

## Research Article

# Profitability Analysis of Handloom Weaving Units in Tangail District of Bangladesh

Muhammad Rabiul Islam Liton<sup>1</sup>, Md. Elias Hossain<sup>2</sup>

<sup>1</sup>Assistant Professor, Department of Economics, Mawlana Bhashani Science and Technology University, Bangladesh.

<sup>2</sup>Professor, Department of Economics, University of Rajshahi, Bangladesh.

## I N F O

**Corresponding Author:**

Muhammad Rabiul Islam Liton, Department of Economics, Mawlana Bhashani Science and Technology University, Bangladesh.

**E-mail Id:**

rabiul388@gmail.com

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## A B S T R A C T

Handloom, a traditional cottage industry in Bangladesh, has been contributing significantly to the rural economy of Bangladesh in terms of employment generation and income enhancement. In Bangladesh, handloom weaving activity is considered to be a marginally profitable business compared to other weaving options as well as other occupations. Therefore, the present study emphasizes on analyzing the profitability of handloom weaving units operating in Tangail district, a handloom concentrated region in Bangladesh. To this end, primary data of 53 handloom weaving units have been collected from two Upazilas of this district. From profitability analysis, the study finds that handloom weaving activity in the study area is still profitable albeit marginally. A disaggregated analysis revealed that small scale handloom units earn higher profit per loom compared to single units, medium scale units and large scale units. Contrarily, rate of return earned by large scale units is higher than that by other types of units. It is also found that handloom units, which produce higher value products earn more profit per loom than those producing lower value products. On the contrary, rate of return is lower in case of higher value products than that in case of lower value products. Extent of using family labor and economy of scale effect may have contributed to yield such differences.

**Keywords:** Bangladesh Handloom Industry, Profitability, Rate of Return

## Introduction

Bangladesh, having a population of 163 million, is recognized as one of the populous countries in the world. Around 65% of the population in the country live in rural areas, whose livelihood mainly depends on agriculture.<sup>14</sup> However, agriculture cannot always provide these households a sustainable livelihood, because of low per capita arable land, lower productivity of agriculture and risk and uncertainties associated with agriculture in the country. Thus, in addition to farming, rural households often find scopes of non-farm activities to enhance their income for earning a better

livelihood. The traditional handloom industry, the largest non-farm economic activity in Bangladesh since long past, comes up with such a scope for people in the rural areas through providing supplementary employment and income opportunity for farm and non-farm households.<sup>2,5,7,10</sup> According to various reports, a total of about one million weavers, dyers, hand spinners, embroiderers and allied artisans have been using their creative skills in handloom industry among which around 50% are women.<sup>1,5,8</sup> In addition, a significant number of people are indirectly involved in this sector through the activities like marketing, transporting etc. According to the report of Bangladesh

Handloom Board (2003), the handloom units of Bangladesh produce 687 million meters of fabrics every year which comprise 28% of the total fabric production in Bangladesh and meet 36% of the local fabric demand.

According to the latest available estimates, handloom industry in Bangladesh consists of 0.183 million handloom units with 0.506 million looms.<sup>2</sup> Among them 0.31 million looms are operational that constitutes 62% of the total looms. Although handloom units operate in all over the country, they are mostly concentrated in few regions and Tangail district is one of them. According to BBS (2005), there are 37222 looms in 6476 handloom units in Tangail district among which 82.5% are operational.<sup>2</sup> These handloom units provide job opportunities for 95316 weavers out of which 55007 are male and 40309 are female. Among the handloom products produced in the study area, the *Tangail Sharee* is of good demand in home and abroad. While the industry has been on the flourish, the weaving units, at the same time, are facing numerous problems that result in lowering of profit over time. The reasons include increasing price of thread, yarn, dye and other raw materials and lack of credit, transportation and supply chain facilities; and availability of cheaper cloths from power looms and mill sector. As a result, a large number of small-scale handloom weavers are either operating at the margin or leaving their parental occupation.<sup>1</sup> Therefore, this sector requires special attention from academics and policy makers. In this context, this paper aimed at analyzing the profitability of handloom units located in Tangail district of Bangladesh.

