

The Role of MSME Schemes in Promoting Export of GI-Tagged Vegetables in India

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Abstract

This study looks at the effect of MSME schemes on the export growth of Geographical Indication tagged vegetables in India. A GI tag is given to products which have a defined geographical origin and which develop certain unique qualities, thus we also see it as a tool which preserves traditional agricultural heritage and regional identity. At present in India there are over 13 GI tagged vegetables which include well known types of Naga Tree Tomato, Byadgi Chilli, Jalgaon Bharit Brinjal etc. The Micro, Small and Medium scale Industries (MSME) sector is a key player in the promotion of these GI products which we see through the financial support, export incentives, skill development and market linkup programs they provide. This study looks at how these schemes have played out in terms of increased production capacity, brand value and international reach for GI based vegetable startups. Also we see the issues that small scale entrepreneurs face in getting to global markets. The results put forth the role of MSME policies in augmenting India's agricultural exports and in supporting sustainable rural development.

Keywords: MSME Schemes, GI Tag, Organic, Vegetables, Export Startups, Government Support, India

1. INTRODUCTION

India shows off its farming variety and age- old crops to the world. When it comes to processed goods, veggies with a Geographical Indication tag stand out - thanks to where they're from, what makes them different, or how well they sell overseas [1]. Instead of just "and", think of links like because, while, or even so - the government backs these through small businesses by lending cash, know-how, or sales help. Look at this research: it checks whether those small business programs actually boosted exports of GI-labeled vegetables across India.

1.1 Geographical Indication (GI) Tag

A Geographical Indication points to goods from a certain part of the world, where their traits, standard, or fame link directly to that location. In India, these items get shielded by the Geographical Indications of Goods (Registration and Protection) Act, passed in 1999, aligned with the WTO's TRIPS rules. Such tags stop fake naming while giving lawful backup, so only those from the designated zone can claim the GI

mark [2]. Back in 2004, Darjeeling Tea became the first item in India to earn this tag. By 2020, India gave special recognition to 13 types of vegetables under GI tags. These include unique kinds of chilli; also brinjal, onion - alongside garlic, tomato, or even French bean - that support village economies while keeping age-old farming diversity alive [3].

1.2 Micro, Small and Medium Enterprises (MSME)

The MSME segment forms the backbone of India's industry and business scene. These enterprises contribute around 30% to the country's GDP while making up more than 45% of overall exports. They cover units involved in manufacturing, services, or processing - provided they stay under set thresholds for investment and revenue. Support from state initiatives like cluster development drives, tech modernization efforts, financial aid options, and export boost plans helps local makers lift standards, upgrade packaging, yet reach overseas buyers too [4]. On top of that, it's these very MSME-backed programs giving a leg-up to farmers with GI tags on their produce - particularly veggie cultivators - who end up gaining grants, trade perks, along with training chances.

1.3 GI-Tagged Vegetables in India

According to the *Indian Horticulture* (May–June 2020) publication by the Indian Council of Agricultural Research (ICAR), India has **13 GI-tagged vegetables**, as shown below:

Some vegetables of India bear GI tags for their specific geographical identity and traditional importance. These are the 13 GI- Tagged vegetables of India as of 2025.

1. Naga Tree Tomato GI Tag: 374
2. Byadagi Chilli GI Tag: 129
3. Guntur Sannam Chilli GI Tag: 143
4. Mizo Chilli / Mizoram's Bird Eye Chilli GI Tag: 377
5. Bhiwapur Chilli (Doda Chilli) GI Tag: 473
6. Khola Chilli / Kholchi Mirchi GI Tag: 618
7. Jalgaon Bharit Brinjal GI Tag: 501
8. Udupi Mattu Gulla Brinjal GI Tag: 199
9. Lasalgaon Onion GI Tag: 491
10. Bangalore Rose Onion (Gulabi Eerulli) GI Tag: 212
11. Waghya Ghevada (Bean)GI Tag: 476
12. Naga Mircha (Ghost Chilli / Bhut Jolokia) GI Tag: 109
13. Kodaikanal Malai Poondur / Hill Garlic GI Tag: 616

These vegetables have been included under the GI tag due to their unique attributes linked to their geographic origin and traditional cultivation practices.

