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Economic impact of GI tagging on hanuman Garhi laddu manufacturers in Ayodhya district of Uttar Pradesh

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Abstract

The present study had been undertaken to examine the economic impact of Geographical Indication (GI) tagging on manufacturers of Hanuman Garhi Laddu in Ayodhya district of Uttar Pradesh. The study primarily focused on analysing changes in income, employment generation, demand, price realisation, government support, and overall livelihood improvement among manufacturers after GI recognition. A combination of purposive and random sampling techniques had been adopted for the selection of the district, block, villages, respondents, markets, and market functionaries. Ayodhya district and Bikapur block had been purposively selected due to the significant presence of GI-tagged food product manufacturers and traditional sweet-making enterprises. A total of seven villages and 50 respondents belonging to different production categories had been selected for detailed investigation. Primary data had been collected through personal interviews using a well-structured schedule, whereas secondary data had been obtained from published and official sources. The collected data had been analysed with the help of statistical tools such as arithmetic mean, correlation coefficient, Likert scale, and cost sheet analysis. The findings revealed that GI tagging had significantly improved the economic condition of manufacturers by increasing income, product demand, selling price, and employment opportunities. Medium and large manufacturers had benefited comparatively more than marginal and small producers. Strong positive correlations had been observed between the scale of manufacturers and economic impact variables such as income, demand, and employment. The study further revealed that financial assistance schemes such as Mudra Loan and PMFME had played an important role in supporting GI-based enterprises, although awareness regarding GI promotion and certification support remained limited among smaller producers.

Keywords: GI tagging, hanuman Garhi laddu, economic impact, food processing enterprises, rural entrepreneurship

Introduction

Geographical Indication (GI) tagging had emerged as an important intellectual property right for protecting region-specific traditional products and enhancing their market value, authenticity, and economic sustainability. In India, GI tagging had played a significant role in preserving indigenous food products, promoting rural entrepreneurship, and generating employment opportunities for local communities. Hanuman Garhi Laddu, a renowned traditional sweet associated with the religious and cultural heritage of Ayodhya district in Uttar Pradesh, had gained recognition for its unique taste, preparation method, and strong association with the Hanuman Garhi temple. The GI tagging of Hanuman Garhi Laddu had been expected to improve product identity, strengthen market competitiveness, and provide economic benefits to manufacturers and traders engaged in its production and marketing. However, despite the growing importance of GI-tagged products, limited empirical studies had been conducted to assess their actual economic impact on local manufacturers. Therefore, the present study had been undertaken to examine the economic impact of GI tagging on Hanuman Garhi Laddu manufacturers in Ayodhya district of Uttar Pradesh. The study had focused on

analysing changes in income, employment generation, production practices, market expansion, price realisation, and livelihood improvement among the manufacturers after GI recognition. It had also attempted to identify the major constraints faced by producers in the production and marketing process and to explore the opportunities associated with GI-based entrepreneurship and sustainable local economic development.

Research Methodology

The selection of the district, block, villages, respondents, markets, and market functionaries had been undertaken through a combination of purposive and random sampling techniques. Uttar Pradesh, comprising 75 districts and 18 divisions, had been considered for the study, out of which Ayodhya district had been purposively selected because of its significant concentration of GI-tagged food products, particularly GI-tagged Besan Laddu, along with the presence of associated raw material traders and traditional sweet product clusters. The district had also exhibited rapid growth in GI-based entrepreneurship, which made it suitable for assessing the major challenges and opportunities related to the production and marketing of GI-tagged food products. Among the 11 blocks of Ayodhya district, Bikapur block

had been purposively selected due to its notable presence of GI-tagged food producers, traditional sweet-making units, and small-scale processing enterprises. The favourable socio-economic conditions prevailing in the block had further supported its selection for analysing production and marketing issues associated with GI-tagged products. A complete list of 136 villages under Bikapur block had been obtained from the Block Development Office and arranged in descending order according to the number of producers engaged in GI-tagged Besan Laddu production. Thereafter, five per cent of the total villages, comprising seven villages, had been selected randomly to ensure proper representation of GI-tagged Besan Laddu manufacturers. From each of the selected villages, a comprehensive list of GI-tagged Besan Laddu producers had been collected from the Block Development Office and local cooperative or producer groups. Subsequently, ten per cent of the total producers had been selected randomly for the study. The selected respondents had been categorised into five groups based on their scale of production, namely marginal (less than 50 kg/week), small (50–100 kg/week), semi-medium (101–250 kg/week), medium (251–500 kg/week), and large (more than 500 kg/week). For the marketing study, two types of markets had been selected purposively, namely Bikapur market as the primary market and Gija market as the secondary market. A list of market functionaries had been prepared with the assistance of officials from the selected markets, and from the total number of market participants,

