



ISSN (E): 2277- 7695

ISSN (P): 2349-8242

NAAS Rating: 5.23

TPI 2021; 10(6): 49-51

© 2021 TPI

www.thepharmajournal.com

Received: 17-04-2021

Accepted: 26-05-2021

SH Kamble

Associate Professor,

Department of Agricultural

Economics, College of

Agriculture, Latur, Maharashtra,

India

Analysis of value addition at weaving stage of cotton processing

SH Kamble

Abstract

Cotton (*Gossypium spp.*) the white gold or the king of fiber is the closely linked to human civilization itself. In India cotton industry ranks first among the agro-based industries and engaged human resource about 4 to 5 million people. Cotton is one of the most important commercial crops playing a key role in economics, political and social affair of the world. Cotton processing industry services mainly on its uniqueness of craftsmanship and utilitarian values. The customer too is becoming choosier, paying attention to price and weaving efficiency. The best utilization of raw material for thorough analysis of value addition at weaving stage of cotton processing is necessary. Keeping this in view the present study was undertaken with the following objective- To find out value addition to cotton at weaving stage.

As more number of powerlooms situated in Kolhapur and Sangli district these districts were purposively selected for study. On the basis of availability of powerlooms Hatkanangale and Shirol tehsils from Kolhapur district and Khanapur and Palus tehsils from Sangali district were selected for study. Fifteen weaving units from each selected tehsils were chosen randomly for the collection of required information for the study. Thus, the total sample size was 60.

Fixed investment in weaving unit was estimated and the result revealed that total fixed investment on weaving unit was found to be Rs. 3,29,504.12. Fixed investment for powerloom machinery was higher as Rs. 2,23,054.80 (67.69%) as compare to other fixed investment. The investment on building was found to be Rs. 75,829.98 (23.01%), on supplementary machinery was Rs. 13,897.67 (4.22%), on electrification was Rs. 9471.67 (2.87%), on humidifier Rs. 4275 (1.29%), and on weighing balance was Rs. 2975 (0.90%).

Per unit cost of processing of weaving process (yarn to cloth) revealed that the average total cost incurred in the processing of yarn to cloth worked out to Rs. 36.30 lakh of which the total variable cost (Rs. 35.53 lakh) formed the major component in the cost of processing of yarn and amounted for 97.88 percent of the total cost of yarn processing. The fixed cost being Rs. 0.77 lakh accounted for only 2.12 percent of the total cost of processing. In the total variable cost the cost of raw material was Rs. 26.97 lakh accounting for 74.29 percent of the total cost of processing followed by interest on working capital (10.50%), wages to casual labour (9.61%), electricity charges, repair and maintenance, family labour charges, communication charges, office maintenance, corporation tax and license fee together accounted for remaining 3.47 percent of total cost of processing.

In the total fixed cost (Rs. 0.77 lakh) salary to permanent staff (Rs. 0.37 lakh) found to be the major component accounting for 1.02 percent of the total cost of processing followed by depreciation of fixed investment and interest on fixed capital which together accounted for 0.40 percent of the total processing cost.

The gross return obtained and value added in weaving process revealed that on processing of yarn 97 percent of final product (cloth) and 3 percent of waste material was obtained from weaving process. The gross return obtained from weaving unit was Rs. 40.73 lakh which contributed by return from main produce (Rs. 40.64 lakh) and return from wastage (Rs. 0.09 lakh). Raw material cost in weaving process was Rs. 26.88 lakh. The net processing cost was Rs. 9.42 lakh and margin obtained was Rs. 4.43 lakh. The value addition in weaving process was Rs. 13.85 lakh. The output input ratio worked out to be 1.12 in weaving process.

Keywords: Weaving unit, output input ratio, processing cost, value addition

Introduction

Cotton (*Gossypium spp.*) the white gold or the king of fiber is the closely linked to human civilization itself. In India cotton industry ranks first among the agro-based industries and engaged human resource about 4 to 5 million people. Cotton is one of the most important commercial crops playing a key role in economics, political and social affair of the world.

About 78 countries are growing cotton in the world on the area of 32.80 million hectares with the production of 93.63 million bales of 170 kg each. In India area under cotton 96.06 lakh hectare and production 290 lakh bales of 170 Kg per hectare. In which the Maharashtra having

Corresponding Author:

SH Kamble

Associate Professor,

Department of Agricultural

Economics, College of

Agriculture, Latur, Maharashtra,

India

higher area under cotton (35.03 lakh hectare) but Gujarat ranks first in production. The total cotton consumption by spinning unit in India is 289.15 lakh bales. The Gujarat ranks first in cotton processing and consume 90 lakh bales and Maharashtra ranks second after Gujarat with 62 lakh bales cotton consumption.

