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Research Paper

Socio-economic analysis of power loom industry in Karnataka a study on Thumkur district

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ABSTRACT : The Indian textile industry is a personification of Indian culture. It has always occupied a place of honour in the industrial system of India. The introduction of decentralized sector power looms dates back to 1904 when the Jahagirdar of Ichalkaranji (the princely state) gave encouragement to weavers to install power looms and improve their standards of living. The study was conducted in Tumkur district of Karnataka. The total sample size was 60 from three different taluks of Tumkur district, the result of the study showed that weaving was the main occupation for majority of 70 per cent of power loom weavers, the remain weavers interestingly 21.66 per cent of were involved in business activities along with weaving has the main occupation and they were selected weaving as a profession because of hereditary, 35.00 per cent weavers selected prospectus of job opportunity. Nearly 22 per cent of power loom weavers were illiterates, 55 per cent of weavers belonged to Devanga caste which traditionally had known to peruse weaving profession. And 45.00 per cent of power loom weaver had APL cards with grass annual income of 3,79,472.17 Rupees. Resham *Saree* has more cost of production than other power loom products of the study area and net return of the Resham *Saree* is 123.44 Rupess it is higher than LT and cotton silk *Saree*s with more than one B: C ratio. The lack of demand and threat from mil sector/ garments were the major constraints as expressed by power loom weavers, by the support of government sector with the creation of good market facility will help for improve the socio-economic conditions of the power loom weavers.

KEY WORDS : Power loom, Weavers, Resham, LT, Cotton Silk

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INTRODUCTION :

During the 20th century, there has been a considerable development in mechanical devices of weaving operations. Several new types of looms have came into existence, where as older have been refined and their scope extended. Thus, power loom sector consists of manufacturing cloth with the help of up-graded handloom technology by the weavers. The introduction of decentralized sector power looms dates back to 1904 when the Jahagirdar of Ichalkaranji (the princely state) gave encouragement to weavers to install power looms and improve their standards of living. Later they were introduced in the Indian weaving industry during 1922 to1927 (Anonymous, 2001) the growth of this industry was slow. In fact, this was major breakthrough in the decentralized weaving industry as manpower was substituted by mechanical power.

The growth of power looms was actually started during 1960s and year after year there is tremendous growth in the number of power looms. As a result, presently there are more than 22.69 lakhs power looms in the country. Looking at the speed of increase in number of power looms, one may concluded the better future and prospects for power loom industry (Anonymous, 1988).

In Karnataka 30,988 families are engaged in power loom weaving. The power looms of the state provide employment to 1, 27,535 weavers directly. The power loom have been extensively developed in the districts like-Tumkur, Bangalore (R), Bagalkot. There is a moderate development of power looms in the districts like Gadag, Chikkaballapura and Bangaluru In the remaining districts the power loom activity is found on a very small scale. (Census, 2010).

Need for the study :

The power loom industry are facing several problems such as non-availability of adequate quantity and quality of raw material, shortage of working capital, non-availability of marketing facilities, poor credit, low capacity utilization due to non-utilization of new technology, failure of co-operative movement, stiff competition from organized mill and other sectors and also central and state government's low budget allocations and non-utilized budgeted funds in a proper way 613 weavers suicide cases have been registered and 1500 weavers have attempted to commit suicide due to lack of reimbursement of their personal loans taken from micro financial institutions and money lenders during 1997 to 2010 in India (Rao, 1980 and 2012). Majority of the weavers in the state are not financially sound because of inadequate earnings from weaving. Many Primary Weavers Co-operative Societies are defunct, very few societies are earning profits and the other societies are eagerly waiting for a savior to lift them from the disastrous conditions. Considering the above facts, the present study is undertaken to through light on the status of weaving under power loom approaches with fallowing specific objectives.

Objectives of the study :

– To study the demographic characteristics of Power loom weavers.

– To study the socio-economic status of power loom weavers.

– To Economics of products produced in power loom sector.

MATERIALS AND METHODS :

The study was under taken in Tumkur district of Karnataka State. Tumkur district is situated roughly in the southern part of the state. Tumkur district was purposively selected for investigation and it occupies second place in respect of number of weavers in the state. Further it fallows first place in the number of power loom weavers in the state (Depertment of Handloom and Textile,Bangalore,2013). In the selected district out of ten taluks, three taluks having largest number of weavers was selected *viz.*, Tiptur, Gubbi, Turvekere. From each Taluk, 20 power loom weavers were selected randomly for the study. Thus, the total sample size selected for the study was 60. The primary data with respect to demographic characteristics, socio-economic condition, cost and returns structures for different *Sarees* produced was collected from the weavers by personal interview method with the help of pre-tested schedule.

