A Case Study

Labour utilization pattern in handloom silk weaving in Assam under co-operative and non co-operative coverage

■ HORINDRA GOGOI AND TRISHNALEE SAIKIA

SUMMARY : The present study was undertaken to examine the labour utilisation pattern of member weaver household of cooparative and non-member weaver household in handloom silk weaving and there by to assess whether there has been any differences in labour utililisation among two categories of respondent.The study was carried out in five villages of Sualkuchi area of Kamrup district of Assam where most of the weavers' cooperatives are prevalent. Primary data were collected from 150 respondents comprising of 100 member weaver household of the coopertaive and 50 non-member weaver household of the same locality to analyse the impact made by the handloom silk weavers' cooperative on their member weaver household in labour utilisation.The study reveals that the annual household employment from weaving in member household was significantly higher (432.05 mandays) than the non-member household (t = 5.24**). Average annual labour employment in weaving per loom in member household was higher than the non-member household.Similarly; absolute share of labour employment per loom in all the operations was higher in member household than the non-member household. It is also observed that hired labour accounted for the major share in the annual employment per loom in all the size groups of member and non-member household.

How to cite this article : Gogai, Horindra and Saikia, Trishnalee (2014). Labour utilization pattern in handloom silk weaving in Assam under co-operative and non co-operative coverage. *Agric. Update*, **9**(1): 145-148.

BACKGROUND AND OBJECTIVES

Handloom industry is a very old traditional cottage industry spread most part of the country and has a long tradition of excellence. The industry is mostly found in rural and semi urban areas of the country and has been the second largest sector next to agriculture providing directly or indirectly massive employment opportunities to rural people and thereby generating sustainable income to them. Handloom industry is scattered and unorganised all over the country. Hence, it appears as a small economic unit and faces lots of problem in day to day operation. So, organisation of this industry on cooperative way will be very much effective for social and economic upliftment of the poor weavers.

The economic condition of the rural weavers in Assam was not so good before they got united under the umbrella of cooperative. The poor weavers' particularly silk handloom weavers were severely exploited by money lenders and other intermediaries in production and marketing of silk handloom products. Realising the problem of weavers, several silk handloom cooperative societies were established in Assam, particularly at 'Sualkuchi' the "Manchester of Assam" where majority of silk weavers are concentrated. "The Assam Cooperative Silk House Ltd "shortly "Kalpataru" which was established in 1941 is the first weaver's cooperative of Assam to organise and protect the poor weavers from exploitation.

Author for correspondence :

HORINDRA GOGOI
Krishi Vigyan Kendra, DHEMAJI (ASSAM) INDIA
Email: horindra@gmail.com

See end of the article for authors' affiliations

The society in its long existence has been successful in organising, protecting as well as providing sustainable income and employment opportunity to its members.The present study is designed with the specific objective to examine the labour utilisation pattern of member weaver household of the cooperative and non-member weaver household in silk handloom weaving.

RESOURCES AND METHODS

The study was undertaken in five villages of Sualkuchi area of Kamrup district of Assam where most of the weavers' cooperatives are prevalent. Primary data were collected from both the member weavers' household of the cooperative, "The Assam Cooperative Silk House Ltd" and non-member weavers' of the same locality for comparison of the impact made by the cooperative on their members. For selection of sample among the member household, a list of all the member weavers' household of the cooperative was prepared and they were categorised to into six size groups based on the number of looms possessed by each member. Members having 1 loom were categorised into group I, 2 looms into group II, 3 looms into group III, 4 looms into group IV, 5 looms into group V and 6 looms into group VI. A sample of 100 member weaver household was selected out of the total member weaver household of the cooperative using proportional allocation method of sampling technique. In addition to 100 sample member weaver household, a sample of 50 number non-member weaver household of similar category with that of member weaver household was selected for comparison. Data were collected with the help of a pretested structured schedule through personal interview method. Simple statistical tools like average and percentages were used to draw relevant conclusion.

OBSERVATIONS AND ANALYSIS

The observations of the present study as well as relevant analysis have been summerised under the following heads:

Average annual household employment from weaving:

Average annual household employment from weaving for both member and non-member household by loom size is shown in the Table 1. Weaving was the major source of employment for both the member and non-member household in the study area. Considerably high share of weaving in annual household employment of the member weavers' household was also reported by Chadha and Sharma (1996) from their study on Bhutti Weavers' Cooperative Society in Himachal Pradesh. On an average, the annual household employment from weaving in member household was higher by 432.05 mandays than the non- member household and the difference was statistically highly

significant (t=5.24**). Similarly, in all size groups also, the employment from weaving in case of member household was significantly higher than the non-member household. The difference increased with the increase in loom size group *i.e.* from 159.25 mandays in size group I to 828.47 mandays in loom size group VI. Thus, the results indicate that the weaver cooperative has the positive impact in increasing labour employment of the member household.

