

GUARDIANS OF AUTHENTICITY: GI TAGS' DUAL ROLE IN PROTECTING TRADITIONS AND BOOSTING ASSAM'S AGRIBUSINESS VIA ASSAM LEMON

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ABSTRACT

In the verdant landscapes of Assam, the Kaji Nemu (Assam Lemon) not only represents a cherished cultural emblem but also stands as a testament to the region's agro-biodiversity. The conferment of the Geographical Indication (GI) tag in the year 2019 on this citrus variety marks a pivotal moment, intertwining the preservation of agricultural traditions with the propulsion of local agribusiness into the global marketplace. This paper delves into the dual role of GI tags as guardians of authenticity, safeguarding indigenous horticultural practices while simultaneously catalyzing economic growth for Assam's agrarian communities. Through an analytical lens, the study examines the synergistic impact of India's Protection of Plant Varieties and Farmers' Rights Act, 2001 and the Seeds Act, 1966 on the Assam Lemon's journey from local orchards to international markets. It highlights how these legislative frameworks underpin the GI tag's efficacy in enhancing market differentiation, ensuring quality and protecting farmers' rights. Furthermore, the paper explores the opportunities that GI tags unlock for farmers including brand recognition, legal protection and government support which collectively contribute to elevating Assam Lemon to a symbol of rural prosperity. The research culminates in strategic recommendations aimed at amplifying the reach of GI-tagged Assam Lemon. These include leveraging policy initiatives, fostering public-private partnerships and harnessing innovative marketing strategies to bridge the gap between local excellence and global demand. The paper underscores the transformative potential of GI tags in fortifying Assam's agribusiness heralding a new era of sustainable development rooted in the authenticity of its agricultural heritage.

KEYWORDS: Kazi Nemu, Assam Lemon, Climate Smart Agriculture, Self-Help Groups (SHGs), One District One Product (ODOP), Sustainable Development.

Introduction

Assam Lemon which is also known as 'Kaji Nemu' locally, is a unique variety of lemon in respect of its oval shape, distinct aroma and exceptional juiciness. It has been declared as the state fruit of Assam, by the Government of Assam in the month of February 2024. It was awarded the Geographical Indication (GI) status in the year 2019. The Geographical Indications of Goods (Registration and Protection) Act, 1999 section 2(1)(e) defines "geographical indication in relation to goods, means an indication which identifies such goods as agricultural goods, natural goods or manufactured goods as originating, or manufactured in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristic of such goods is essentially attributable to its geographical origin and in case where such goods are manufactured goods one of the activities of either the production or of processing or preparation of the goods concerned takes place in such territory, region or locality, as the case may be". It has not only become a cultural symbol of Assam but because of its

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special feature of year-round production having two peak seasons it has also become a valuable source of income for the farming community of Assam. Apart from having various culinary uses, it is used in various religious and cultural customs throughout the northeastern region of India.

Assam lemon has exclusive nutritious qualities as it has a rich composition of citric acid, malic acid, multivitamins like Vitamin C, Vitamin E and Vitamin B6, essential oils and various health promoting elements. It is a must have culinary item in Assamese kitchens and has recently gained national and international recognition, especially after its registration under the Geographical Indication (GI) of Goods Act, 1999. GI tag has elevated its status to that of a premium commodity and is opening up new opportunities for export and improved price levels of this product. It has thus become a catalyst for the economic expansion of the state of Assam and at the same time is enhancing the economic well-being of the indigenous farming community of the state and the local economy as well. Various internationally acclaimed Chefs and YouTubers are seen promoting this product nationally as well as internationally.

Recognizing the need to harness the inherent strengths of Assam Lemon, the initiative to promote it as a GI tagged State Fruit of Assam in Chirang, within the Bodoland Territorial Council, has emerged as a transformative endeavour. It can be envisioned that the conferment may enhance its reputation which will boost consumer confidence in non-native geographies as well while boosting regional rural economic development.