The article is organized as follows: First section of the article introduced the issue; second section provided a review or related literature; third section provided the methodological framework; fourth section analyzed the results and finally, fifth section concluded the whole study.

## Review of Literature

Handloom weaving industry in Bangladesh went through a lot of ups and downs throughout the centuries. Mughal era was the golden period of Bengal Handloom. However, after the Mughal period, handloom industry of this region suffered many problems due to hostile policies imposed by the British rulers. After the emergence of Bangladesh, handloom sector flourished during the 1980s and early 1990s. Due to numerous reasons, including both demand side and supply side problems, handloom industry has again experienced a setback in the recent years.<sup>11</sup> However, a number of research studies on economic viability of handloom weaving industry in Bangladesh indicate that although handloom weaving activity could not flourish in its potential, the activity is still marginally profitable. Islam MK and Hossain ME (2013) conducted a cost-benefit study of handloom weaving units operating in Kumarkhali Upazila of Kushtia District.<sup>4</sup> Based on gross return, net return,

average return and per-loom profit of handloom units, they found that handlooms weaving activity is still profitable and per-loom profit for small-and large-scale units are higher than that of the medium scale units. Rahman MM (2013) found that production cost (per product) of large size units is lower than that of smaller units and therefore, per product profit as well as per unit profit are larger in large size units compared to those in small units.<sup>13</sup> In a comparative cost-benefit analysis of three handloom products-*Benarashi*, *Jamdani* and *Lungi* produced in the handloom unit operating in Dhaka and Narayanganj districts, Jahan N and Kumkum IJ (2016) showed that handloom industry is still a profitable business.<sup>6</sup> They found that profitability of *Jamdani* was the highest (33%) and of *Benarashi* was the lowest (13%), while it was 17% in case of *Lungi*. Economic analysis in terms of Internal Rates of Return (IRR) of three alternative weaving techniques-handlooms, power looms and mills, Chowdhury N (1990) showed that handloom industry is more efficient than its competitors.<sup>3</sup> Outside Bangladesh, research studies on profitability of handloom industry are found in the case of India. Mathew G (1987) found that due to increase in yarn price and labor cost, production cost of handloom products in Kerala has been on the increase day by day that caused to wane the profit margin of the handloom weavers.<sup>9</sup> The estimated rate of profit earned by the weavers in this study is found to be as meager as 5% only. He concluded that high competition from power loom, fluctuation in price, increasing price of inputs and market difficulties are the main barriers of flourishing handloom industry in the study area. Patra S and Dey SK (2015) analyzed the cost-benefit of various handloom products in Kuttack district of Odisha.<sup>12</sup> They found that *Pata Sharee* is the most profitable handloom product and *Silk Sharee* is the least profitable product in the study area compared to *Body Bandha Sharee*, *Kumbha Sharee* and *Cotton (design) Sharee*. The study found, anyway, that handloom weaving in Kuttack is also a profitable business. Thus, in almost all the studies, it is found that handloom weaving is profitable, although the rate of profit is not high. However, these studies have also mentioned numerous problems faced by the handloom production units that caused the profit margin to decrease over time and in some cases many handloom weavers were found to leave their parental occupation and switch to other occupations.<sup>1</sup>

## Methodology

### Theoretical Framework of Profitability

Profit, the most important source of motivation for economic activities, is the ultimate goal behind the establishment of business organizations. Profitability is the measure of efficiency of a business firm. The more the profit a firm earns, the more efficient the firm is. However, importance of profit is different to different stakeholders. To the financial

management profit is the test of efficiency and a measure of control, to the owners it a measure of the worth of their investment, to the creditors it is the margin of safety, to the government it is a measure of taxable capacity and basis of legislative action and to the country profit is an index of economic progress. However, there are two types of profits-accounting profit and economic profit. Accounting profit is the surplus of revenue earned by a firm over total costs associated with an activity. In other words, profit of a business during a given period is the excess of income over expenditure for that period. Thus, accounting profit considers only explicit costs (transaction costs). In contrast, economic profit subtracts both implicit costs (opportunity cost) and explicit costs (transaction cost) from total revenue. Thus, economic profit can be expressed as follows:

$$\text{Economic Profit} = \text{Accounting Profit} - \text{Implicit costs}$$

Or

$$\text{Economic Profit} = \text{Total Revenue} - (\text{Explicit cost} + \text{Implicit cost})$$