Average and percentage were calculated for analyzing demographic, socio-economic condition of power loom weavers and budgeting technique was followed for estimating the cost and returns in the production of handloom products.

RESULTS AND DATA ANALYSIS :

The results obtained from the present investigation as well as relevant discussion have been summarized under following heads :

Demographic characteristics of power loom weavers :

Table 1 represents the demographic characteristics of power loom weavers. According to this Table 1 majority of the power loom weavers belonged to middle age (53.33%) group while 21.66 per cent of the weavers belonged to old age group fallowed by young age (25.00%). About 92 per cent households of weavers were male headed influenced their dominance as head of the family and the remaining were headed by female members.

It could be observed from the educational status of power loom weavers that educational level was relatively

better when compared to handloom weavers. Among the power loom weavers, 45 per cent, 18.34 per cent and 10 per cent pursued primary, secondary and collegiate education. While, at least 5 per cent of power loom weavers possessed higher education

On the caste composition, majority of power loom weavers belonged to Devanga caste (55%) which traditionally had known to peruse weaving profession. Incidentally, 20 per cent of the weavers in the categories of weaving belonged to scheduled caste and scheduled tribes. While on the other hand 25 per cent of the weavers were muslims in power loom.

Average family size and its composition in power loom weavers showed that male member marginally outnumbered (42.41%) when compared to female members (37.52%) proportion of children in power loom families 21 per cent. The average size of the family across weavers remained between 5 to 6 members per family. From the Table 1 it was clear that majority of power loom weaves belonged to nuclear family (91.67%) nearly eight per cent belonged to joint family.

Socio-economic profile of power loom weavers:

The results on the socio-economic profile presented in Table 2 showed that weaving was the main occupation for majority of 70 per cent of power loom weavers, the remain weavers interestingly, 21.66 per cent of were involved in business activities along with weaving has the main occupation.

Government or private service, petty business activities and other occupations as coconut merchant and weaving related business constituted the secondary occupations and sources of income to the weaving power loom weaver's households. Among the power loom weavers 13.33 per cent of them had petty business as secondary source of income. On the ownership of ration card by power loom weavers, (Table 2) it could be ascertained that 30.00 per cent weavers were below poverty line. As large as 45.00 per cent of weaver had APL cards. Further, About 83.33 per cent of power loom weavers pocessed ICICC or Yashaswini health cards.

The silk weaving has been acquired either through hereditary or for other reasons (Table 2). The results

Table 1 : Demographic characteristics of sample weavers in the study area **(n=60)**

Sr. No.	Variable	Category	Power loom	
			Frequency	%
1.	Age	Young age (18-30 yrs)	15	25.00
		Middle age (31-50 yrs)	32	53.33
		Old age (above 50 yrs)	13	21.66
2.	Gender	Male	55	91.66
		Female	5	8.33
3.	Education	Illiterate	13	21.66
		Primary School	27	45.00
		Secondary	11	18.34
		College	6	10.00
		Higher education	3	5.01
4.	Caste	Devanga	33	55.00
		SC	3	5.00
		ST	9	15.00
		Muslim	15	25.00
5.	Average family composition	Male	2.43	42.40
	(number)	Female	2.15	37.52
		Children	1.15	20.06
		Average family size	5.73	100.00
		Average number of weavers per family	3.25	
6.	Family type	Joint family	5	8.33
		Nuclear family	55	91.67
7.	Average weaving experience (year)		10.23	

depicted that majority of the silk weaving and were of selected as a profession because of hereditary reasons by 38.33 per cent weavers fallowed by prospectus of job opportunity (35.00%) in weaving as the reason and another 20 per cent of the them selected power loom weaving and were of first generation weavers due to higher job opportunity (20.00%) and based on their interest another 6.67 per cent chose weaving as profession.

Association of silk weavers with social organizations showed that in case of power loom weavers, 8.33 per cent were associated with village Panchayat as members and as high as about 27 per cent were members in SHGs fallowed by very few weavers (about 5%) with NGO as members. Interestingly, in all it could be seen that association of power loom weavers with these local organizations was more.