The ODOP scheme of the Government of India is a part of the 'Atma Nirbhar Bharat' initiative i.e. 'Self-Reliant India' initiative. Every district has a specific product or a special craft or art form for which it is famous and in which it has competitive edge over others. The ODOP initiative aims at boosting region wise growth of the economy and promotion of job opportunities in various districts across India by identifying the specific product and promoting it in India as well as internationally. Chirang district has designated "Assam Lemon and lemon products" as its District Product under ODOP. This means not only farm activities will be supplemented but also small and medium scale industries (MSMEs) will be promoted with help of government intermediaries like Assam State Rural Livelihood Mission (ASRLM), District Industries and Commerce Centre (DICC), Rural Self Employment Training Institute (RSETI), Krishi Vigyan Kendra (KVK) and Panchayati Raj and Rural Development (P&RD) departments in the district. These Departments will assist in forming of Self-Help Groups (SHGs), financial assistance and industrial know-how through schemes like Pradhan Mantri Formalization of Micro food processing Enterprises (PMFME), training on food processing and packaging and individual and community based free lemon plantation schemes like Mahatma Gandhi National Rural Employment Guarantee Act schemes (MGNREGA).

This scheme is implemented by the Department of Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry in collaboration with other government agencies and the main aim is to turn every district into an export haven for the chosen product in which they excel and thus promote the economy of the district in particular and the country in general.

Objectives of the Study

Assam lemon's commercial value has increased significantly in recent years, particularly when it was granted a GI Tag. After that, the product was chosen to be an ODOP product in the Chirang district with the understanding that Chirang is a feasible location for the large-scale cultivation of this fruit and that government support and intervention were necessary to meet the requirements needed for the export of Assam lemons. The following are the study paper's aims in this context:

- To examine the journey of promoting Assam Lemon as a GI tagged produce in Chirang, focusing on its economic, environmental and social dimensions.
- The challenges and opportunities inherent in marketing Assam Lemon as a premium product in context of GI standardisation.
- To elucidate the role of governmental support in promoting production of Assam Lemon.
- To find out whether the farmers have really benefitted after the conferment of GI Tag on Assam Lemon.

Methodology

The study has been conducted using both primary and secondary sources of data. Primary data was collected from 185 farmers who cultivate Assam Lemon in Chirang district using a questionnaire cum schedule. The farmers were selected using Convenience Sampling Method.

At the same time, five Farmer Producer Company (FPC) were contacted and a few government officials were also interviewed. An FPC is a hybrid between cooperative societies and private limited companies. The FPC operates as a collective enterprise owned and governed by its farmer members. A farmer producer company is a corporate body registered as a Producer Company under Companies Act, 2013. Its main activities are production, harvesting, processing, procurement, grading, pooling, handling, marketing, selling, export of primary produce of the members or import of goods or services for their benefit. Profits/benefits are shared among the members. The secondary data was collected from research articles, newspapers, relevant government department websites, reports of implementing agencies like Assam State Rural Livelihoods Mission (ASRLM) for their Self Help Groups (SHGs), FPC Reports, Bodoland Research Fellows deployed in Chirang district etc.

Through empirical investigation and descriptive analysis, the paper seeks to find out the initiatives taken by the government machinery to augment the production, marketing and export of this product and whether the farmers have really benefitted after the conferment of GI Tag and inclusion of the fruit as ODOP in Chirang district.

About Chirang District and Assam Lemon as its ODOP

Chirang was once a part of the Bongaigaon district and is currently one of the four districts in Assam that are under the Bodoland Territorial Council. The formal opening date of this district was June 4, 2004. Sidli, Borobazar, and Manikpur are the three development blocks and revenue circles in the district. In Chirang, there are 479 revenue villages. Its overall size is 1468.42 square kilometres, with a composition of sandy and sandy loam textures, as well as rich alluvial soil. Over seventy percent of Chirang's workforce works in agriculture or related fields. The Boro community makes up the majority of the district's population; other populations that call this area home include the Nepali, Santhali, Rabha, Rajbongshi, Bengali, Muslim, Assamese, and others. The quality of the soil and the climatic conditions in Chirang are extremely favourable for the cultivation of Assam Lemon.

