

Geographical Indication for Horticulture Commodities in Northeastern India: Opportunities and Challenges

Northeastern India, known for its lush landscapes and rich cultural diversity, has many horticultural treasures that have been granted Geographical Indication (GI) status. These GI tags celebrate these products' unique qualities, traditional farming practises, and cultural significance to local communities as well as their geographical origin. This article explores Northeastern horticultural commodities with GI status, their uniqueness, their potential, and the challenges they face in obtaining and maintaining these exclusive tags. From the fragrant Khasi Mandarin of Meghalaya to the fiery Naga Mircha of Nagaland, these products tell a story of tradition, flavour, and the ecologically diverse region's endless potential.

NORTHEASTERN India has many unique horticultural treasures protected by Geographical Indication (GI) tags. These tags indicate the products' origin, unique qualities, and cultural significance. There are ongoing initiatives that aim at preserving and advancing the utilisation of traditional medicine and breeding programmes. Many GI-designated horticultural products in Northeastern India show rich bio diversity of the region.

Northeastern Region Horticultural Commodities with GI

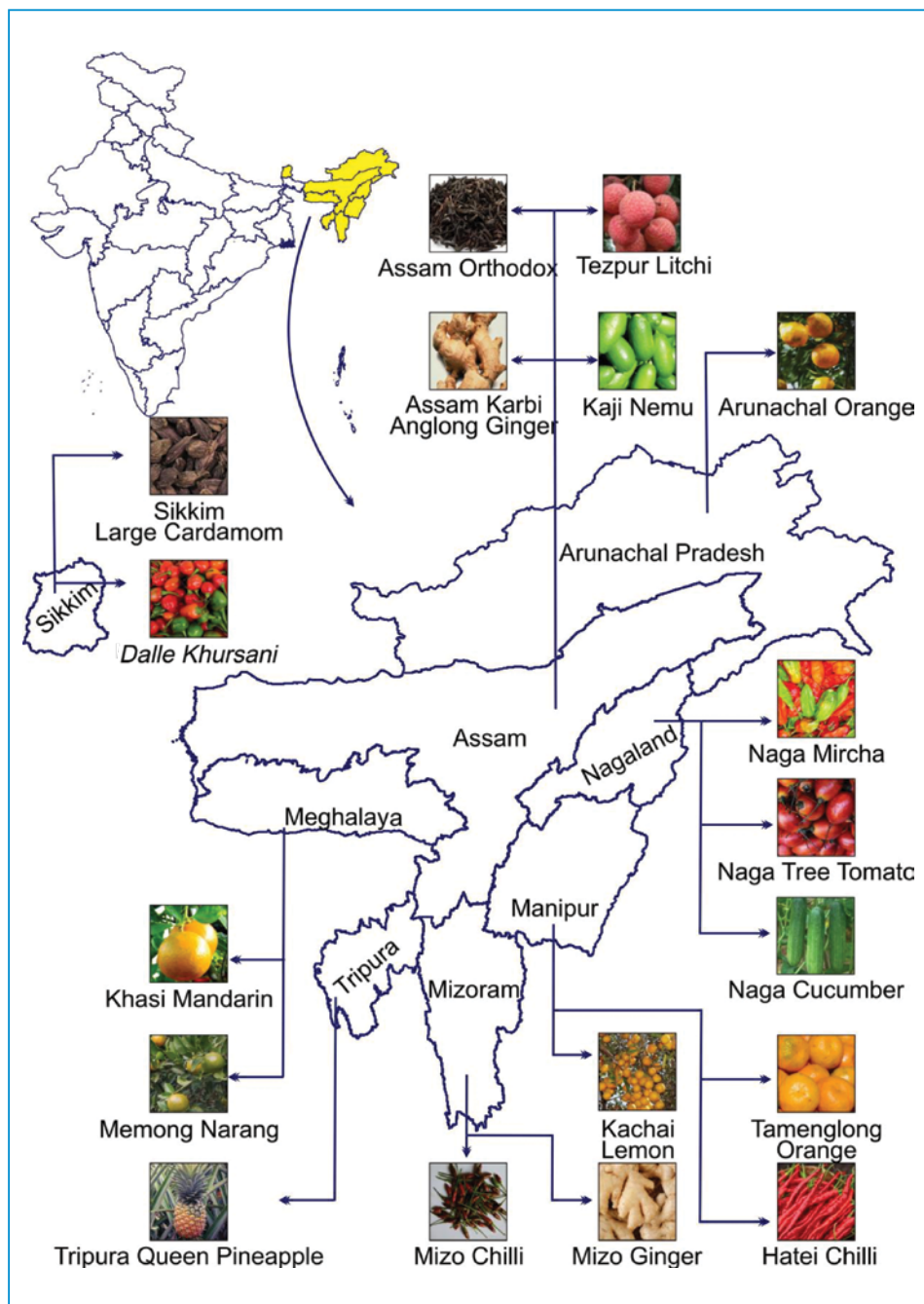
The Khasi Mandarin, cultivated in the hilly terrain of Meghalaya, is regarded as a remarkable example in the field of horticulture. This particular citrus variety flourishes in the East Khasi Hills, West Khasi Hills, and Jaintia Hills regions, benefiting from the distinctive taste attributed to the sub-tropical climate and fertile soil found in these areas. The Tamenglong Orange, which is prominently cultivated in the Tamenglong district of Manipur, garners significant attention due to its distinct flavour profile characterised by a delightful combination of sweetness and sourness, along with its notable abundance of juice content. The geographical area, appropriately referred to as the "Santra bowl" of Manipur, commemorates the copiousness of this distinctive citrus cultivar. The Arunachal Orange, indigenous to the sub-tropical areas of Arunachal Pradesh, exhibits notable characteristics such as a well-defined spherical form and a moderately thick rind that undergoes a colour transformation to orange upon reaching maturity.