In economics, accounting profit is known as 'gross profit' and economic profit is known as 'pure profit'. This study uses the following procedure for analyzing economic profit of handloom weaving units:

Net return or profit ( $\Pi$ ) is calculated by subtracting gross costs ( $X_2$ ) from gross return ( $X_1$ ). That is:

$$\Pi = X_1 - X_2$$

Where, gross return ( $X_1$ ) is the sales revenue of the products and gross cost ( $X_2$ ) is the sum of total fixed cost ( $X_3$ ) and total variable cost ( $X_4$ ). That is:

$$X_2 = X_3 + X_4$$

Total fixed cost in handloom units includes opportunity cost of building price ( $X_5$ ) and opportunity cost of loom price ( $X_6$ ) and total variable cost ( $X_4$ ) includes labor cost ( $X_7$ ), yarn cost ( $X_8$ ), other input cost ( $X_9$ ) e.g. costs for small tools, electricity cost, kerosene cost, wax cost etc. That is:

$$X_3 = X_5 + X_6$$

$$X_4 = X_7 + X_8 + X_9$$

Thus, net return or profit ( $\Pi$ ) is calculated as:

$$\Pi = X_1 - (X_5 + X_6 + X_7 + X_8 + X_9)$$

That is, the economic profit of handloom units is the surplus of total revenue over total transaction costs and opportunity costs. In this study, net profit is calculated for per unit and per loom for a period of one year. It is important to calculate the rate of return of handloom production, which is simply the net return or profit ( $\Pi$ ) expressed in percentage terms. It is fashionable to calculate two types of rate of returns i.e. rate of return against total cost ( $RR_{TC}$ ) and rate of return against total variable cost ( $RR_{TVC}$ ), computed by the following formula:

$$RR_{TC} = \left( \frac{TR - TC}{TC} \right) * 100$$

$$RR_{TVC} = \left( \frac{TR - TVC}{TVC} \right) * 100$$

Where, TR stands for total revenue, TC for total cost and TVC for total variable cost.

## Data

The present study is mainly based on primary data. It followed a multi-stage sampling method for data collection. For this study Tangail district of Bangladesh has been taken purposively as it is a traditionally handloom concentrated area. Though, Tangail is famous for handloom weaving activities, handloom units are concentrated in three Upazillas-Delduar, Tangail Sadar and Kalihati. For analyzing unit level profitability, the study selected the first two Upazilas purposively. Finally, 53 handloom weaving units from four villages of these Upazilas were surveyed using a semi-structured questionnaire.

## Discussion of Result

### Features of the Handloom Units

Handloom units in Tangail district are mainly premise based cottage industry. More than 90% units are premise based that operate more than 60% of the total looms. Collected data state that a large number of ethnic minority households, especially from the Hindu community, operate the industry in the study area. Although Hindu community comprises only 6% of the total population of Tangail district, almost 40% handloom owner households belong to this community. Thus, it is evident that people belonged to Muslim community are less interested in this business. In addition, young people are also less interested in handloom weaving business as the study found no handloom owner aged below 30 years. However, among 514 looms in the 53 units, 357 looms are found operational. It is seen that handloom in the study area is a male dominated economic activity. Responding handloom units have employed a total of 560 persons in its operation among which 77.86% are male and 22.14% are female. Although handloom is considered as a family-based business, it is dominated by hired weavers. The study found that 71.07% weavers come from non-family source. With regard to size, it is found that the handloom units mostly comprise of small-size units. According to the field survey, 16.98% are single loom units that contains only 1 loom, 53.83% units are small-size that consist of 2-5 looms, 22.64% units are in the medium size group that consists of 6-19 looms and finally, 7.55% units are large in size consisting of more than 20 looms. In terms of produces, the handloom units in Tangail district produce mainly *Sharee*, a long women ware, which is renowned as *Tangail Sharee* in home and abroad. Though all the units produce same type of products, due to differences in quality different *Sharees* are sold at