Assam Lemon is grown and harvested all round the year and in the year 2022-23, it had a production of 68,310 MT in only one block of Chirang district, namely Borobazar block, of which 20 % was locally consumed and 80% was surplus which could be sold. (Source: Detailed Project Report of Sunjarang Mahila Kisan Producer Company Limited). This is enough proof that Assam Lemon is produced in abundance in Chirang and if proper measures are in place to harness the potential of this product that it can bring substantial economic growth in Assam, especially for the farmers.

Conferment of GI Tag on Assam Lemon holds significant promise for **strengthening the economy** of the district in the following ways:

- Role in promoting local entrepreneurship by empowering small-scale farmers and artisans to participate in value-added activities such as processing, packaging, and marketing. This has not only diversified income sources but also fostered a culture of innovation and enterprise within the community.
- Catalysing economic development in the region by leveraging its unique attributes and geographical indication. Assam Lemon has the potential to capture niche markets and command premium prices, thereby generating income and employment opportunities along the entire value chain. The income (per Bigha) from production and selling of Assam Lemon at wholesale prices is more than Rs.60000 annually (Barua and Bharadwaj). After conferment of GI tag and declaring Kaji Nemu as state fruit, the prices have witnessed a substantial sharp surge in the market and so has the profit margin.
- Significance for Schedule Tribes in Chirang District as it offers a means of sustainable livelihoods and cultural preservation. By integrating traditional knowledge and practices into modern agricultural techniques, the cultivation of Assam Lemon serves as a source of pride and identity for indigenous communities.
- The Assam lemon has an important place in the socio-cultural traditions of Assam and the neighbouring states:
- It is a must in the cuisines and cultural heritage of Assam and adjoining regions. It is not only significant as a fruit but is necessary in many facets of daily life in Assam. It is included in the regional delicacies, to enhance the taste and to adding a refreshing edge to beverages and condiments.

- Moreover, the entire plant part including juice, zest, leaves and roots of the fruit are widely used in diverse traditional cuisines, from curries to sweets and medicinal and cosmetic preparations.
- At the same time, Assam lemon is offered in various religious and cultural customs in the region. It is embedded as socio-cultural symbol in the Assamese tradition.
- Assam Lemon has close linkage with environmental conservation in the following ways:
- Promoting sustainable farming practices, such as organic cultivation methods and water conservation techniques, is imperative for minimising environmental impact and preserving the ecological integrity of lemon orchards. By prioritizing soil health, biodiversity conservation, and agroecological principles, stakeholders can enhance the sustainability and resilience of Assam Lemon cultivation.
- Conservation of Biodiversity is a natural outcome of producing Assam lemon as it provides habitat and sustenance for diverse flora and fauna. Introducing agroforestry practices, incorporating native species into agroecosystems, and minimizing chemical inputs can contribute to biodiversity conservation and ecosystem restoration efforts.
- Embracing organic and eco-friendly production methods not only enhances the quality and safety of Assam Lemon but also aligns with consumer preferences for sustainably sourced products. Certification schemes, farmer training programs, and consumer education initiatives can incentivise the adoption of organic practices and promote eco-conscious consumption.
- While lemon tree has its commercial value for the fruit, the low maintenance plant is excellent at carbon sequestration, which means it removes carbon from atmosphere. Moreover, since shelf life of Assam Lemon which has a thick outer cell is quite long it can be transported with very less carbon footprint.
- Lemon tree can be grown as biofences that can restrict the movement of wild elephants. The thorns of the trees and the smell of the lemons repel the elephants and the produce of lemons adds to the farmers' earnings.

The State Government implemented the ODOP (One District One Product) approach in Assam in 2023 to reap the benefits of scale in terms of procurement of inputs, availing of common services and marketing of products. The approach provides support for processing to reducing wastage, improving storage and marketing.

Although lemon naturally grows in Chirang district, the fruit grows without much efforts from the farmers. It takes very less land area for plantation and gives fruit year-round varying in quantity as per season. The effect of GI tag has led to a steep price increase in the retail markets which goes up to Rs10-20 per piece. The exporters had paid around Rs.40 per piece to the farmers. This is a great encouragement for small farmers who had to sell their produce at extremely lower rates in previous years. The conferred GI tag also ensures legal protection to the farmers who produce authentically by enhancing demand in national and international markets.