When one relocates to Ukhrul District in Manipur, they come across the Kachai Lime, which is renowned for its distinctive taste and various health advantages. It

Geographical Indication Recognized Horticulture Products of Northeastern India

Commodity and GI name	Region
Arunachal Orange	Sub-tropical regions of Arunachal Pradesh
Khashi Mandarin	Khasi Mandarin in Meghalaya
Kachai Lime	Ukhrul District, Manipur
Memong Narang	Garo Hills of Meghalaya
Kaji Nemu (Assam Lemon)	Assam
Tamenglong Orange	Tamenglong district of Manipur
Tripura Queen Pineapple	Tripura
Tezpur Litchi	Assam
Mizo Chilli	Mizoram
Elephant Chilli	Ukhrul Central Tehsil of Ukhrul District in Manipur
Naga Mircha	Nagaland
Dalle Khursani	West, South and East districts of the state in the central hills of Sikkim
Naga Tree Tomato	Nagaland
Naga Cucumber	Mokokchung, Maun, Wokha, Kohima and Porenzile of Nagaland
Sikkim Large Cardamom	Sikkim
Assam Karbi Anglong Ginger	Assam
Mezo Ginger	Mizoram

serves as a fundamental component in Manipuri cuisine, augmenting the flavours of local dishes and pickles. The Memong Narang, a distinctive wild citrus species, holds both ecological significance and cultural heritage in the verdant Garo Hills of Meghalaya. The Assam Lemon,



exceptional flavour and superior quality. The aforementioned pineapple variety serves as a testament to the rich agricultural heritage of the region. The Tezpur Litchi, a highly esteemed fruit variety, is prominently grown in the central region of Tezpur town, as well as in the adjacent village of Porova, within the state of Assam. The distinctive flavour profile and inherent qualities of this product have resulted in its recognition and designation as a GI.

Mizoram takes great pride in showcasing the Mizo Chilli, also referred to as Vaimarcha, a renowned spice and vegetable crop that flourishes in the region's varied climate and topographical conditions. The unique characteristics and widespread appeal of this particular element contribute significantly to its status as an essential component of Mizoram's cultural and gastronomic heritage. Located in the central region of Ukhrul District in Manipur, Elephant Chilli distinguishes itself due to its distinctive and exceptional flavour. The distinct characteristics of this region are attributed to its practise of exclusive cultivation.

Naga Mircha, alternatively referred to as Raja Mircha, has gained renown as the most piquant chilli pepper globally. The plant is cultivated in diverse regions within the state of Nagaland, where it holds a significant position in the region's vibrant culinary heritage. Sikkim showcases Dalle Khursani,

commonly referred to as Kaji Nemu, is widely distributed throughout the state of Assam, particularly in the Upper Assam area. The Assam Lemon has been granted a Geographical Indication (GI) tag due to its commendable adaptability in various culinary and medicinal contexts.

