

# A Study on Determinants of Occupational Choice among Geographic Indication Certified Handloom Weavers in Kerala

Sangeetha K Prathap

Assistant Professor,  
School of Management Studies,  
Cochin University of Science and Technology,  
Kerala.

## Abstract

Handloom industry supporting the rural population providing the largest employment potential after the agriculture sector is facing the issue of occupational shifts. Though the heritage of the segment is authenticated and popularized by Geographical Indication (GI) certification, the weavers are not in a position to derive the benefits of such certification due to various reasons. The present study explores the factors that affect the occupational choice of weavers in holding them to the segment or prefer other avocations. Binary logistic regression was used to analyse the determinants of occupational choice of weavers. It was found that income earning potential of other avocations when compared to GI handloom segments influenced the weavers to have occupational choice in favour of other jobs. However, the factors like favourable attitude towards traditional culture and GI, trust and authenticity of GI products and its benefits and presence of other earning members in the family influenced weavers to stick on to the sector.

**Keywords :** GI certification, occupational choice, handloom weavers

## Introduction

Handloom industry in India accounts for the provision of largest employment after agriculture sector. Further in Kerala, the sector is the second largest employer among the traditional industries (Government of Kerala, 2019). However, in spite of Government support and efforts, the production of handlooms in the state reduced to 30.27 million meter (2018-19) from 38.97 million meter (2017-18). Productivity also recorded reduction from 2282.9 million meter per loom (2017-18) to 1747.99 million meter per loom in 2018-19. There were 13789 weavers of which 10815 are women creating 40.68 lakh mandays of employment. Out of this the co-operative sector employs 12545 weavers of which 9732 are women creating 37.01 lakh mandays of employment (Government of Kerala, 2019).

Inherent qualities of products of the handloom segment are being recognized with the adoption of GI registration that enables registration of products with traits traceable to its geographic origin. Balaramapuram sarees, Kasaragode sarees, Chendamangalam and Kuthampally handlooms in Kerala have been accorded GI registration. The names are linked to the geography in which the product is

produced. GIs provide suitable rewards to producers who use traditional systems in the region. GIs are attributed with leverages that tend to make differentiation of products by enabling charging of price premium, restricting 'fake' products, protection and enhancement of traditional knowledge and skills and empowering customers with information for better decision making (Aggarwal et.al, 2014)

While GI products are localized indigenous products; a collective mark or recognition can help in authenticating the products, thus widening the scope of domestic markets and extending to international markets. GI collectives could foster local producer co-operation in setting criteria, maintaining standards and adopt a common strategy on production front with a view to instigating local development by collective actions. GIs provide suitable rewards to producers who use traditional systems in the region where the registered products and produced through conventional production systems. GIs are attributed with leverages that tend to make differentiation of products by enabling charging of price premium, restricting 'fake' products, protection and enhancement of traditional knowledge and skills and empowering customers with information for better decision making (Aggarwal et.al, 2014).

The supposedly accruing economic gains from GI label accumulate when label is used as promotional instrument and as protection strategy by restricting entry of competitors. In the former case, GI serves as marketing instrument to attract confidence of consumers (in terms of selling an original product) and creating niche markets (Dimara et al., (2004); Teuber, 2011). While the strategy of protecting the producer is enforced by providing GI registration to producers collective, wherein only a registered member of a collective can only produce and trade in the said product. The implied quality of the product that is being levered by the GI label serves as the 'trust' factor for the consumers who purchase the product. The focal point in such transactions is the 'quality'. GI adds new functionality in terms of assured quality and as a consequence, can be sold at higher prices owing to Veblen effect on the consumer (desire of conspicuous consumption or feeling that higher price implies higher quality). However, the question is whether the theories seem to effect in the micro environments owing to limited geographic reach of production and markets of GI handlooms.

GI tag holds the values of quality and authentication that ensures protection to both producer and consumer, being the major stakeholders in the process. The producer gets his indigenous craft being recognized that could be sold at a

premium. On the other hand, consumer has his trust being reinforced while purchasing a GI tagged product. GI certified handloom producers in Kerala are organized under the umbrella of co-operatives. Handloom products are sold through exclusive stores of weaver's cooperatives and through outlets of hantex, handweev. Even after getting the GI, the weavers' co-operatives have not succeeded in endorsing the certification in the market and claim premium price.

### Literature review

Occupational choice is the process of compromise between one's occupational preferences and expectations to enter into various occupations. Experiences during the previous employment and the contemporaneous changes in the social conditions can act as determinants of occupational choice while shifting occupations. Often, determinants of occupational choice can be different under different situations, leading to relevance/non relevance of a variable (Blau, Gustad, Jessor, Parnes, & Wilcock, 1956).