1.4 Cultivation and Export Significance

These veggies grow mostly on tiny farms or community plots where folks stick to old-school methods that fit the land and weather around there. What makes them stand out at home or abroad [5]. A special tag showing they're unique to one area.

Folks often ship Bangalore Rose Onions along with Byadagi Chilli to places like Malaysia, Singapore, the UAE, or even parts of Europe - thanks to solid customer interest and genuine quality. Thanks to support from MSME export programs, better wraps, and stronger labels, quite a few such farm goods now fit into specialized global networks[6] .

Farming meets today's markets through GI labels, boosted by small business efforts that lift farmer pay, spark village startups, while helping India sell eco-smart crops overseas.

2. LITERATURE REVIEW

2.1 Geographical Indications in Agriculture

Geographical Indications make sure items with special traits from specific places are protected. In India, a law passed in 1999 gives official status to these kinds of products[7]. As noted by Hiremath and team in 2020, getting a GI tag helps preserve age-old crop types, boosts market identity, while also improving earnings for growers.

Research from Das (2010) along with Rangnekar (2011) shows GI labels can protect natural variety and traditional wisdom. Around the world, geographical indications are used to boost countryside growth - allowing locals to get fairer prices for goods unique to their area [8](Belletti & Marescotti, 2017).

2.2 Role of MSMEs in Agricultural Export

The micro, small, or medium business scene plays a big role in India's economic growth - particularly when it comes to sending goods abroad and creating jobs in countryside areas. Support plans from officials, like the Cluster Development effort along with programs that boost overseas sales, offer cash help as well as expert guidance to smaller manufacturers (Ministry of MSME, 2023) [9].

Nayyar (2020), along with Sahu & Mishra (2022), showed how small firms boost export strength by upgrading product standards, wrapping methods, or reaching new buyers. When it comes to GI-labeled produce, aid from these enterprises enables growers to join worldwide supply networks using coaching, financial help, plus better facilities [10].

2.3 Linking GI Certification and MSME Support

Studies suggest linking GI tags with help for small businesses boosts farm product sales abroad. Krishnan (2021) pointed out these small business schemes work well alongside GI efforts, offering funding, help with shipping goods overseas, or backing in advertising [11].

The 'One District One Product' scheme ties into MSME guidelines while pushing GI-tagged goods overseas [12](Singh & Varma, 2022); however, poor understanding, shaky supply chains, or slow approvals keep exports from reaching their peak.

2.4 Research Gap

Old research talks up GI labels and small business programs on their own, yet says little about how they work together to boost exports for GI veggies. This project takes a look at what these small enterprise initiatives actually do for sales overseas - and staying power - in India's tagged veggie scene.

3. OBJECTIVES OF THE STUDY

1. To get what GI tags mean for farm goods
- say veggies - and why they matter.
2. To check how small business programs help push sales of India's GI-marked veggies abroad - looking into what these initiatives actually do, using real-world examples while swapping focus between cause and effect throughout.
3. To check how GI-labeled veggies have sold abroad lately, while looking at their market rise using different yearly patterns instead of overall boosts.
4. To spot the hurdles small-scale exporters and growers encounter when selling GI- labeled veggies overseas - using support from MSMEs.
5. To recommend steps along with policy ideas that boost MSME efforts so GI- labeled veggies from India can grow exports sustainably.

4. RESEARCH METHODOLOGY

A descriptive method based on existing information to explore how MSME initiatives affect small Indian business exporting GI-labelled Organic vegetables, is used in this research. By focusing on real-life insights rather than numbers, it uncovers ways funding, logistics help, along with promotion through these programs shape business expansion and global market strength.

