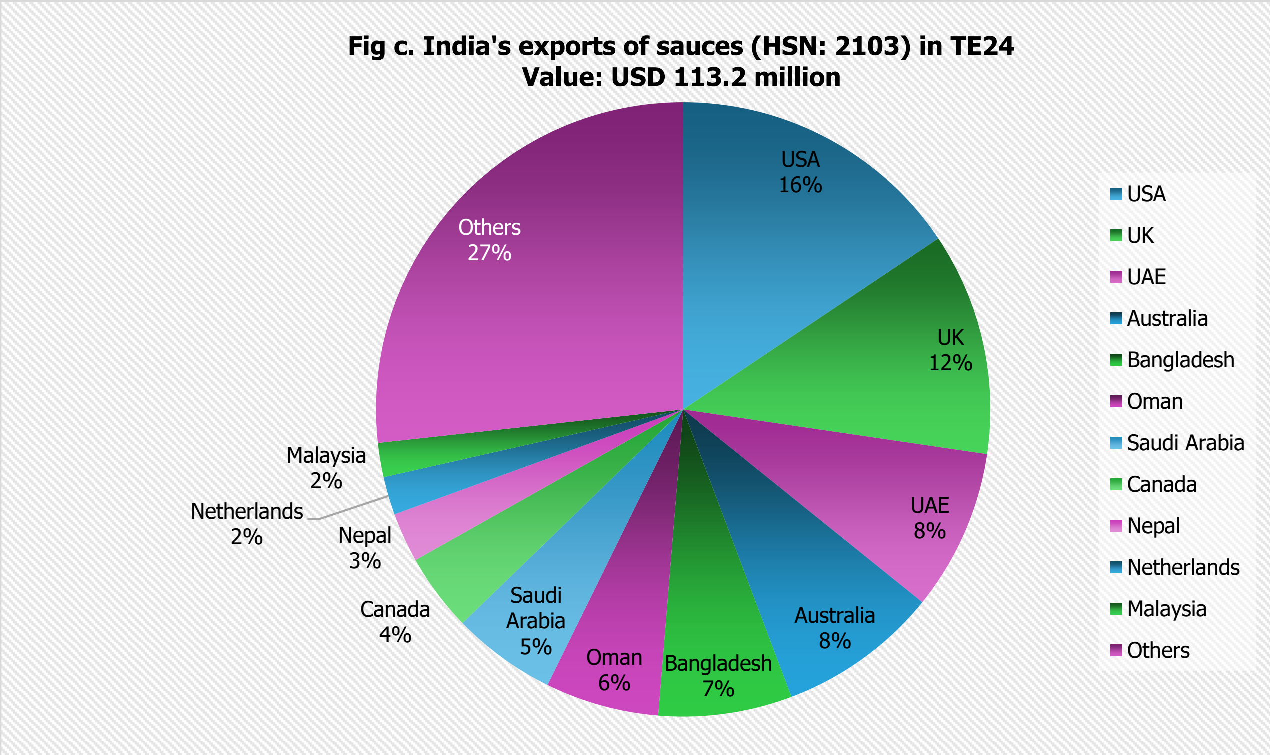


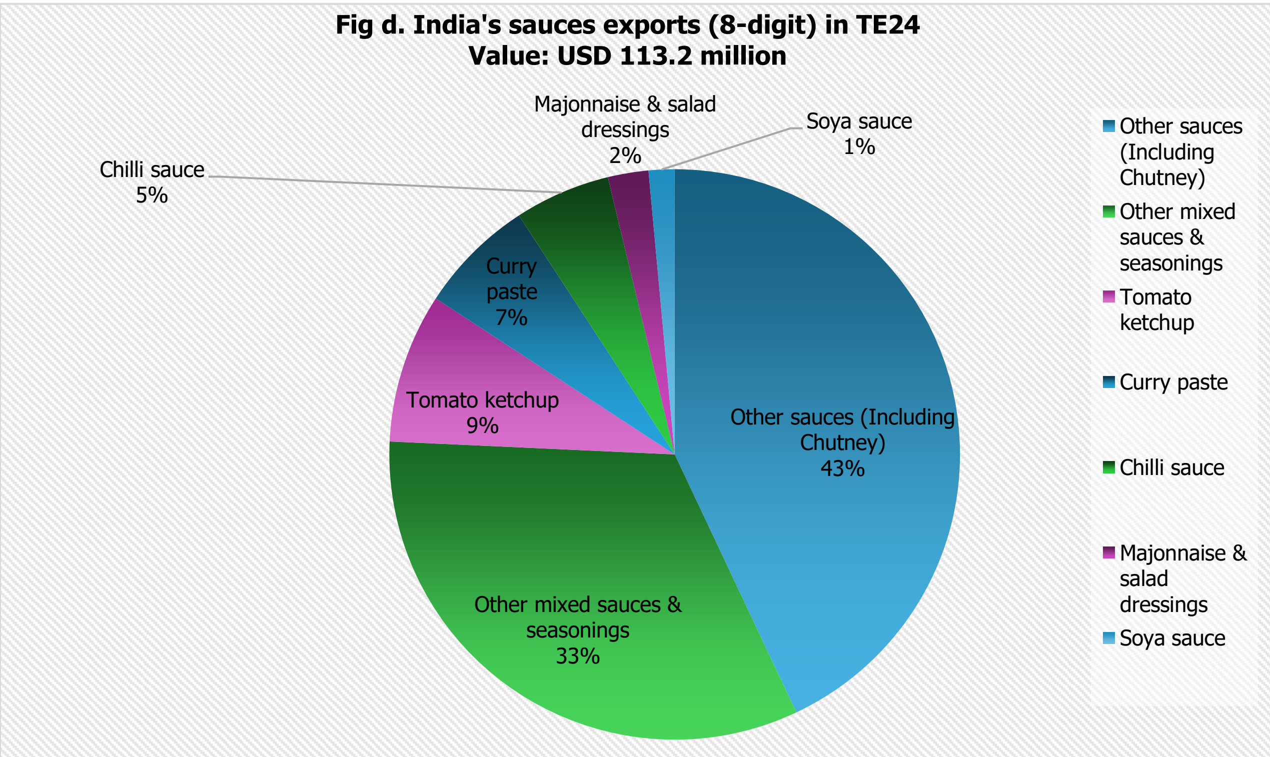
Fig b. India's exports of HSN 200599 in TE24
Value: USD 41.8 million



Source: ITC Trade Map, 2024



Source: ITC Trade Map, 2024



Source: DGFT, 2024

Indian Council for Research on International Economic Relations (ICRIER)
Our Offices:
4th Floor, Core 6A, India Habitat Centre, Lodhi Road, New Delhi-110003
The Isher Building, Plot No. 16-17, Pushp Vihar, Institutional Area, Sector 6, New Delhi-110017
O: +91 11 43112400, F: +91 11 24620180 | W: www.icrier.org | E: info@icrier.res.in

9 788199 889385