The non-institutional sources of credit dominated even today as major source of credit to weavers in the study area along with banking institutions. Across weavers categories it was indicated that money lenders, friends and relatives and master weavers were the ones on whom weavers depended mostly to fulfil their credit requirements. Among the Power loom weavers dependence of power loom weavers on money lender was to the extent of about 42 per cent, friends and

Table 2: Socio-economic characteristics of power loom sample respondent in study area

Sr. No.	Variable	Category	Power loom	
			Frequency	%
1.	Main occupation	Weaving	42	70.00
		Agriculture	6	8.33
		Business	12	21.66
2.	Subsidiary occupation	Govt/private service	11	18.33
		Petty Business**	8	13.33
		Other *	4	6.66
		None	37	61.67
3.	Ration card owned	BPL	18	30.00
		APL	27	45.00
		No cards	15	25.00
4.	ICICC/Yashawini/ health card owned	Yes	50	83.33
		No	10	16.67
5.	Choose of profession	Hereditary	23	38.33
		First generation	12	20.00
		Job opportunity	21	35.00
		Interest in weaving	4	6.67
6.	Association with organization	Village Panchayath	5	8.33
		NGO	3	5.00
		SHG	16	26.66
		None association	36	60.01
7.	Land holding	Upto 2.5 acre	0	0.00
		2.51 – 5.00 acre	2	3.33
		5.10 -10.00 acre	4	6.66
		Land less	54	90.00
		Average land size(acre)	0.10	
8.	Source of credit to weavers family	Money lender	25	41.66
		Master weaver	21	35.00
		Friends/ relatives	22	36.66
		Bank	28	46.66

Note ** indicate Hotel/pan shop/retail shop,*indicate coconut merchant and weaving related business

relatives accounted for 37 per cent while, the dependence of power loom weavers on mater weavers for credit was relatively more at 35 per cent and dependence for credit needs on banking institutions was almost 47 per cent.

Cost of silk *Saree* production in power loom:

The quantities of raw materials utilized with respect to production of different types of *Sarees* by power loom weavers are presented in Table 3. The results revealed that the quantities of raw materials required for production of all the sources woven by power loom *viz.*, weft, warp, zari, human labour etc were found to be less as compared to handloom. The total cost of production of Resham type *Saree* was Rs. 401.56, of this cost, 99.01 per cent was variable cost and the remaining only 0.98 per cent was fixed cost. The distribution pattern of variable cost on various raw materials used in Resham type *Saree* revealed that human labour shared the highest per cent (41.63) of the total cost fallowed by cost on weft that accounted 36.45 per cent and warp at 2.65 per cent. The share of other costs that include cost of transportation, gum materials and Greece and interest on working capital accounted was 1.89 per cent and 5.74 per cent, respectively. And the electricity cost was 0.11 per cent. The share of the fixed cost in total cost of Resham type *Saree* production was Rs. 3.97 that accounted only for 0.98 per cent of total cost of production. Remaining only 1.56 per cent was fixed cost. The total cost of production of LT type *Saree* was Rs. 224.69, of this cost, 98.39 per cent was variable cost and the remaining only 1.60 per cent was fixed cost. The distribution pattern of different cost on various raw materials used in LT type *Saree* revealed that human labour shared the highest 50.22 per cent of the total cost

Table 3 : Cost of production of silk saree

Sr. No.	Particular	Power loom (Rs./ *Saree*)					
		Resham *Saree*		LT *Saree*		Cotton silk *Saree*	
		Cost	%	Cost	%	Cost	%
I.	**Variable cost**						
	Warp	10.66	2.65	6.12	2.72	6.36	1.60
	Weft	146.39	36.45	58.45	26.01	168.61	42.61
	Zari	42.25	10.52	31.83	14.16	42.33	10.69
	Human labour	167.18	41.63	112.85	50.22	146..00	36.89
	Power charge	0.45	0.11	0.41	0.18	0.43	0.10
	Other materials	7.6	1.89	3.61	1.60	4.26	1.07
	Interest on working capital at 11%	23.06	5.74	7.82	3.48	23.90	6.03
	Subtotal I	397.59	99.01	221.09	98.39	391.89	99.03
II	**Fixed cost**						
1.	Rent value of building	0.27	0.06	0.23	0.10	0.26	0.06
2.	Depreciation	0.20	0.04	0.18	0.08	0.19	0.04
3.	Power connection	0.14	0.03	0.13	0.05	0.14	0.03
4.	Interest on fixed capital at 11%	3.36	0.83	3.06	1.36	3.22	0.81
	Subtotal II	3.97	0.98	3.60	1.60	3.81	0.96
	Total cost (I + II)	401.56	100	224.69	100	395.70	100

Other*: material include, transportation charge, other material like gum, Greece etc