different prices. Among the 53 handloom units, 41.51% produce low priced products of worth less than Tk.1000 per piece, 30.19% produce medium-priced products with worth from Tk.1000 to Tk.2000 and 28.30% produce very high-priced products generally sold at more than Tk.2000.

### Profitability Analysis

In the phase of intense competition with power loom and mill sectors, profit of handloom weaving units mainly depends on production cost. Production cost of the handloom units highly depends on variable costs (99%) and this variable cost is dominated by yarn cost (49%) and labor cost (45%).

Taking these facts into account, the profitability scenario of the handloom weaving units located in Tangail district is provided in Table 1, below. It is observed from Table 1 that annual gross return of sample handloom units in the study area is Tk.66.46 million and annual average gross return is Tk.1.25 million per year. Total variable cost and average variable cost per year are Tk.57.98 million and Tk.1.09 million, respectively. Therefore, annual total gross margin

and annual average gross margin stand at Tk.8.48 million and Tk.160044.00, respectively. It is estimated that per year total fixed cost and average fixed cost per unit in the study area are Tk.649925.00 and Tk.12262.00, respectively. Thus, the total gross cost per year of 53 units in the study area becomes Tk.58.63 million while the average gross cost per year becomes Tk.1.11 million. Therefore, handloom units in the study area earn net return or profit by an amount of Tk.7.83 million per year with Tk.147780.00 per unit and Tk.21939.00 per loom. The rate of return on total cost and variable cost for the surveyed handloom units are 13.36% and 14.63%, respectively.

### Profitability Analysis by Unit Size

#### Profitability of Single Loom Handloom Units

Many handloom weavers in the study area operate single loom units. In the study sample, 9 handloom units were found which operate single loom and it is observed from Table 2, that total gross return of these single loom units is Tk.1.5 million per year with average gross return Tk.168533.00 per year.

**Table 1. Profitability of handloom units in Tangail District**

Items	Total costs and return (Tk.)	Average cost and return (Tk.)	Per loom profit	RR <sub>TV</sub>	RR <sub>TVC</sub>
Gross return	66464400.00	1254045.28			
Total variable cost	57982090.00	1094001.70	21939.45	13.36	14.63
Gross margin (A-B)	8482310.00	160043.58			
Total fixed cost	649925.00	12262.74			
Total gross cost (B+D)	58632015.00	1106264.43			
Net return/ profit (A-E)	7832385.00	147780.85			

Source: Author's calculation

**Table 2. Profitability of single loom units**

Items	Total costs/ return (Tk.)	Average cost/ return (Tk.)	Per loom profit	RR <sub>TC</sub>	RR <sub>TVC</sub>
Gross return	1549200.00	172133.33			
Total variable cost	1364400.00	151600.00			
Gross margin (A-B)	184800.00	20533.33			
Total fixed cost	25000.00	2777.78	17755.56	11.50	13.54
Total gross cost (B+D)	1389400.00	154377.78			
Net return/ profit (A-E)	159800.00	17755.55			

Source: Author's calculation



It is found that average total variable cost of the sample units is Tk.1.36 million per year and average variable costs per loom is Tk.151600.00 per year. Therefore, total gross margin for single loom units is Tk.84800.00 per year with average gross margin Tk.20533.00. Total fixed cost for single loom units is Tk.25000.00 per year and average fixed cost is Tk.2778.00 per year. Thus, total gross cost becomes Tk.1.39 million per year while average cost becomes Tk.154378.00 per year. Therefore, single loom units earn a total profit by Tk.159800.00 annually with average per unit profit of Tk.17756.00 per year. Due to very small share of fixed cost, rates of return based on total cost and total variable cost are almost the same for these handloom units in the study area and these are 11.50% and 13.54%, respectively.

