

A Study on the Conch Shell Industry in West Bengal

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Abstract

From time immemorial, West Bengal has been famous in the field of conch shell handicrafts. The gifted artisans produce wonderful objects of craft from conch shell materials. Their rare artistic skills have been streamlined in manufacturing exquisite household pieces. The present paper focused on identifying the present condition of the conch shell industry in the state, and the challenges faced by the artisans for continuing their handicraft work. The research paper is based on primary survey of 240 household conch shell units in four districts of West Bengal namely North 24-Parganas, Purba Medinipur, Paschim Medinipur, and Bankura. The paper tried to identify the major problems faced by the craftsmen in the industry. The survey revealed that irregularity in the supply & continuous increase in prices of raw materials and monopoly of raw material suppliers caused great frustration to many household entrepreneurs. The study also found that despite the poor conditions of artisans, the conch shell industry still plays an important role in creating artistic value for the artisans by maintaining and carrying forward the cultural and religious legacy of the conch shells and also generates livelihood through creation of employment and income for the artisans.

Keywords: artisans, conch shell (sankha) industry, culture, religion

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Conch shell craft is one of the most unique and most beautiful forms of handicrafts practiced in West Bengal for centuries. It has a close association with the rich culture of the state. Conch shell craft is beautiful and delicate, apart from being considered to be extremely auspicious in the Hindu mythology in India. Even in the great epic *Mahabharata*, conch shells were given a lot of importance. Presently, conch shells are obtained from the sea coasts of Chennai, Puri (Jagannatha), Ramesvaram, and Sri Lanka. It is actually the art of engraving decorative motifs on the conch shells obtained from the ocean. Each artisan has his/her own unique pattern of carving the shell. It takes a minimum of two to three months to make just one conch shell piece (*sankha*) that can be used as a puja item. The shells of large marine gastropods are prepared by cutting a hole in the spire of the shell near the apex, and then blowing into the shell as if it were a trumpet, as in blowing a horn.

The conch or conk shell is intimately connected with the religious and social life of the people of India. One of the most exclusive and beautiful forms of art practiced in West Bengal is the conch shell craft. Conch fashioning, that is, cutting and polishing of conches to make bangles, to make shells suitable for blowing purposes, and so forth is business in Orissa and West Bengal. The *sankha* industry is profitable, considering the high demand for *sankhas* not only in Bengal, but also in Odisha, Bihar, and other parts of India. Conch shells are used in two significant ways in Bengali tradition. One is in the form of the bangles worn by married women, and the other is

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using the *sankha* to blow into it during religious ceremonies. Conch shell bangles (*bangri*) are worn by married Bengali women. Most of the craftsmen of this craft belong to the Sankhakar community. Conch shell products have aesthetic, cultural, creative, and religious values. In addition to the cultural and aesthetic value, the conch shell industry can play a great role in generating employment and income. However, the conch shell industry is facing problems both in the demand and supply side. On the supply side, a major problem is the unavailability of raw conches, and on the demand side, there is a diversion of demand to low quality conch shell bangles and *shankhas*. Hence, the present study attempts to look at the present condition and current problems faced by the conch shell industry in West Bengal.

Review of Literature

A limited number of studies have been conducted on the economics of the conch shell industry in India. Aiyar (2008) discussed that the *sankha* or the conch occupies an important place in Hindu thought. When a conch is blown, the primordial sound "OM" emerges from the conch. Conches of different varieties are used for the worship of the Gods. The best *sankhas* are those that are shiny, soft, white as moon, with pointed ends, and rather heavy. Conches were used as bugles in war, and in ancient India, each warrior had his special famous conch. The conch also has therapeutical properties. Banerjee (2012) explored the problems and prospects of the conch shell industry in recent times in Bishnupur that is situated in Bankura District in West Bengal. She concluded that although the traditional conch industry is facing a lot of problems; still, its popularity is worth noticing. Hornell (1914) wrote about the chank (conch) in Hindu life and also discussed the various aspects of folklore and ethnology associated with conch shells. Hunter (1875) discussed the importance and the process of production of conch shells in the earlier times.