Challenges in Marketing Assam Lemon

- **Market Intermediaries:** The dominance of market intermediaries can lead to lower price realisation for farmers, affecting their earnings.
- **Awareness:** There is a need to increase awareness about the GI tag and its implications among producers and consumers.
- **Infrastructure:** Adequate infrastructure for storage, processing and transportation is necessary to maintain the quality of Assam Lemon but the district is lacking the required infrastructure.
- **Standardisation:** Ensuring consistent quality and adherence to GI standards can be challenging due to varying practices among farmers.
- **Marketing Channels:** Developing efficient marketing channels that benefit the producers directly is crucial. Also lack of brands building and visibility limits the sales.
- **Infrastructure Deficiencies:** In rural areas, inadequate infrastructure including roads, storage facilities, and market linkages impede the aggregation process. Poor transportation networks make it difficult to transport produce from scattered farms to aggregation centers or markets efficiently.

- **Market Access and Price Volatility:** Smallholders often face limited market access and are vulnerable to price volatility. They may be subject to exploitation by middlemen due to their inability to negotiate better prices or access higher-value markets.

Opportunities for Assam Lemon

- **International Market:** Assam Lemon can be positioned as a distinctive and high-end product in the international market by using the GI badge.
- **Product Development:** Assam lemon has the potential to be used in the creation of new products, such as those for the food and beverage sector.
- **Branding:** The GI tag offers a chance for narrative and branding, which can enhance the product's worth.
- **Economic Development:** The region's economy can be greatly enhanced by marketing done correctly.
- **Direct Sales:** Promoting direct sales between manufacturers and consumers can lower dependence on middlemen and boost profitability.

It is difficult to preserve lemon for a long period without incurring huge expenditure and there is insufficient infrastructure for the same in Chirang, so, the viable proposition is to develop various products like Lemon squash, fresh lemon juice, taste enhancers, medicines, pickles out of various raw materials derived from Assam Lemon. While there are several challenges to overcome, the GI standardisation of Assam Lemon opens up numerous avenues for enhancing its market value and ensuring sustainable economic benefits for the local community.

The Role of Government Support IN Promoting Production and Marketing of Assam Lemon

Awarding of GI tag to Assam Lemon in 2019, followed by its selection as ODOP in select districts in 2023 and declaration as the state fruit in 2024 has inflated its value in the recent years. This has necessitated the protection of its unique identity and sufficient infrastructure to boost the rural and local economy. Various measures from various government departments are being taken in Chirang district to ensure proper growth of farmers and economy of the district. Some remarkable initiatives are:

- District Rural Development Agency (DRDA) under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has implemented 306 Lemon plantation schemes till now for plantation of Assam Lemon farms across the district amounting to Rs. 1,38,54,950. These plantations are done on individual lands, SHG (Self Help Groups) land and in public lands such as VCDC (Village Council Development Committee) offices, which are Gram Panchayat Office equivalent as lemon farms and fencing around campuses/farms with multiple benefits for these beneficiaries.
- Some of these farms are individually owned while some are owned by Self Help Groups formed under ASRLM (Assam State Rural Livelihood Mission).
- KVK (Krishi Vigyan Kendra) and RSETI (Rural Self Employment Training Institute) Kajalgaon, Chirang offer courses on Assam Lemon plantation and related products industry course as per their training calendars.
- Pradhan Mantri Kisan Sampada Yojana (PMKSY) aims to upgrade and revolutionise the entire food processing value chain. The scheme provides infrastructure development, capacity building and technology upgradation under this scheme.
- Equity Grant Scheme provides equity support to farmers and strengthens their financial base.
- Scheme for Fund for Regeneration of Traditional Industries (SFURTI) aims to organise agro-processing firms into clusters to make them competitive and provide support for their sustainability.
- Credit Guarantee Scheme provides credit guarantee coverage to banks who provide loans to farmers do not have access to institutional credit.
- Mission for Integrated Development of Horticulture (MIDH) focuses on holistic production, post-harvest management, processing, and marketing infrastructure like support for establishing cold storage facilities, packing houses, processing units, etc.