Several studies have explored determining factors of occupational choice in varied contexts. (Bortamuly, Goswami, & Hazarika, 2013) found that relative potential earnings were found to be a determinant of choice between self-employment or wage work choice. A study using expectancy –value theory in educational psychology to explain occupational choices identified task value as a determining factor; the value that is attributed by a rational individual in weighing the future benefits to costs of taking up an activity (Schneider & Cook, 2015). A study exploring the theory of human capital to explain the factors influencing occupational choice suggests that the worker will take a rational decision in making a change in occupation, particularly when the change allows the most profitable use of his limited resources (Boskin, 1974).

Another study found that in addition to gender, social systems, physical and institutional opportunities as well as expectations could influence occupational choice (James & MaryBeth, 2017). (Brown, 2002) looked into value based theory of occupational choice and found that cultural and work values have been identified as critical variables in the occupational choice.

Handloom segment are subject to systemic vulnerabilities in terms of product popularity and organisational weaknesses of producers collectives. Studies on handlooms have detected problems like low income and its low share in household income (Devi, 2013), unorganized production system, weakness of low working capital, low productivity, traditional product that do not suit modern customer demands etc (Naga Raju & Viyyanna Rao, 2014) that can have a bearing on the occupational choice of

handloom weavers.

The study is about occupational choice of weavers involved with GI certified handlooms; their intention to choose other avocation when compared to their current occupation of weaving. This is important in the context of declining number of workers in weavers' co-operatives that undertakes administration of production and marketing of GI handlooms.(Bortamuly et al., 2013) probed the influence of age, education and economic factors including income and credit on occupational choice of weavers in Assam in India. No studies were found to analyse the attitudes of weavers to the avocation of weaving GI products along with economic aspects. The present study is an attempt to understand the occupation specific (GI certified handloom weaving) attitudinal and economic factors that would determine the choice of sticking to the current occupation in comparison with other occupations.

### Objective

The study was taken up with the following objective

To identify the determinants of occupational choice of GI certified handloom weavers in Kerala.

### Materials and methods

Primary and secondary data was used for the purpose of the

study. Primary data was collected by conducting survey and focus group discussions in the study region. Primary survey using structured schedules was conducted among handloom weavers (200 weavers producing Chendamangalam and Kuthampully handlooms). Chendamangalam handloom is produced in Chendamangalam region in Ernakulam district. Similarly, Kuthampully handlooms are produced in Kuthampully region in Thrissur district. Further focus group discussions were also carried out to understand the problem in detail. Secondary data was accessed from published records from authentic sources,

### Results and Discussion

#### Demographic description of GI handloom weavers

Descriptive analysis based on frequency distributions and percentages was carried out to summarise the socio demographic profiles of the respondents Kuthampully region and Chendamangalam region. Respondents from Kuthampully region comprises members of Eravathodi Weavers Co-operative Society and Thiruwillamala Weavers Co-operative society for which GI registration has been granted for producing Kuthampully handlooms.

Table.1 Gender wise distribution of handloom weavers

Name of GI Handloom	Female	Male
Kuthampully	27	73
Chendamangalam	96	4
Total	123	77

Source: Primary survey

Majority (73%) of the weavers at Kuthampully who responded to the study were male, while at Chendamangalam, 96% were female (Table.1).

Table.2 Educational qualification wise distribution of handloom weavers

Name of GI Handloom	Illiterate	Primary	Secondary	Above secondary
Kuthampully	14	69	12	5
Chendamangalam	14	11	74	1
Total	28	80	86	6

Source: Primary survey

In Kuthampully region most of them were educated till primary level whereas in Chendamangalam region, most of them attained secondary level of education (Table 2).

**Table.3 Age wise distribution of handloom weavers**

Name of GI Handloom	Less than 35 years	36-50 years	51-65 years	66 years and above
Kuthampully	6	38	45	11
Chendamangalam	0	64	29	7
<b>Total</b>	<b>6</b>	<b>102</b>	<b>74</b>	<b>18</b>

Source: Primary survey

Table 3 shows that most of the respondents fall in the middle aged or above category at both the regions. The young generation does not have any interest towards

involving in weaving activities which has turned almost un-remunerative compared to other jobs.