### Profitability of Small Size Handloom Units

There are 28 handloom units found in the study sample which are of small size containing 2-5 looms.

cost is Tk.225425.00 per year. Per year average variable cost and average fixed cost are Tk.678011.00 and Tk.8050.00, respectively. Therefore, total gross cost becomes Tk.19.21 million and average gross cost becomes Tk.686062.00 per year. Thus, the small size handloom units earn an average profit by Tk.85023.00 per year and per loom profit by Tk.26161.00 per year. Rates of return based on total cost and variable cost are 12.39% and 13.73%, respectively, for this group of handloom units.

### Profitability of Medium Size Handloom Units

Medium size handloom groups contain 6-19 looms and in the survey 12 handloom units are found which belong to this group. These 12 units have a total of 100 operational looms. Table 4, presents the profitability scenario of this group. In this study it is estimated that total gross return for these units is Tk.17.67 million per year with the average gross return of Tk.1.47 million. Total variable cost per year

**Table 3. Profitability of small handloom units**

Items	Total costs and return (Tk.)	Average cost and return (Tk.)	Per loom profit	RR <sub>TC</sub>	RR <sub>TVC</sub>
Gross return	21590400.00	771085.71			
Total variable cost	18984310.00	678011.07	26161.15	12.39	13.73
Gross margin (A-B)	2606090.00	93074.64			
Total fixed cost	225425.00	8050.89			
Total gross cost (B+D)	19209735.00	686061.96			
Net return/ profit (A-E)	2380665.00	85023.75			

Source: Author's calculation

It is observed in Table 3, that gross return of these small handloom units is Tk.21.59 million per year with average gross return Tk.771085.00 per year. Total variable cost of this category handloom unit is Tk.18.98 million and total fixed

is Tk.15.34 million and total fixed cost is Tk.188600.00 per year. Therefore, gross margin per year for this group is Tk.2.33 million per year with average gross margin of Tk.194178.00.

**Table 4. Profitability of medium size handloom units**

	Items	Total costs and return (Tk.)	Average cost and return (Tk.)	Per loom profit	RR <sub>TC</sub>	RR <sub>TVC</sub>
A.	Gross return	17674800.00	1472900.00			
B.	Total variable cost	15344660.00	1278721.67			
C.	Gross margin (A-B)	2330140.00	194178.33	21415.40	13.79	15.19
D.	Total fixed cost	188600.00	15716.67			
E.	Total gross cost (B+D)	15533260.00	1294438.33			
F.	Net return/ profit (A-E)	2141540.00	178461.67			

Source: Author's calculation

On the average, a handloom unit belonged to this group earns a profit amount of Tk.178461.00 per year where a loom earns a profit amount of Tk.21415.00 per year. The rates of return on total cost and total variable cost are 13.79% and 15.19%, respectively, for this group.

### Profitability of Large Size Handloom Units

There are a few large size handloom units found in the study area which contain more than 20 looms.

the handloom units. Table 6, provides a comparison of profitability among different groups of handloom units. It is observed from the table that small size units are more profitable in terms of per loom profit. The amount of profit earned per loom in a small scale unit is Tk. 26161.

Average per loom profit earned by a single loom unit is Tk.17756.00 and these are Tk.21415.00 and Tk.20066.00 for medium and large size units. Both single and small size units

**Table 5. Profitability of large size handloom units**

	Items	Total costs and return (Tk.)	Average cost and return (Tk.)	Per loom profit	RR <sub>TC</sub>	RR <sub>TVC</sub>
A.	Gross return	25650000.00	6412500.00			
B.	Total variable cost	22288720.00	5572180.00			
C.	Gross margin (A-B)	3361280.00	840320.00	20066.11	14.00	15.08
D.	Total fixed cost	210900.00	52725.00			
E.	Total gross cost (B+D)	22499620.00	5624905.00			
F.	Net return/ profit (A-E)	3150380.00	787595.00			