Table 1 : **Average annual household employment for member and non- member household from weaving and loom sizes (mandays)**

Size groups	Average annual household employment (Mandays) from weving			
	Member	Non-member	Difference	't' value
Group I	421.00	261.75	159.25	5.86**
Group II	733.06	499.00	234.06	3.83**
Group III	1073.81	727.80	346.01	4.97**
Group IV	1418.11	879.08	539.03	6.96**
Group V	1757.10	1073.85	683.25	6.54**
Group VI	2105.75	1277.28	828.47	8.62**
Pooled	1188.24	756.19	432.05	5.24**

** indicate significance of value at P=0.01

Labour employment in weaving per loom:

Table 2 shows the labour employment per loom for different size groups of member and non-member households. Labour employment in weaving per loom was estimated at 367.06 mandays for member household as against 233.55 mandays for the non-member household in the study area. Thus, labour employment per loom in case of member household was found to be higher by 133.5 mandays than the non-member household. Higher level of human labour employment in member household of dairy cooperative than that of the non-member household was also reported by Singh *et al.* (1996). Greater involvement of the household in weaving activities because of the greater business for being member of the co-operative might be the only reason for such a difference and thereby indicating the positive impact of co-operative in the labour employment of the member household. For different size groups also, human labour employment per loom was higher for the member household than the non-member household. Further, per loom labour employment showed a negative relationship with the loom size in both the cases of member and non-member household *i.e,* higher the loom size, lower was the employment. It varied from 421 mandays in loom size group I to 350.96 mandays in loom size group VI in case of member household as against 261.75 mandays and 212.88 mandays for respective size groups of non-member household.This inverse relationship of labour employment per loom with the loom size group might be due to variation in intensity of use of loom.

Table 2 : Per loom employment from weaving by loom sizes and categories of household (mandays)

Size groups	Member household	Non-member household
Group I	421.00	261.75
Group II	366.53	249.50
Group III	375.94	242.60
Group IV	354.53	219.77
Group V	351.42	214.77
Group VI	350.96	212.88
Pooled	367.06	233.55

Operation wise labour employment in weaving per loom:

The operation wise labour employment in weaving per loom for different size groups of member and non-member household is given in Table 3 and 4, respectively. The table reveal that colouring and dying of yarn, bobbin winding, warping, fitting into the loom, spindle winding and weaving were the only operations involved in weaving. The absolute share of all these operations in the total annual employment of labour per loom was found to be 2.69, 2.75, 2.78, 2.93, 95.56 and 260.35 mandays in member household corresponding to 1.70, 1.74, 1.78, 1.82, 60.86 and 165.65 mandays in case of non-member household, respectively. Labour employment per loom in all the operations appeared to be higher in member household than the non-member household. Employment of higher amount of labour in all the operations in member household attributed to greater weaving activities than the non-member household. However,

Table 3: Operation wise labour employment in weaving for different size groups of members households (Mandays per loom)

Size groups	Colouring and dying of yarn	Bobbin winding	Warping	Fitting into the loom	Spindle winding	Weaving	Total
Group I	3.33(0.79)	3.41(0.81)	3.43(0.81)	4.11(0.98)	108.95(25.88)	297.77(70.73)	421.00(100)
Group II	2.75(0.75)	2.82(0.77)	2.87(0.78)	2.90(0.79)	96.63(26.36)	258.56(70.54)	366.53(100)
Group III	2.63(0.73)	2.65(0.74)	2.68(0.75)	2.82(0.79)	93.45(26.11)	253.71(70.88)	375.94(100)
Group IV	2.51(0.71)	2.55(0.72)	2.58(0.73)	2.59(0.73)	91.90(25.92)	252.40(71.19)	354.53(100)
Group V	2.48(0.71)	2.54(0.72)	2.57(0.73)	2.58(0.73)	91.25(25.97)	250.00(71.14)	351.42(100)
Group VI	2.46(0.70)	2.53(0.72)	2.56(0.73)	2.57(0.73)	91.18(25.98)	249.66(71.14)	350.96(100)
Pooled	2.69(0.73)	2.75(0.75)	2.78(0.76)	2.93(0.80)	95.56(26.03)	260.35(70.93)	367.06(100)

Figures within parentheses indicate percentages to row total

Table 4: Operation wise labour employment in weaving for different size groups of non -members households (Mandays per loom)