10 wholesalers, 5 retailers, 10 producers, and 5 consumers had been selected randomly for the present investigation. Primary data had been collected through personal interviews using a well-structured schedule from middlemen, producing respondents, and channel partners associated with GI-tagged Besan Laddu, whereas secondary data had been obtained from magazines, published papers, books, journals, government records, and the Block Development Office. The collected data had been analysed using appropriate statistical tools, and the findings pertained to the agricultural year 2025–2026.

Analytical Tools

- 1. Likert Scale:** A Likert scale is a rating scale used to assess opinions, attitudes, or behaviors. To collect data, you present participants with Likert-type questions or statements and a continuum of possible responses, usually with 5 or 7 items. Each item is given a numerical score so that the data can be analysed quantitatively.
- 2. Coefficient of Correlation(r):** $r = [\Sigma(x - \bar{x})(y - \bar{y})] / \sqrt{[\Sigma(x - \bar{x})^2 \times \Sigma(y - \bar{y})^2]}$
- 3. Cost Sheet Analysis:** Prime Cost (Direct Materials + Direct Labour + Direct Expenses)

$$\text{Arithmetic Mean} = \Sigma Xi / N$$

Results and Discussion

Table 1: Economic Impact of GI Tagging on manufactures of Hanuman Garhi Laddu.

Category	Income Before (₹)	Income After (₹)	Increase (₹)	% Increase	Demand Index (1–5)	Price Before (₹/kg)	Price After (₹/kg)	Price Change (₹)	Employment Before	Employment After
Marginal	12,000	16,000	4,000	33.3	2	180	380	200	1	2
Small	20,000	27,500	7,500	37.5	3	200	395	195	2	3
Semi-Medium	35,000	50,000	15,000	42.9	4	220	405	185	4	6
Medium	60,000	90,000	30,000	50.0	5	250	420	170	7	10
Large	90,000	1,35,000	45,000	50.0	5	280	430	150	10	15

Table 1: The table illustrated the economic impact of GI tagging on manufacturers of Hanuman Garhi Laddu across different categories. It was observed that income levels of all categories increased significantly after GI tagging, with marginal producers experiencing a 33.3 percent rise, while medium and large producers recorded the highest increase of 50 percent. The absolute income gain was highest among large manufacturers (₹45,000), followed by medium producers (₹30,000), indicating better economic benefits for higher-scale units. The demand index also showed a positive trend, increasing from lower levels among marginal producers

(2) to the highest level (5) among medium and large producers, reflecting improved market demand. Additionally, product prices increased across all categories, though the increment gradually declined with scale. Employment generation also improved, as all categories reported higher workforce engagement after GI tagging. Overall, the findings revealed that GI tagging had a substantial positive impact on income, demand, pricing, and employment, thereby enhancing the economic viability of Hanuman Garhi Laddu manufacturers.

Table 2: Relationship between Category of Manufacturers and Economic Impact Variables of GI-tagged Hanuman Garhi Laddu.

Variables	Correlation with Category
Income After	0.99
Increase (₹)	0.98
% Increase	0.97
Demand Index	1.00
Price Change (₹)	-0.96
Employment After	0.99

Table 2: The table showed the relationship between the category of manufacturers and various economic impact variables of GI-tagged Hanuman Garhi Laddu. It was observed that there was a very strong positive correlation between category and income after GI tagging (0.99), indicating that as the scale of manufacturers increased, their income also increased significantly. Similarly, income increase (0.98) and percentage increase (0.97) were highly positively correlated with category, which suggested that medium and large producers benefited more compared to marginal and small producers. The demand index showed a perfect positive correlation (1.00), meaning higher-category

manufacturers experienced greater market demand. Employment after GI tagging also had a strong positive relationship (0.99), indicating that larger units generated more employment opportunities. However, price change showed a strong negative correlation (-0.96), which implied

that smaller producers experienced relatively higher price increases than larger ones. Overall, the results indicated that GI tagging had a positive economic impact, especially for medium and large manufacturers, by increasing income, demand, and employment opportunities.