The processing of cotton is a business, which is undertaken for the purpose of value addition to the product. The value addition to cotton takes place at four main stages ginning, spinning, weaving and garments. The end product in cotton processing is the cloth, which is got at the weaving stage of cotton processing.

Weaving and knitting converts cotton, manmade, or blended yarns into woven or knitted fabrics. India's weaving and knitting sector remains highly fragmented, small-scale, and labour-intensive. Weaving sector consists of handlooms and powerlooms. "Powerlooms" are small firms, with an average loom capacity of four to five owned by independent entrepreneurs or weavers. Though weaving is one of the important sector for Indian textile industry, it has not been given due attention like spinning sector. Moreover structure of the industry plays a major role in making it competitive. Nature of this sector is mainly unorganized. The sector consists of fragmented, small and often, un-registered units that invest low amount in technology and practices especially in the powerloom, processing, handloom and knits. India has world's largest installed base for looms. The powerloom sector produces more than 60 percent of cloth in India and textile ministry's estimation says that more than 60 percent of the country's cloth exports originated from that sector. With its employment of 4.86 million workers, the powerlooms sector comprised approximately 60 percent of total textile industry employment.

The powerloom industry has grown up from handloom sector traditionally with inherent technical knowhow passed on from forefather and is being continuing in many of the clusters. The 19.44 lakh looms in the decentralized powerloom sector are spread over 4.3 lakh units with an average holding of a little over 4 looms per unit. Thus, the sector largely comprises of very tiny units with a majority of loom holdings in the range of 1 to 8. Decentralized powerloom sector is consistently meeting out the need of the fabric required for garment sector for export as well as the domestic market. The share of the decentralized sector is 62 percent of the total fabric production in the country. In some of the clusters, manufacturing, product diversification, merchandising and marketing have been on sound footing while in some of the areas, it is very weak till date. However the growth of the powerloom sector in India skewed therefore, there is a need of inclusive growth to facilitate equal opportunity for the development of the sector.

Cotton processing industry services mainly on its uniqueness of craftsmanship and utilitarian values. The customer too is becoming choosier, paying attention to price and weaving efficiency. The best utilization of raw material for thorough analysis of value addition at weaving stage of cotton processing is necessary. Keeping this in view the present study was undertaken with the following objective.

To find out value addition to cotton at weaving stage.

Materials and Methods

Sampling procedure adopted

Multistage sampling design was adopted for selection of

region, district, tehsil and weaving units. Western Maharashtra region of Maharashtra state was selected for the study as textile industries and weaving units are one of the important industries of the region. Presence of well-established co-operative textile industries as well as private textile industries are helpful for establishment of weaving units hence, there are large number of weaving units. Western Maharashtra region consists of seven districts viz., Kolhapur, Sangali, Satara, Solapur, Pune, Ahmednagar and Nashik having large number of weaving units. As more number of powerlooms situated in Kolhapur and Sangli district these districts were purposively selected for study. On the basis of availability of power looms Hatkanangale and Shirol tehsils from Kolhapur district and Khanapur and Palus tehsils from Sangali district were selected for study. Fifteen weaving units from each selected tehsils were chosen randomly for the collection of required information for the study. Thus, the total sample size was 60.

Results and Discussion

Value addition to cotton at weaving stage

Fixed investment in weaving unit

Fixed investment in weaving unit was estimated and presented in table 1. The result revealed that total fixed investment on weaving unit was found to be Rs. 3,29,504.12. Fixed investment for powerloom machinery was higher as Rs. 2,23,054.80 (67.69%) as compare to other fixed investment. The investment on building was found to be Rs. 75,829.98 (23.01%), on supplementary machinery was Rs. 13,897.67 (4.22%), on electrification was Rs. 9471.67 (2.87%), on humidifier Rs. 4275 (1.29%), and on weighing balance was Rs. 2975 (0.90%).

Cost of processing in weaving unit

Per unit cost of processing of weaving process (yarn to cloth) was presented in table 2. The result revealed that the average total cost incurred in the processing of yarn to cloth worked out to Rs. 36.30 lakh of which the total variable cost (Rs. 35.53 lakh) formed the major component in the cost of processing of yarn and amounted for 97.88 percent of the total cost of yarn processing. The fixed cost being Rs. 0.77 lakh accounted for only 2.12 percent of the total cost of processing. In the total variable cost the cost of raw material was Rs. 26.97 lakh accounting for 74.29 percent of the total cost of processing followed by interest on working capital (10.50%), wages to casual labour (9.61%), electricity charges, repair and maintenance, family labour charges, communication charges, office maintenance, corporation tax and license fee together accounted for remaining 3.47 percent of total cost of processing. In the total fixed cost (Rs. 0.77 lakh) salary to permanent staff (Rs. 0.37 lakh) found to be the major component accounting for 1.02 percent of the total cost of processing.