Size groups	Colouring and dying of yarn	Bobbin winding	Warping	Fitting into the loom	Spindle winding	Weaving	Total
Group I	2.00(0.76)	2.07(0.79)	2.12(0.81)	2.15(0.82)	69.05(26.38)	184.36(70.43)	261.75(100)
Group II	1.88(0.75)	1.90(0.76)	1.93(0.77)	2.07(0.83)	64.50(25.85)	177.32(71.07)	249.50(100)
Group III	1.76(0.73)	1.80(0.74)	1.83(0.75)	1.84(0.76)	63.37(26.12)	172.00(70.90)	242.60(100)
Group IV	1.58(0.72)	1.60(0.73)	1.65(0.75)	1.68(0.76)	57.17(26.01)	156.09(71.02)	219.77(100)
Group V	1.53(0.71)	1.55(0.72)	1.59(0.74)	1.62(0.75)	55.95(26.05)	152.53(71.02)	214.77 (100)
Group VI	1.47(0.69)	1.52(0.71)	1.54(0.72)	1.56(0.73)	55.14(25.90)	151.65(71.24)	212.88(100)
Pooled	1.70(0.73)	1.74(0.75)	1.78(0.76)	1.82(0.78)	60.86(26.06)	165.65(70.93)	233.55(100)

Figures within parentheses indicate percentages to row total

Table 5: Family and hired labour employment in weaving per loom in different size groups of member and non-member household (Man days)

Size groups	Member household			Non-member household		
	Family	Hired	Total	Family	Hired	Total
Group I	157.88(37.50)	263.12(62.50)	421.00(100)	110.69(42.29)	151.06(57.71)	261.75(100)
Group II	129.79(35.41)	236.74(64.59)	366.53(100)	102.79(41.20)	146.71(58.80)	249.50(100)
Group III	124.75(34.85)	233.19(65.15)	375.94(100)	96.55(39.80)	146.05(60.20)	242.60(100)
Group IV	122.22(34.47)	232.31(65.53)	354.53(100)	77.15(35.10)	142.62(64.90)	219.77(100)
Group V	109.60(31.19)	241.82(68.82)	351.42(100)	68.30(31.80)	146.47(68.20)	214.77(100)
Group VI	90.56(25.80)	260.40(74.20)	350.96(100)	61.00(28.66)	151.88(71.34)	212.88(100)
Pooled	122.47(33.37)	244.59(66.63)	367.06(100)	86.08(36.86)	147.47(63.14)	233.55(100)

Figures within parentheses indicate percentage to row total

the relative share of all these operations in the annual employment per loom appeared to be almost similar in both the cases of member and non-member household. Weaving and spindle winding operation accounted for about 71 per cent and 26 per cent in the annual employment per loom in both the member and non-member household, while the operations like colouring and dying, bobbin winding warping and fitting into the loom individually accounted for less than 1 per cent of annual employment per loom in both the categories of household. Weaving and spindle winding were thus, found to be the major operations in weaving cloths for both the member and non-member household.

For different size groups, operation wise labour employment per loom also reveals a similar picture like the total of member and non-member household. However, labour employment per loom in all the operations tended to decline with the increase in the loom size in both the member and non-member households. Intensive use of loom by the lower size groups resulted in higher employment of labour in all their operations compared to that of larger size groups.

Employment of family and hired labour per loom:

Table 5 shows the distribution of labour employment per loom according to sources of labour in different size groups of member and non-member household. It is observed from the Table that on an average family and hired labour employment per loom were 33.37 per cent and 66.63 per cent in member house hold and, 36.86 per cent and 63.14 per cent in case of non-member household. Hired labour employment thus, dominated the labour employment scenario of weaving in both the categories of household. Even then, the proportion of hired labour was more, while that of family labour was less in member household compared to non-member household. Greater business activities of the member household due to co-operative resulted into higher amount of hired labour employment in this category of household compared to non-member household.

For different size groups also, similar result was observed. Hired labour accounted for the major share in the annual employment per loom in all the size groups of member and non-member household. It is also observed that with the increase in the loom size, family labour employment decreased while that of hired labour increased in both the categories of household. Employment of family labour thus, showed a negative relationship and that of hired labour a positive relationship with loom size group.

Conclusion:

From the above discussion, it can be concluded that average annual labour utilisation in weaving in member household was significantly higher than the non-member household. This positive impact of weavers' cooperative on member household in labour utilisation might be due to greater business activities of member household under the patronage of cooperative system. This indicates a vast scope for organisation of silk handloom weaving industry under the umbrella of cooperative for a sustainable income and gainful employment of weavers.

Authors' affiliations :
TRISHNALEE SAIKIA, Krishi Vigyan Kendra, LAKHIMPUR (ASSAM) INDIA
Email: saikiatrishnalee_2010@rediffmail.com

REFERENCES

Chadha, G.K. and Sharma, H.R. (1996). Co-operative succeed in mountain too: Case of Bhutti Weavers Society, Kulu. *Indian J. Agric. Econ.*, **51**(4): 755-756.

Singh, B., Yadav, S.R., Shukla, D.S. and Singh, R.B.(1996). Impact of co-operative milk societies in increasing rural income and employment in district Kanpur Dehat, Uttar Pradesh. *Indian J. Agric. Econ.*,**51**(4): 809-881.

9th Year ★★★★★ of Excellence ★★★★★