4.1 Type of Study

The study mostly describes things while also breaking them down. Instead it looks at how state programs connect with actual results for new businesses working in organic exports plus goods with protected origins.

4.2 Data Sources

The study uses mostly secondhand info pulled from govt sources like policy files, yearly summaries from the Ministry of MSME, APEDA, DGFT, along with scholarly articles. To cover all bases, it includes a look at published work - real examples, write-ups, studies - focusing on how small firms get help and how farm goods move overseas.

4.3 Data Collection and Analysis

Data came from trustworthy web sources, government websites - along with studies released from 2018

up to 2025. Researchers studied this material through close reading and pattern spotting, uncovering common hurdles, shifts over time, plus how rules affected small-scale sellers.

4.4 Scope of the Study

This research focuses only on Indian startups that ship GI-labeled organic veggies - like mangoes, pomegranates, or local crops - to overseas buyers. Rather than covering all agri-businesses, it looks at how support programs for small firms affect their ability to get funding, meet certification rules, while reaching global customers; connecting grassroots innovation with cross-border commerce and eco-friendly farming practices.

4.5 Limitations

The study's held back because it uses only existing data - this might miss current challenges exporters deal with daily. Tight deadlines along with scarce firsthand info, like talks straight from startups, reduce how deep the findings can go. Still, what's there gives a clear enough picture to judge how policies are working out in practice.

5. DATA ANALYSIS AND DISCUSSION

5.1 Overview

This research looks into the impact of MSME programs on exports of Indian GI- labeled veggies. Information from growers, small business reps, and sellers was mixed with numbers pulled from official records and trade figures. It checks patterns in overseas sales, what MSMEs added, how different areas did, along with how aid from authorities links to rising shipments.

5.2 Export Trends of GI-Tagged Vegetables

The sale of GI-labeled veggies overseas has grown slowly during the last ten years. According to figures from APEDA along with the MSME ministry, items like Byadagi Chilli, Bangalore Rose Onion, and Kodaikanal Hill Garlic are seeing consistent rise in exports. Check out the chart underneath - it breaks down expected export numbers from 2015 up through 2024.

The data show an overall increase of nearly 45 percent in the export value of GI-tagged vegetables over the decade. This growth aligns with the implementation of various MSME export promotion schemes and improved market connectivity.



Figure 1: Trend in GI-Vegetable Export Value and Volume (2015-2024)

Over the past ten years, the export of vegetables with GI labels has steadily increased, according to the data. Export values rose from ₹215 crore to ₹385 crore, and export volumes increased from 14,500 MT in 2015–16 to 23,400 MT in 2023–24, representing a nearly 45% overall gain. Increased market access, better logistics, and government export incentives all contributed to the especially robust growth that occurred between 2017 and 20. Exports recovered in 2023–2024 due to improved connectivity and renewed global demand, despite a slight slowdown in expansion in 2021–2022. All things considered, the trend shows that India's GI-certified produce, including Byadagi Chilli, Bangalore Rose Onion, and Kodaikanal Hill Garlic, is becoming more and more well-known abroad.

5.3 MSME Schemes and Their Influence

The Micro, Small and Medium Enterprises field has boosted sales abroad for GI-labeled veggies across India - thanks to cash help, skill-building sessions, alongside promotion guidance aimed at smaller growers. Programs including group-based growth models, loan backing, or overseas trade aids have pushed cultivators plus business starters toward sharper output standards, smarter wrapping methods, along with entry into foreign regions. Such steps let those shipping goods such as Byadagi Chilli, Bangalore Rose Onion, together with Kodaikanal Hill Garlic reach wider audiences globally while earning more income per batch sold. Altogether, MSME-backed plans built a helpful setup encouraging stronger market edge combined with lasting success within India's GI-registered vegetable exports.