Table 1: Fixed investment in weaving unit

	Particular	Amount in lakh Rs.	Percent
1.	Building	0.75	23.01
2.	Powerloom machine	2.23	67.69
3.	Supplementary machinery	0.13	4.22
4.	Electrification	0.09	2.87
5.	Weighing balance	0.02	0.90
6.	Humidifier	0.04	1.29
	Total	3.29	100

Table 2: Cost of processing in weaving unit

	Particular	Amount (In lakh Rs.)	Percent
Fixed cost			
1.	Depreciation @10 on fixed investment	0.33	0.91
2.	Salaries to permanent staff	0.37	1.02
3.	Interest on fixed cost	0.07	0.19
	Total fixed cost	0.77	2.12
Variable cost			
1.	Raw material	26.97	74.29
2.	Electricity	1.01	2.78
3.	Repair and maintenance	0.07	0.19
4.	Office maintenance	0.03	0.08
5.	License fee	0.02	0.06
6.	Corporation tax	0.03	0.08
7.	Casual labour Wages	3.49	9.61
8.	Communication charges	0.04	0.11
9.	Family labour	0.06	0.17
10.	Interest on working capital	3.81	10.50
	Total variable cost	35.53	97.88
	Total cost	36.30	100

Followed by depreciation of fixed investment and interest on fixed capital which together accounted for 0.40 percent of the total processing cost.

Return from processing of weaving unit

The gross return obtained and value added in weaving process was presented in table 3. On processing of yarn 97 percent of final product (cloth) and 3 percent of waste material was obtained from weaving process. The gross return obtained from weaving unit was Rs. 40.73 lakh which contributed by

return from main produce (Rs. 40.64 lakh) and return from wastage (Rs. 0.09 lakh). Raw material cost in weaving process was Rs. 26.88 lakh. The net processing cost was Rs. 9.42 lakh and margin obtained was Rs. 4.43 lakh. The value addition in weaving process was Rs. 13.85 lakh. The output input ratio worked out to be 1.12 in weaving process. The result obtained in value addition to cotton at weaving stage shows similarity with the results given by Mundinamani (2000) [6]. The calculated results were also shows similarity with the results given by Dodamani M.T. (2006) [2].

Table 3: Return from processing of weaving unit

	Particular	Amount (in lakh Rs.)
1.	Return from main produce	40.64
2.	Return from wastage	0.09
3.	Gross return	40.73
4.	Processing cost	36.30
5.	Raw material cost	26.88
6.	Net processing cost (processing cost – raw material cost)	9.42
7.	Margin (Gross return - processing cost)	4.43
8.	Value addition (Net processing cost + Margin)	13.85
9.	Benefit cost ratio	1:1.12

Conclusion

The gross return obtain from weaving unit was Rs. 40.73 lakh which contributed by return from main produce (Rs. 40.64 lakh) and return from wastage (Rs. 0.09 lakh) Raw material cost in weaving process was Rs. 26.88 lakh. The value addition in weaving process was Rs. 13.85 lakh. The output input ratio worked out to be 1.12 in weaving process.

References

1. Dev MS, Galab S, Reddy PP, Vinayan S. Economics of handloom weaving: a field study in Andhra Pradesh. Econ Polit Wkly. 2008 May 24;43-51.
2. Dodamani MT. Production and value addition in naturally coloured cotton under contract farming-an economic analysis. M.Sc. (Agri.) Thesis. University of Agricultural Sciences, Dharwad; c2006. p. 182.
3. Geeta M, Sunanda RK, Bhavni K. Value addition-cotton yarns. The Text Industry and Trade J. 1998;(1):75-79.
4. Jolly MS. Cost and costing in silk industry. Indian Silk. 1982;21(4&5):11-18.
5. Mattigatti R, Srinivasa G, Iyengar MNS, Datta RK.

Value addition in silk. The Indian Text J; c1997. p. 50-53.

6. Mundinamani RM. Value addition to cotton-an economic analysis. M.Sc. (Agri.) Thesis. University of Agricultural Sciences, Dharwad; c2000.