Table 4: Returns from power loom silk *Saree* produced

Particular	Power loom		
	Resham *Saree*	LT *Saree*	Cotton silk *Saree*
Selling price (Rs.)	525.00	280.00	510.00
Cost of production (Rs.)	401.56	224.69	395.70
Net return (Rs.)	123.44	55.31	114.30
B:C ratio	1.30	1.24	1.28

fallowed by cost on weft that accounted 26.01 per cent and warp at 2.72 per cent. The share of other costs (cost of transportation, gum materials and Greece) and interest on working capital accounted was 1.60 per cent and 3.48 per cent, respectively. And the electricity charge cost was 0.18 per cent. The share of the fixed cost in total cost of LT type *Saree* production was Rs. 3.60 that accounted only for 1.60 per cent of total cost of production. The total cost of production of cotton silk *Saree* was Rs. 395.70, of this cost, 99.03 per cent was variable cost and the remaining only 0.96 per cent was fixed cost. The distribution pattern of variable cost on various raw materials used in cotton silk *Saree* revealed that human labour shared the highest per cent (36.89) of the total cost. Fallowed by cost on charaka silk that accounted 42.61 per cent and warpat 1.60 per cent. The share of other costs (cost of transportation, gum materials and Greece) and interest on working capital accounted was 1.07 per cent and 6.03 per cent, respectively. And the electricity charge cost was 0.18 per cent. The share of the fixed cost in total cost of cotton silk *Saree* production was Rs. 3.81 that accounted only for 0.96 per cent of total cost of production. Remaining only 0.96 per cent was fixed cost.

Return from silk *Saree* production in power loom:

The average selling price and per unit net returns of different type of *Sarees* produced in power loom were presented in the Table 4. The average selling price and cost of production of Resham type *Saree* was Rs.525.00 and Rs. 401.56, respectively. The net returns obtained by weaver were Rs.123.44 per *Saree* with the benefit cost (B:C) ratio of 1.30. In case of LT type *Saree*, the average selling price and production cost per unit was Rs. 280.00 and Rs. 224.69, respectively. The net returns realised by weaver per *Saree* was Rs. 55.31 with the B:C ratio of 1.24. However, cotton silk *Saree*, the average selling price and per *Saree* production cost were Rs. 3450.72 and Rs. 3132.97, respectively. The net return was Rs.317.75 per *Saree* and the B:C ratio obtained was 1.10. Moreover, Resham type *Saree*, the average selling price and cost of production was estimated to be at Rs. 525.00 and Rs.401.56, respectively. The net returns of *Saree* was Rs.123.44 per *Saree* and returns per rupee cost was 1.30 The analysis of the cost and returns structures of silk *Saree* production among brands/types in power loom production indicated that the highest net returns was observed in case of Resham type silk *Saree* (Rs.123.44 with B:C ratio of 1.30) followed by cotton silk *Saree* type (Rs. 114.30 with B:C ratio of 1.28) silk *Saree* and LT type *Saree* (Rs. 55.31 with B:C ratio of 1.24). Similar work related to the present investigation was also conducted by Arif and Thakor (2011); Awade (1988); Bindu (2013); Muthe (2013); Rao *et al.* (2001) and Rao (1980 and 2012).

Conclusion:

The power loom industry are facing several problems such as non-availability of adequate quantity and quality of raw material, shortage of working capital, non-availability of marketing facilities, poor credit, low capacity utilization due to non-utilization of new technology, failure of co-operative movement, stiff competition from organized mill and other sectors and also central and state government's low budget allocations, so there is need of government support, technological change in power loom sector for up lipment of power loom weavers.

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LITERATURE CITED:

Anonymous (1988). Working and living conditions of the workers in power loom Industry in India, New Delhi.

Anonymous (2001). *Compendium of textile statistics*, Ministry of textile, GOI.

Arif, A. and Thakor (2011). An analytical study of the functioning and the problems of the power loom industry in Maharashtra with special reference to Malegaon dist, Nasik. *Internat. J. Trade, Econ. Fin.*, **2**(3): 56-59.

Awade, K. B. (1988). Power looms sentenced to death? *Indian Textile J.*, **11**: 90-93.

Bindu, O. (2013). Determinants of demand for the Indian textile industry. *Econ. & Politi. Weekly*, **48**(3): 62-69.

Census (2010). Ministry of textile Industries, India.

Department of Handloom and Textile, Karnataka.

Department of Handloom and Textile, Bangalore.

Muthe, P. R. (2013). Growth and performance of textile industry

in Nanded city, *Internat. J. Res. Commerce, Econ. Manag.*, **2** (6): 70-80.

Rao, M.V., Kumaresan, P. and Prakash, N.B.V. (2001). Comparative economics of cocoon production in coastal area and traditional area of Andhra Pradesh. *Indian J. Seri*. **40**(2): 147-150.

Rao, S. (1980). Economic aspects of the Gadwal handloom industry in Andhra Pradesh. Ph.D. Thesis, Osmania University, Hyderabad, A.P. (India).

Rao, Srinivasa (2012). Socio-economic analysis of handloom industry in Andhra Pradesh a study on selected districts. *J. Exclusive Manag. Sci.*, **4**(8): 22-30.