The Naga Tree Tomato, which is predominantly cultivated in the region of Nagaland, is highly esteemed for its nutritional content and its ability to be harvested throughout the year. The Naga Cucumber, cultivated using organic methods across various geographical regions in Nagaland, holds significant importance within the shifting cultivation practises observed by diverse Naga tribes. Every indigenous community cultivates distinct cucumber varieties, each possessing its own unique set of characteristics and flavours.

The Queen Pineapple of Tripura exemplifies the distinctive geographical and climatic conditions of the region, which play a significant role in enhancing its

a renowned cultivar of red cherry pepper that is cultivated solely in the central hills of the region. The exceptional chilli variety is characterised by its fiery taste and intense pungency.

Sikkim has established itself as a prominent global leader in the production of large cardamom, accounting for more than 85% of India's overall production. The distinctive climatic and geographical characteristics of the state have rendered it a prominent centre for the cultivation of large cardamom. The Karbi Anglong District in Assam is renowned for its cultivation of ginger, encompassing a range of varieties such as Nadia, Bhola, and Aizol, which are widely cultivated in the region. The region's agro-climatic conditions are particularly favorable for ginger production. Mizo Ginger, a significant cash crop in the state of Mizoram, is prominently cultivated and presented. Cultivated in a sub-tropical hill zone with acidic soil, local cultivars like Thingpui, Thinglaidum,

and Thingaria are grown extensively, each boasting its unique flavour.

The horticultural specimens in question exemplify the extensive range and cultural legacy of Northeastern India, with each being officially recognised and safeguarded through a GI designation, thereby acknowledging and commemorating their distinctive attributes.

Unique Fruits and Vegetables Await GI Recognition

It is apparent that the registration of GI status for horticultural commodities from Northeastern India has been limited thus far. The aforementioned area, widely recognised for its abundant variety of flora and fauna and distinctive methods of farming, possesses a valuable collection of extraordinary fruits and vegetables, each intricately intertwined with the region's indigenous customs and environmental conditions. It is crucial to acknowledge that there are several other horticultural products originating from this region that are highly suitable for GI labelling. The Northeastern states exhibit a wide range of climatic conditions, soil characteristics, and traditional agricultural practises, thereby offering numerous prospects for additional commodities to attain prestigious recognition. GI tags not only provide legal protection, but also facilitate the utilisation of unique characteristics possessed by products, allowing them to access new markets and consequently improving the economic prospects of the respective region.

In the Northeastern region, there exists a variety of distinctive fruits, vegetables, and spices that are suitable for GI labelling. The products exemplify the fundamental characteristics of their corresponding regions, as their exceptional attributes are shaped by the unique combination of climatic and soil conditions. The expansion of Geographical Indication (GI) tags to encompass these commodities presents a promising opportunity for local farmers and producers to attain acknowledgment, safeguard their cultural heritage, and enhance their economic well-being. The potential for Northeastern India to enhance its agricultural identity and promote sustainable practises through the expansion of Geographical Indication (GI) tagging for horticultural commodities is evident. This approach would contribute to the preservation and prosperity of the region's distinctive agricultural heritage.

Potential Opportunities with GI Tags

In the particular context of Northeastern India, the implementation of GI labels for the distinctive horticultural products of the area offers a wide range of prospects, each carefully suited to the specific characteristics of these goods.

The implementation of GI tags holds the potential to greatly impact the economic environment of Northeastern India. By conferring GI

status upon these valuable horticultural products, they can be elevated to the status of premium commodities, thereby opening up new opportunities for export and enabling the attainment of improved price levels. Consequently, this phenomenon possesses the capacity to serve as a catalyst for economic expansion, consequently enhancing the well-being of indigenous agricultural workers and bolstering the local economy.

Furthermore, the implementation of GI tags confers a distinct international recognition to horticultural products. These labels function as a mechanism for global acknowledgement, allowing individuals across the globe to identify and value the distinctive characteristics of these goods. The heightened acknowledgment of these unique offerings has the potential to result in elevated export statistics and can also play a role in the growth of the tourism sector in the area. This is due to the attraction that these distinctive products hold for visitors, who are motivated to delve into the diverse tastes and cultural significance associated with them.