Source: Author's calculation

There are only 4 such units found in the study sample, which are operating with a total of 197 looms. It is found in Table 5, that these large handloom units earned a total gross return of Tk.25.65 million per year with 6.41 million on the average. Total gross margin is found to be Tk.3.36 million and total gross cost is found to be Tk.22.50 million annually. Thus, these 4 handloom units earned a total profit by Tk.3.15 million annually and annual per unit and per loom profit of Tk.787595.00 and Tk.20066.00, respectively. Rates of return based on total cost and variable cost are 14.00% and 15.08%, respectively, for the large size handloom units.

use a huge number of family members in production and family members are more productive than hired weavers. It may be the reason for earning more profit for small units. In contrast, due to economy of scale effect rate of return might be higher in large units. It is also observed that the rate of return on total cost is not similar in all types of handloom units. It is estimated that the rate of return in the highest (14%) in case of the large scale units while it is the lowest (11.5%) in case of the single loom units. Again the economy of scale effect can be attributed to yield this difference.

**Table 6. Comparison of profitability in handloom units by size groups**

Size	Gross margin	Average gross margin	Net profit	Average net profit	Per loom profit	RR. (TC)	RR. (TVC)
Single	184800.00	20533.33	159800.00	17755.55	17755.56	11.50	13.54
Small	2606090.00	93074.64	2380665.00	85023.75	26161.15	12.39	13.73
Medium	2330140.00	194178.33	2141540.00	178461.67	21415.40	13.79	15.19
Large	3361280.00	840320.00	3150380.00	787595.00	20066.11	14.00	15.08
Total	8482310.00	160043.58	7832385.00	147780.85	21939.45	13.36	14.63

Source: Author's calculation

### Comparison of Profitability among Different Size of Handloom Units

It is evident from the earlier discussions that handloom weaving industry in the study area is a profitable business although profitability differed across the size of

### Profitability Analysis by Product Category

#### Profitability of Low-priced Products

Majority of handloom units (52%) in the study area produce low priced products. Table 7, provides that total gross revenue of the handloom units producing low priced

products is Tk.22.46 million per year with average gross revenue of Tk.1.02 million per year.

It is observed that total gross margin and average gross margin per year of this category of handloom units are Tk.2990360.00 and Tk.135925.00, respectively. Again, annual total cost and annual average cost of these units are Tk.19.74 million and Tk.897236.00, respectively. Therefore, per unit profit and per loom profit of this category handlooms are Tk.123746.00 and Tk.17015.00, respectively and they earned rates of return on total cost and variable cost by 13.79% and 15.36%, respectively.

### Profitability of Medium-priced Products

It is observed from Table 8, that total gross return and average gross return per year of the handloom units producing moderate priced products are Tk.16.00 million and Tk.1.00 million, respectively. In this group of handlooms units total variable cost and average variable cost are Tk.13.88 million and 0.87 million, respectively.

**Table 7. Profitability analysis of low priced products**

Items	Total costs and return (Tk.)	Average cost and return (Tk.)	Per loom profit	RR <sub>TC</sub>	RR <sub>TVC</sub>
Gross return	22461600.00	1020981.82			
Total variable cost	19471240.00	885056.36			
Gross margin (A-B)	2990360.00	135925.45	17015.06	13.79	15.36
Total fixed cost	267950.00	12179.55			
Total gross cost (B+D)	19739190.00	897235.91			
Net return/ profit (A-E)	2722410.00	123745.91			

Source: Author's calculation

**Table 8. Profitability of medium-priced products**

Items	Total costs and return (Tk.)	Average cost and return (Tk.)	Per loom profit	RR <sub>TC</sub>	RR <sub>TVC</sub>
Gross return	15999000.00	999937.50			
Total variable cost	13878510.00	867406.88			
Gross margin (A-B)	2120490.00	132530.63	24155.12	13.93	15.38
Total fixed cost	163925.00	10245.31			
Total gross cost (B+D)	14042435.00	877652.19			
Net return/ profit (A-E)	1956565.00	122285.31			

Source: Author's calculation

Total cost per year for this group is Tk.14.04 million and on the average per unit cost becomes Tk.877652.19. Thus, total net return for these handloom units become Tk.1.96 million and per unit profit become Tk.122285.31 per year. For all these units, per loom profit is Tk. 24155. Rates of profit based on variable cost and total cost is 13.93% and 15.38%, respectively.