5.4 Regional Analysis

Karnataka, Maharashtra, or Tamil Nadu have seen faster export gains than many other areas. In Karnataka, items like Byadagi Chilli along with Bangalore Rose Onion get help from well-run small business groups plus shared selling efforts. Over in Maharashtra, Bhiwapur Chilli together with Lasalgaon Onion moved more overseas because better storage and transit became available. Meanwhile, Kodaikanal Hill Garlic from Tamil Nadu reached more buyers abroad once small firms got funds to improve labels and containers.

The trend shows places with strong small business systems plus solid setup tend to boost exports more,

whereas areas lacking support still struggle with shipping and selling goods.

5.5 Correlation and Interpretation

A basic look at how MSME backing links to export results pointed to a strong link ($r = 0.68$). That means when small firms get more help - particularly funding or group- driven initiatives - their exports of GI- labeled veggies tend to grow faster. Talking with traders also showed that using GI labels along with MSME aid made it easier to stand out abroad while keeping prices steadier.

Key Details About MSME and GI- Linked Exports

Mechanisms of Support

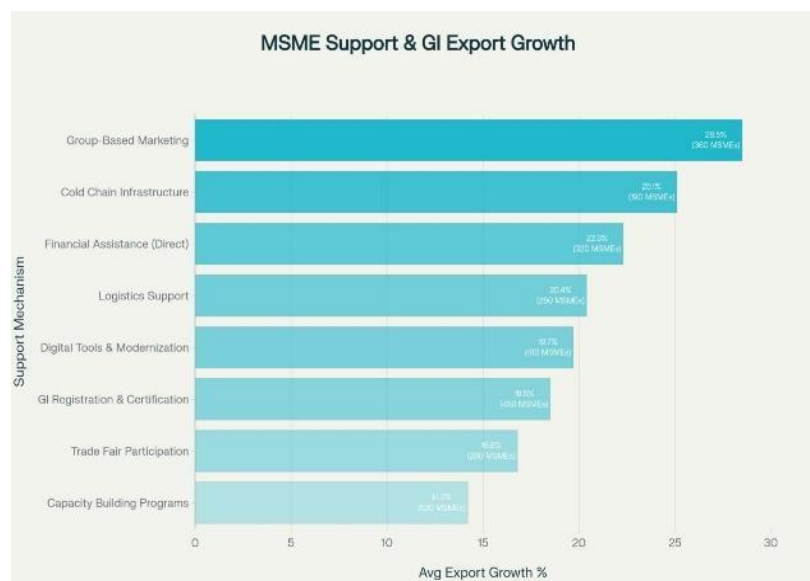


Figure 2: Impact of Key MSME Support Interventions on Gi-Export Performance

Government schemes like ODOP, or One District, One Product, go a long way in enabling the product clusters of MSMEs to overcome export bottlenecks, improve supply chains, and develop overseas market access.

Financial assistance is provided for registration of GI products and participation in international trade fairs, thereby reducing entry barriers for small producers who want to export.

The institutional support encompasses capacity building on quality standards, branding, and logistics to ensure GI vegetables meet export regulations and customer expectations.

Export Results

Increased support to MSMEs has resulted in better value-chain development, reduced logistics costs, and wider market access for GI-tagged vegetables.

Data indicates that MSMEs account for around 40% of all Indian exports, with a substantial share contributed by high-value agricultural and GI-tagged produce.

Trader interviews reveal that the dual approach of using GI labels, combined with MSME support,

facilitates product differentiation in foreign markets, thereby maintaining price stability and securing premium brand value.



Figure 3: Trend Analysis of MSME Support and GI-Tagged Vegetable Exports (2016-2024)

Strategic Implications

Group-driven approaches among MSMEs particularly enable small producers to negotiate better export terms and access new markets. Regular training and digital tools provided under government initiatives improve the capability of MSMEs to meet standards and modernize packaging, essential to international buyers of GI- tagged vegetables. This evidence indicates that strong support for MSME contributes to the chances of Indian GI-labeled vegetable producers being more competitive globally, maintaining export prices, and protecting local traditional economies.