### **Economic gains to producers**

**Table.4 Average wages, employment days and income of handloom weavers**

Place	Average per day wage earned by weavers (Rs.)	Average number of employment days	Average annual income (Rs.)
Kuthampully	250	253	65100
Chendamangalam	233	302	77115
<b>Total</b>	<b>242</b>	<b>277</b>	<b>71108</b>

Source: Primary survey

The average wages earned by weavers were compiled along with number of employment days to compute the average income earned by a weaver. The wages are on piece rate, which varies according to type of work undertaken. For single dhothies, weavers require lesser time to complete and the piece rate is low. However, for weaving materials like saree, it requires two three days and carries a higher rate. However, as far as a weaver is concerned, whether he specializes in saree or dhothi, wages that they receive per day is nominal. Average wages received by Kuthampully weavers was found to be Rs. 250 and Rs. 233 for Chendamangalam weavers. This offers no comparison with the prevailing casual wage rate in construction and other sectors where one can earn to the order of Rs. 800-900. Also there is no mechanism to create special incentive for the weavers who weave specialized GI products in comparison with normal handloom products produced in producer's collectives. The 3rd Handloom census reports average employment days per weaver to be

234 days. The prevailing number of employment days was found to be on an average 277 days (Table 4).

As part of the present policy of the State to promote handlooms, it has been decided to compulsorily implement state sponsored handloom uniform in Government schools. Following this, the handloom production orders have been placed with handloom co-operatives in the State. This offers a higher incentive pattern for the weavers and they are able to earn as high as Rs. 750-Rs. 900 while working for preparing uniform cloth. However, this does not relate to GI received by the society. During the survey period, it was found that many of them opted for weaving uniforms instead of GI products due to its higher incentives and less laborious work as no specialised skills are required for weaving such cloth. However, this opportunity occurs only during limited period of the year. Increase in the wages due to special scheme cannot be attributed as impact of GI certification. It can be observed that if government is

incentivizing the support of GIs also in a similar manner, the weavers in this sector could be supported. As regards employment days, there are weavers who own looms, who work all round the year from their homes. Those who do not have such facility opt to work with the society's looms provided at common facility centres. However, such facilities are facing severe shortage of space and funds.

### **Occupational choice GI handloom weavers: binary logistic regression analysis**

Declining membership in producer's collectives is found as the major problem affecting GI goods production. It has been observed that the existing members are thinking of occupational shift in light of the opportunities that are available in other sectors. However, there are some factors that retain the workforce with GI handloom production. Weaver's perception of occupational choice depends on factors such as contribution of other members to family income, attitude towards traditional culture and GI, possession of skills, income generating potential, perceived trust and authenticity of GI products, legal backing and ergonomic problems.

Logistic regression analysis was conducted to identify factors that mostly influenced occupational choice among weavers.

The independent variables that affect the occupational choice of GI weavers could be divided into two broad categories (1) socio economic and (2) attitudinal. The variables from B1 to B5 including contribution of other members to family income, income generating potential of GI handloom, income generating potential of other avocations, possession of skills and ergonomic issues were classified under socio economic variables. Studies have looked upon the economic factor where the rationality of the individual applies while making occupational choices. Variables that have a bearing of such rationality are contribution of other members to family income, income generating potential of GI handloom, income generating potential of other avocations. Occupational choices in individuals can also be spurred by the skills one possesses, inducing him to think of alternatives that could make use of such skills and ergonomic issues that he might be facing in continuing with the present job.

The second set of variables corresponds to attitudinal variables, where attitude towards traditional culture and GI, trust and authenticity of GI products and legal implications of GI certification can be attributes of occupational choice. Value based theory posits that cultural and work values can act as critical variables in the occupational choice (Brown, 2002). Thus cultural values that hold the traditions are likely to influence people to the choice of occupation bound with traditional values. Work

value implies the truthfulness of the process of production that could be reinforced by resultant trust and authenticity of GI handlooms. Further, GI Act implies non duplicability of the product that offers protection to the producers against copycats.

The logistic regression equation predicts the outcome of the categorical dependent variable from the independent variable identified as part of the study. Equation 1 shows the prediction of the outcome dependent variable as follows.

$$\text{Log } (p/(1-p)) = \alpha + \beta_1 X(\text{contribution of family members to income}) + \beta_2 X(\text{income generating potential of GI handlooms}) + \beta_3 X(\text{income generating potential of other avocations}) + \beta_4 X(\text{possession of skills}) + \beta_5 X(\text{ergonomic issues}) + \beta_6 X(\text{attitude}) + \beta_7 X(\text{trust and authenticity of GI products}) + \beta_8 X(\text{legal implications of GI certification}) + \epsilon$$

Where

Log (p/(1-p)) = the odds ratio

$\alpha$  = the constant term

$\beta_i$  = the coefficients of the independent variables,  $X_i$  where  $i = 1, 2, \dots, 8$  and

$\epsilon$  = error term

The dependent variable occupation shift choice among the weavers, was categorized as "1 = opting for occupational shift and 0 = not opting for occupational shift-remaining in GI handloom production". The independent variables consisted of seven factors that might have a bearing on the decision of the weavers to have an occupational shift.