In addition, the process of GI tagging enables the Northeastern region to highlight the specific geographic origin of its horticultural products. This practise also serves as a means of honouring the longstanding agricultural methods that hold cultural significance within the region's identity. The acknowledgement of both aspects provides a significant incentive for the preservation of longstanding cultural practises and sustainable agricultural techniques that are inherent to the abundant heritage of Northeastern India. This guarantees the protection of these invaluable traditions for the welfare of forthcoming generations.

Furthermore, GI tags are of utmost importance in upholding rigorous quality standards and regulations. This lack of oversight ensures that consumers consistently receive products of exceptional quality, thereby fostering trust within consumer markets. Consequently, this phenomenon serves to bolster the standing and attractiveness of horticultural commodities originating from the Northeastern region, thereby solidifying their position within the market.



Harvested Khasi Mandarin

Challenges and Roadblocks

While the potential benefits of GI tagging for Northeastern horticulture commodities are substantial, there are several challenges and roadblocks that need to be addressed to realize this potential fully. These challenges include administrative hurdles, standardization issues, and increasing awareness among local farmers.

Administrative Hurdles

Complex Application Process: Obtaining a GI tag is a complex and time-consuming process. It involves multiple stages, including the formation of a GI association, detailed documentation, legal procedures, and consultations with various stakeholders. The administrative intricacies can be overwhelming, particularly for small-scale farmers and producers who may lack the resources and knowledge required.

Financial Resources: Many small-scale farmers and producers may struggle to finance the GI tagging process. The costs associated with documentation, legal procedures, and compliance with GI regulations can be a significant burden for them. Lack of financial resources can hinder their ability to obtain GI tags.

Capacity Building: Ensuring that local producers and farmers have the necessary knowledge and capacity to navigate the GI application process is crucial. Capacity-building programs and assistance in preparing the required documentation are needed to enable them to participate effectively in the GI system.

Standardization Issues

Maintaining Quality and Consistency: GI tagging necessitates maintaining a consistent level of quality and specific attributes associated with the product. Variations in product quality can occur due to factors like weather, soil conditions, and farming practices. Achieving and maintaining consistency poses a significant challenge.

Infrastructure and Technology: The lack of modern infrastructure and technology in some remote regions of Northeastern India can hinder the production and post-harvest processing of horticulture commodities. Inadequate facilities for sorting, packaging, and transportation can affect the quality and marketability of the products.

Pest and Disease Control: Certain horticulture crops are vulnerable to pests and diseases, which can affect both quality and quantity. Implementing effective pest and disease control measures, especially in remote areas, can be a challenge.

Increasing Awareness among Local Farmers

Awareness of GI Benefits: Many local farmers and

producers in Northeastern India may not fully understand the benefits of GI tagging. They may lack awareness of how GI tags can enhance the value of their products and provide protection from imitation. Educating and raising awareness among these stakeholders is crucial.

Traditional Farming Practices: Traditional farming practices, while contributing to the distinctiveness of these products, may not always align with GI requirements. Local farmers may be reluctant to alter their methods to meet GI standards, fearing that it could compromise the traditional aspects of their cultivation.

Collective Action: To obtain GI tags, local producers often need to come together and form associations or cooperatives. Coordinating collective action and ensuring the active participation of all stakeholders can be a challenge, as it requires building trust and addressing potential conflicts of interest.

CONCLUSION

Northeastern horticulture commodities have great potential for growth and Geographical Indication recognition, but administrative hurdles, standardisation issues, and farmer awareness must be addressed. Overcoming these challenges will boost the local economy and preserve the region's cultural and agricultural heritage. Government agencies, non-governmental organisations, and local communities must collaborate to support GI tagging.

Northeastern India's horticultural commodities' GI recognition recognises its agricultural diversity, cultural heritage, and economic potential. GI tags indicate geographical origin and protect traditional farming methods and unique qualities that make these products special. GI tags boost regional growth, price realisation, and market presence. These tags help consumers worldwide appreciate the unique flavours and cultural significance of these commodities, potentially boosting exports, tourism, and regional enrichment. Northeastern India's culture and sustainable farming are promoted by GI tagging. GI tags' high quality standards build consumer and market trust in Northeastern horticultural products. As more of its exceptional fruits, vegetables, and spices become GI-recognized, Northeastern India will grow and shine globally, protecting and celebrating its rich cultural and horticultural heritage.

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