### Profitability of High-priced Products

It is stated in Table 9, that production of high-priced products is profitable for the owners. In the analysis it is observed that total gross return per year for this category of handloom units is Tk.28.00 million. Total fixed cost and total variable costs of these units are Tk.0.22 million and Tk.24.63 million, respectively. The resultant total gross cost is Tk.24.85 million annually.

Therefore, annual per unit and per loom profit earned by this group of handloom units is Tk.210227.00 and Tk.27184.00, respectively. The rate of return on total cost and variable cost is 12.69% and 13.69%, respectively.

### Comparison of Profitability of Handloom Units by Category of Products

It is evident from the earlier discussions that irrespective of low, medium and high-priced products, handloom weaving is a profitable business. But profitability is not

the same for all handloom products. It is observed from Table 10 that production of higher priced products is more profitable than that of lower-priced products by handloom units. Though a large number of handloom units (41.51%) produce low-priced products, per loom profit is lower in this group (Tk.17015). By contrast, per loom profit in medium and high-priced product groups are Tk.24155 and Tk.27184, respectively.

**Table 9. Profitability of high-priced products**

Items	Total costs and return (Tk.)	Average cost and return (Tk.)	Per loom profit	RR <sub>Tc</sub>	RR <sub>Tvc</sub>
Gross return	28003800.00	1866920.00			
Total variable cost	24632340.00	1642156.00			
Gross margin (A-B)	3371460.00	224764.00	27184.57	12.69	13.69
Total fixed cost	218050.00	14536.67			
Total gross cost (B+D)	24850390.00	1656692.67			
Net return/ profit (A-E)	3153410.00	210227.33			

Source: Author's calculation

**Table 10. Comparison of profitability of handloom units by quality of products**

Item	Gross margin	Average gross margin	Net profit	Average net profit	Per loom profit	RR <sub>Tc</sub>	RR <sub>Tvc</sub>
Low priced	2990360.00	135925.45	2722410.00	123745.91	17015.06	13.79	15.36
Medium priced	2120490.00	132530.63	1956565.00	122285.31	24155.12	13.93	15.38
High priced	3371460.00	224764.00	3153410.00	210227.33	27184.57	12.69	13.69
Tangail	8482310.00	160043.58	7832385.00	147780.85	21939.45	13.36	14.63

Source: Author's calculation

On the other hand, rate of return is found higher in case of medium-priced (13.93%) producing units compared to low-priced (13.79%) and high-priced (12.69%) producing units. It is observed from the field survey that while handloom units of low-priced products cannot secure efficient price from selling their items due to low price elasticity of their products, high-priced handloom producing units often encounter abnormally high production cost due to higher price of good quality inputs. Therefore, rate of return for both the low-priced and high-priced handloom producers get lower than the medium-priced handloom producers.

## Conclusion

Handloom weaving industry has significant contribution in economic development in the study area in terms of employment generation and income enhancement. Because of different unit sizes and different quality products, all handloom units in the study area are not equally profitable. It is found that due to use of more family members, small size units are more profitable and because of economy of scale effect in purchasing inputs and selling outputs, rate of return in larger units is higher than that in other types of units. It is also found that due to unique design and better quality, production of higher quality products is more profitable than lower quality products, although rate of return for both the low-priced and high-priced handloom producers get lower than the medium-priced handloom

producers. It is to note that although handloom activities in the study area are found profitable irrespective of size and products, the units have been operating at a very low profit margin. Therefore, the weavers always remain vulnerable to different shocks. As a result, a large number of small-scale weavers tend to leave their parental occupation or switch to other occupations or even migrate to other places. Therefore, government should provide sufficient patronage and support for handloom weavers for reviving the golden past of handloom industry.

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