### **The independent variables were coded as follows;**

Contribution of other members to family income: (0= no/less contribution, 1= high contribution (more than 70%))

Income generating potential of GI handloom (0=no potential, 1= have potential)

Income generating potential of other avocations (0=no potential, 1= have potential)

Possession of skills (0= no skills, 1= possess skills other than weaving)

Ergonomic issues (0= no ergonomic issues, 1= have ergonomic issues).

Attitude towards traditional culture and GI (0=not favourable, 1= favourable)

Trust and authenticity of GI products (0=no use, 1= useful)

Legal implications of GI certification (0=not aware, 1=aware)

Table 5. Factors influencing perceived occupational shift choice of GI weavers

Variables	B	S.E.	Wald	Sig.	Exp(B)
Contribution of other members to family income	-1.051	.438	5.755	.01**	.350
Income generating potential of GI products	.666	.630	1.118	.29	1.947
Income generating potential of other avocations	1.494	.483	9.579	.002**	4.456
Possession of skills	.427	.453	.891	.345	1.533
Ergonomic issues	-.496	.758	.429	.513	.609
Attitude towards traditional culture and GI	-.731	.441	2.752	.09***	.482
Trust and authenticity for GI products and its benefits	-1.081	.501	4.649	.031**	.339
Legal implications of GI certification	.484	.483	1.006	.316	1.622
Constant	-1.368	.538	6.470	.011	.255
	<b>-2 Log likelihood</b>		<b>Cox &amp; Snell R Square</b>		<b>Nagelkerke R Square</b>
	<b>146.506<sup>a</sup></b>		<b>.137</b>		<b>.233</b>

Significant at 5% level, significant at 10% level

To evaluate the model fit in logistic regression, Nagelkerke's R<sup>2</sup> is (pseudo R<sup>2</sup>) used. Nagelkerke's R<sup>2</sup> represents the improvement from null model to the fitted model (ratio of likelihood of the intercept of null model to that of full model which varies between 0 to 1). The model estimates Nagelkerke's R<sup>2</sup> of 0.233 implying improvement over the null model.

Table 5 indicates the results of the logistic regression analysis. The results reveal that there were four significant variables; namely contribution of other members to family income (significant at 5% level of significance), attitude of the producers to traditional culture and GI (significant at 10% level), income generating potential of other avocations (significant at 5% level) and trust and authenticity of GI products (significant at 5% level). The direction of exponential ( $\beta$ ) values indicates the probability of the case falling into specific category. The positive or negative sign of values of the estimated coefficients were used to identify the direction of relationship within factors that increase or decrease the likelihood of preference of an

occupational shift by GI weavers. Logistic regression coefficients are interpreted as percentage change in odds (Exp(B)-1 expressed in percentage terms).

The estimated coefficient of contribution of other members to family income was found to be negative indicating that those weavers whose family members contributed to major share in family income had 0.35 times probability of not making an occupational shift. Though this not relevant in the context of GI handloom, better income earning probability out of GI products can be sought by the weaver. Exploring the GI tag benefits, especially in marketing, will enhance the products visibility and consumer preference. This motivates the producers to continue with weaving rather than shifting to other avocations. Most of the weavers are aged and skilled with the job of weaving that they find difficult to find other avocations. They try to support their families with the meager income, provided they have a supporting role with other alternative means of income for the family. Government support to handlooms in the state has been enabled through uniform orders and carries

attractive benefits. But there are no such schemes for GI handlooms. Co-operatives offer benefits of provident fund and welfare schemes for retaining the weavers.

Favourable attitude towards traditional culture was found have negative influence, implying that those weavers who had a favourable attitude towards continuing with traditional business had 0.48 times chance of not shifting the occupation if they have a choice. This is the embedded attitude among the weavers coupled with their attachment to the age old profession that they pursue, provided majority of the weavers are middle aged or above.

Trust and authenticity for GI products also was found to negatively influence the choice of occupational shift among the respondents. It was found that 0.3 times chance of a respondent with the belief that they make trustworthy and authentic products make a choice of shift in occupation compared to others who did not have such perception.

The estimated coefficient of income generating potential of other occupations showed a positive relationship. It indicates that weavers who considered income generating potential of other avocations had 4.4. times chance to have an occupational shift when compared to others who were not either aware or not bothered about the potential opportunities in other segments. This also points to the fact of low income earning potential of handloom production.