Table 3: Types of Government and Institutional Support Received by Manufacturers of GI-tagged Hanuman Garhi Besan Laddu (n = 50)

Sr. No.	Type of Support	Respondents Number	Respondents				
			Marginal	Small	Semi-Medium	Medium	Large
1	Financial assistance (loans/subsidy)	22	1	3	7	9	2
2	Technical training	18	1	2	5	8	2
3	Marketing support	15	0	2	4	7	2
4	Packaging assistance	12	0	1	4	6	1
5	GI certification guidance	10	0	1	3	5	1

Table 3: The present table shows the distribution of respondents based on different types of government and institutional support received by manufacturers of GI-tagged Hanuman Garhi Besan Laddu. It was observed that financial assistance in the form of loans and subsidies was the most widely accessed support, with 22 respondents benefiting from it, particularly among medium and semi-medium manufacturers. Technical training was received by 18 respondents, indicating moderate emphasis on skill development. Marketing support was availed by 15 respondents, mainly by medium and large producers,

suggesting limited outreach for smaller units. Packaging assistance was received by 12 respondents, showing comparatively lower support in improving product presentation and quality. GI certification guidance was the least accessed support, with only 10 respondents benefiting, reflecting a lack of awareness or accessibility. Marginal and small producers had minimal participation across all support types. Overall, the findings indicated that although support mechanisms were available, their reach was uneven and more concentrated among medium-scale manufacturers.

Table 4: Government Financial and Support Schemes Availed by Manufacturers of GI-tagged Hanuman Garhi Besan Laddu (n = 50)

Sr. No.	Scheme/Support	Respondents	Percentage (%)
1	PM Formalisation of Micro Food Processing Enterprises (PMFME)	12	24.00
2	Mudra Loan Scheme	15	30.00
3	Skill development/training programmes	10	20.00
4	GI promotion support	6	12.00
5	Subsidy for machinery/packaging	7	14.00
Total		50	100.00

Table 4: The present table shows the distribution of respondents based on the government financial and support schemes availed by manufacturers of GI-tagged Hanuman Garhi Besan Laddu. It was observed that the Mudra Loan Scheme was the most widely utilized, with 30 percent of respondents benefiting from it, indicating its importance in providing financial assistance to small and medium enterprises. This was followed by the PM Formalisation of Micro Food Processing Enterprises (PMFME) scheme, availed by 24 percent of respondents, reflecting its role in supporting food processing units. Skill development and training programmes were accessed by 20 percent of respondents, suggesting moderate emphasis on capacity building. Subsidy for machinery and packaging was utilized by 14 percent, indicating limited adoption of technological and packaging improvements. GI promotion support was the least availed, with only 12 percent of respondents benefiting, highlighting low awareness or accessibility. Overall, the findings indicated that financial schemes were more popular than promotional and technical support initiatives among the manufacturers.

Conclusion

The study had clearly demonstrated that GI tagging had exerted a positive and significant economic impact on the manufacturers of Hanuman Garhi Laddu in Ayodhya district

of Uttar Pradesh. The findings revealed that income levels, product demand, selling prices, and employment generation had increased considerably after the GI recognition of the product. The increase in income and market demand indicated that GI tagging had enhanced consumer trust, product identity, and market competitiveness of Hanuman Garhi Laddu. Medium and large-scale manufacturers had derived comparatively greater economic benefits due to their higher production capacity, wider market reach, and better access to institutional support. However, marginal and small producers had also experienced noticeable improvements in income and employment opportunities, which highlighted the inclusive nature of GI-based entrepreneurship. The correlation analysis further established a strong positive relationship between the scale of production and economic impact variables such as income, employment, and demand. The study also revealed that government schemes such as Mudra Loan Scheme and PMFME had contributed substantially towards strengthening the financial position of manufacturers and promoting small-scale food processing enterprises. Nevertheless, limited access to GI promotion support, technical guidance, packaging assistance, and certification-related awareness among marginal and small producers remained major constraints affecting the overall effectiveness of GI initiatives. The uneven distribution of

institutional support suggested the need for more inclusive policy interventions and targeted awareness programmes for small-scale manufacturers. Overall, the study concluded that GI tagging had considerable potential to promote rural entrepreneurship, preserve traditional food heritage, generate employment, and improve the socio-economic condition of local producers. Therefore, greater institutional support, effective marketing strategies, skill development programmes, and enhanced awareness regarding GI benefits were essential for ensuring sustainable growth and equitable economic development among all categories of manufacturers associated with GI-tagged Hanuman Garhi Laddu.

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