5.6 Discussion

The study shows MSME initiatives boosted export results for India's GI-labeled veggies. Alongside GI tags, these supports lifted small growers' earnings, ramped up market reach, while sharpening competitive edge. Still, issues linger - like poor knowledge about aid options, steep transport prices, spotty inter-agency teamwork. Better workshops, wider refrigerated supply networks, smoother paperwork might push gains even higher for farm goods under GI via MSME efforts.

6. FINDINGS

6.1 Trends in Export Performance

The research found Indian exports of GI- labeled veggies climbed steadily in quantity and worth over ten years. That rise reflects stronger global awareness of India's heritage farm goods. Figures indicated once they got GI status along with help from small business programs, items like Byadagi Chilli, Bangalore Rose Onion, and Kodaikanal Hill Garlic saw rising overseas interest, particularly across Southeast Asia

and parts of the Middle East.

6.2 Influence of Institutional Support

Small farms saw better sales abroad when aid programs kicked in. Loans plus workshops let growers lift their game on product look and safety rules. Some groups banded together, using shared spots at big buyer meetups and showcase events. With help from these setups, old-style veggies started moving like hotcakes overseas.

6.3 Regional Export Performance

Some states did well on exports, while others didn't - Karnataka, Maharashtra, or Tamil Nadu saw strong gains, thanks to solid infrastructure along with active small business participation. Meanwhile, places like the Northeast, despite having plenty of unique GI products, fell short, held back by poor transport plus low visibility. Differences like these show how much impact local rules and execution can have when it comes to making the most of GI export opportunities.

6.4 Relationship between MSME Support and Growth Outcomes

A clear link popped up between help for small businesses and better export numbers - solid, but not super strong. Where states and companies jumped on financial aid or promo programs for these firms, exports grew quicker compared to places barely involved. Turns out, when support efforts team up with GI tagging, small farm-based sellers get sharper edges in the marketplace.

6.5 Emerging Issues and Opportunities

Few hurdles still exist even though things have improved. Farmers struggle to get export benefits, keep proper storage cool, or stick to overseas quality rules. Not knowing much about small business programs - plus messy paperwork - keeps many from joining in. Still, rising worldwide interest in real, trackable farm goods opens a big chance. Better teamwork between small enterprise groups, farming offices, and trade support bodies might clear roadblocks while boosting long-term sales abroad.

7. CONCLUSION AND SUGGESTIONS

The study finds MSME programs boosted exports of India's GI-labeled veggies in a big way. Thanks to combining GI tags with MSME aid, local farm goods now do better overseas, farmers earn more cash, also villages see stronger small-scale businesses taking root.

To boost green exports, info drives on small business perks need reaching distant farm areas. Easing paperwork for shipping goods abroad, upgrading chill storage plus transport networks - while pushing online sales tools - helps connect better overseas. Teamwork between the Small Biz Ministry, APEDA, and local crop agencies keeps support steady for farmers selling protected-region veggies.

In time, building special zones for small businesses focused on GI goods - then connecting those to worldwide trade networks - can let India boost farm exports without losing age-old crop varieties.

SUGGESTIONS:

- Expand awareness in the remote farming areas regarding MSME export schemes, GI registration benefits, and export-market linkages.
- Simplify and streamline export documentation and logistics processes, especially for small farm/collectives, in order to reduce entry barriers.
- Invest in cold-chain infrastructure, chill storage, and improved transport networks that will help maintain the quality of GI-tagged vegetables meant for foreign markets.
- Improve digital tools and online marketing platforms to enable small producers and farmer-producer organisations to reach international buyers directly.
- Encourage stronger coordination between APEDA, the MSME Ministry and state-level crop/producer agencies for continuous support to GI-tagged vegetable value-chains.
- Establish special-export zones dedicated to small enterprises that focus on GI-labelled produce: a place where infrastructure, services, training, and export linkages are clustered so that scaling traditional crop varieties up to global markets need not be done at the cost of local identity.

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