Certain factors, like income earning potential of GI products, legal implications of GI certification, ergonomic issues and possession of skills was not found to affect occupational choices. The income earning potential of GI products and legal implications of GI certification was found as insignificant factors by the weavers due to their unawareness and lack of confidence in market potential of the product. Further, weavers, mostly belonging to higher age group and lower educational background are likely to have no additional skills that would prompt a shift in occupation.

Overall, the results of the logistic regression analysis revealed that income generating potential of other occupations compared to the GI production was the most influential factor in making a choice of occupational shift. This can be justified on the grounds that the potential of GI products remain unexplored that the increase in income earning potential of GI products is not paced at par with other avocations. Hence the attractiveness of income in other sectors is capable of distorting new entrants to weaving and even takes away existing weavers.

### Conclusion and Suggestions

Producers face the threat of sustenance and are always susceptible to occupational shift unless there are other

earning members in the family. Logistic regression analysis conducted to probe into to find the factors influencing occupational shift from weaving profession revealed that income generating potential of other occupations compared to the GI production was the most influential factor in making a choice of occupational shift, while contribution of other members to family income, attitude towards traditional culture and trust and authenticity for GI products works as factors responsible for continuation of weavers in the segment. However, GI certification could not be effectively used by weavers' collectives to harness the benefits. The need of the hour is to spread awareness among the stakeholders for materializing the objectives of GI registration. The co-operatives could be instrumental in connecting to the consumer so as to derive better prices for the product and enhance the income for the weaver. The study concludes that increase in income potential of the GI handlooms in comparison with other avocations can influence the traditional weavers to stick on to the segment.

### Acknowledgement

Minor Project funding of Interuniversity Centre for IPR Studies, Cochin University of Science and Technology for carrying out the project "Evaluation of Post GI registration status of handloom products in Kerala" is hereby acknowledged.

### References

- [Aggarwal](#), R, [Singh](#), H and [Prashar](#),S (2014) "Branding of geographical indications in India: A paradigm to sustain its premium value", *International Journal of Law and Management*, Vol. 56 Issue: 6, pp.431-442, <https://doi.org/10.1108/IJLMA-08-2012-0029>
- Blau, P. M., Gustad, J. W., Jessor, R., Parnes, H. S., & Wilcock, R. C. (1956). Occupational Choice: A Conceptual Framework. *Industrial and Labor Relations Review*, 9(4), 531–543. <https://doi.org/10.2307/2519672>
- Bortamuly, A. B., Goswami, K., & Hazarika, B. (2013). Determinants of occupational choice of workers in the handloom industry in Assam. *International Journal of Social Economics*, 40(12), 1041–1057. <https://doi.org/10.1108/IJSE-03-2012-0042>
- Boskin, M. J. (1974). A Conditional Logit Model of Occupational Choice. *Journal of Political Economy*, 82(2), 389–398. Retrieved from <http://www.jstor.org/stable/1831185>
- Brown, D. (2002). The Role of Work and Cultural Values in

- Occupational Choice, Satisfaction, and Success: A Theoretical Statement. *Journal of Counseling & Development*, 80(1), 48–56. <https://doi.org/10.1002/j.1556-6678.2002.tb00165.x>
- Devi, C. V. (2013). Handlooms for Livelihood in North-Eastern Region: Problems and Prospects. *Journal of Rural Development*, 32(4), 427–438.
- Dimara E., Petrou, A. and Skuras, D. (2001), “Agricultural policy for quality marketing indicators: a Greek case study”, *Food Policy*, Vol.29.No.5, pp.485-506
- Government of Kerala. (2019). *Economic Review 2019*. Economic Review 2019, 1.
- James, B. G., & MaryBeth, G. (2017). Expectations of choice: an exploration of how social context informs gendered occupation. *Irish Journal of Occupational Therapy*, 45(1), 15–27. <https://doi.org/10.1108/IJOT-01-2017-0003>
- Naga Raju, G., & Viyyanna Rao, K. (2014). A study on the socio-economic conditions of handloom weavers. *Journal of Rural Development*, 33(3), 309–328.
- Schneider, B., & Cook, W. G. (2015). Vocational Interests, Values, and Preferences, *Psychology of*. In J. D. B. T.-I. E. of the S. & B. S. (Second E. Wright (Ed.), *International Encyclopedia of the Social & Behavioral Sciences* (pp. 239–244). Oxford: Elsevier. <https://doi.org/10.1016/B978-0-08-097086-8.26068-6>
- Teuber, R. (2011) Consumers' and producers' expectations towards geographical indications: Empirical evidence for a German case study, *British Food Journal*, Vol 113No.7, pp 900-918