- The DICCC (District Industries and Commerce Centre) under PMFME(Pradhan Mantri Formalisation of Micro Food Processing Enterprises Scheme) adopted the One District One Product (ODOP) approach. Assam has identified specific products for each district to promote their unique agricultural and food items. For the district of Chirang in Assam, the product identified under the ODOP initiative is the renowned Assam Lemon.

These initiatives aim to support the value enhancement of these products while reducing wastage, improving storage and marketing, and providing financial and technical support for micro food processing enterprises. The focus on Assam Lemon under this scheme can help in boosting its production, processing, and marketing, thereby aiding in the promotion of this fruit as a premium product both domestically and internationally.

Primary Data: Discussion

The following remarkable observations emerged when the farmers who should be the first-hand beneficiaries of all these initiatives to promote Assam Lemon were investigated:

- On being asked about the awareness of GI Tag conferment of Assam Lemon in 2019, 22 percent of the farmers were ignorant about the issue.
- On being enquired about the awareness on the adoption of Assam Lemon as ODOP in Chirang, 16 percent of the farmers had no idea about the concept. This may be because local farmers still follow seasonal sale procedures for their surplus produce to their local markets only, while the ODOP initiative particularly targeted SHGs and FPCs.
- On being asked about the support received from the government, 58 percent of respondents acknowledged plantation and training/capacity building endeavours, credit enablement and market linkage information was not clearly observed.
- On being asked whether, the financial conditions have improved through Lemon farming, 86 percent of the respondents agreed in positive. The reason for this steep rise in demand is because of the recent GI tag conferment, declaration as state fruit and One District One Product incentives even that portion of population which was not traditionally consuming the fruit have now become regular consumers and this kind of popularity has also led to a positive price rise and provided for a growing return on investments.
- On being asked about the marketing and sales opportunities 78 percent of respondents displayed enthusiastic expectations as they are aware of recent export of kazi nemu to UK, along with South Asian and middle eastern countries.
- On being asked how the promotion of Assam Lemon could be further improved in the district of Chirang, 30 percent demanded for a minimum price and guaranteed buy on the part of the government. This comes from their experiences in the past wherein they had been selling Assam lemons by the sack prices, not getting even one rupee for one piece of the fruit. Other 50 percent expressed their views that promotional activities and display/consumption of the fruit in tourism sites, interstate and national level programs etc would further illustrate Assam Lemon as unique and nutritional food item and may even be adopted in other cuisines replacing its counterparts. It was interesting to note that such respondents verbally had discussed the social media influencers like celebrity chef Ranveer Brar and Nayanjyoti Saikia, participant in the MasterChef India have been phenomenal in popularising Assam cuisine and the Assam lemon.

Conclusion

"The journey of promoting Assam Lemon exemplifies the potential of sustainable agriculture to drive economic growth and environmental conservation in the region. (Kikon & Barbora, 2020). To conclude, the journey of promoting Assam Lemon as a One District One Product (ODOP) in Chirang and conferment of GI Tag exemplifies the potential of agricultural innovation, environmental stewardship, and community empowerment. Kazi Nemu or Assam Lemon that has been traditionally consumed locally over the years has by leveraging its unique attributes and geographical indication emerged as a symbol of rural prosperity, health and sustainability. Moving forward, sustained efforts are needed to overcome marketing challenges, strengthen market linkages and integrate environmental conservation objectives into agricultural practices, thereby ensuring a promising fail proof market linkage. The fruit although available year-round has seasonal yield variations and in the past surplus produce failed to earned respectable revenue for the farmers. Not only sales, the production infrastructure must be enhanced with

use of new age scientific agricultural techniques to optimally utilise the cropping. Capacity building and awareness about the fruit must be targeted towards the marginalised and individual farmers as well and campaigns must be directed to educate farmers and consumers about the GI tag, ODOP initiative, and the potential of Assam Lemon in local and global markets. More research both scientific and innovative are essential in product development and value addition to diversify Assam Lemon-based products and enhance their market appeal. Despite facing challenges such as market intermediaries and infrastructure deficiencies, the opportunities for global market positioning, product development, and economic development are significant.

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