Marjit and Maiti (2004) aimed to understand the transforming relationship between the formal and informal sectors in a liberalizing open developing economy. They concluded with a discussion of a field-based survey on the changing relationship between formal and informal entrepreneurs in a range of rural industries in India, as these industries gear up for expanded markets and exports. Mudur (2005) suggested that a collection of some 3,000 shells, strewn across a southeastern tip of Bet Dwarka Island, hosted a big shell industry during the late Harappan period. Phadke (2011) mentioned that there are about 3,00,000 conch shell artists and traders in West Bengal and Orissa.

Sacred Indian conch of the species *Turbinellapyrum* (Sinistral) is a rare pooja item used for different rituals in the Hindu religion. It is also one of the eight auspicious symbols in Buddhism as well. Export and import of this species is not banned under the Wild Life Protection Act, 1972 due to its religious importance. Sen and Sinha (1965) discussed the economic behavior of the craftsmen and the production processes of the conch shell industry of West Bengal and Sikkim. Sonali (2012) discussed about the conch shell craft of West Bengal and noted that the tradition of preparing conch shells is an ancient one. They have been used in India since Vedic times. Priests use them to drive away evil spirits, at the beginning of weddings, sacrifices, or at other Hindu rites. Buddhists also blow conch shells as a sound offering. Sujaudhin (2013) discussed about the condition of the *sankha silpas* in West Bengal due to the increase in prices of intact conch shells because of devaluation of INR as compared to the dollar. Tulsyan (2013) pointed out that while not many Bengali women in urban settings can be seen wearing conch bangles, it is easier to find women - generally from lower classes - from Bihar, Odisha, and Uttar Pradesh sporting the same.

From the brief review of the existing literature, it appears that problems and future prospects of the conch shell industry in West Bengal have not been adequately addressed. The present study aims at remedying some of the gaps in the existing literature.

Research Objectives, Data Sources, and Methodology

The specific objective of the study is to analyze the problems faced by the conch shell artisans. Due to non-

Table 1. Types of Production Organizations in the Conch Shell Industry in Sample Districts

Items/Sample Districts		Types of Production Organization				Total
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Type of Unit	Independent	11 (18.33)	13 (21.67)	10 (16.67)	20 (33.33)	54 (22.50)
	Tied	49 (81.67)	47 (78.33)	50 (83.33)	40 (66.67)	186 (77.50)

Note : Parentheses indicate percentage shares

Table 2. Socioeconomic Characteristics of Sample Districts in 2011

Sample district	Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas
Proportion to West Bengal Population	6.48%	5.58%	3.94%	10.97%
Rural Population (%)	87.78 %	88.37 %	91.67 %	42.73 %
Average LiteracyRate (%)	78.00	87.02	70.26	84.06
Male LiteracyRate (%)	85.26	92.32	80.05	87.61
Female LiteracyRate (%)	70.50	81.37	60.05	80.34

Source: Paschim Medunipur (West Midnapore) District : Census 2011 data. (n.d.)

availability of secondary data relating to the conch shell industry, the present study was conducted by using detailed primary data. Four districts of West Bengal namely North 24-Parganas, Purba Medinipur, Paschim Medinipur, and Bankura were selected on the basis of concentration of conch shell handicraft units. The sample comprised of 240 household units selected from four districts (8 blocks) with 60 household units selected randomly from each district. The field survey for this research study was completed in 2011-2012. Multistage stratified random sampling method was used for selecting the sample for the present study. There are two types of production organizations in the conch shell industry - independent units and tied units. Tied units are linked with big independent units either by purchase of raw materials or by sale of their products. They have no bargaining power for purchase of raw materials. The total sample (240 household units) included 54 (22.50%) independent units and 186 (77.50%) tied units (Table 1). To compare age, literacy rate, total number of family members, duration of engagement years, challenges and problems faced by the artisans, and so forth among independent and tied units, mean test, maximum number, minimum number, and percentage method were used for conducting the analysis.

The Table 2 depicts the relevant information regarding the socioeconomic characteristics of the selected districts. According to Census 2011 data, the percentage of rural population in the sample districts was as follows : Paschim Medinipur (87.78%), Purba Medinipur (88.37%), Bankura (91.67 %), North 24 Parganas (42.73 %).

Analysis and Results

This section deals with household details of the participants, such as their socioeconomic background and the observations of independent and tied units. The descriptive statistics of some selected parameters comprising of mean value, maximum and minimum value were calculated for a better understanding of the household profile of the sample units, and for a comparison between independent and tied units.

➤ **Age of the Respondents :** General information of 240 households, especially about the head of the household revealed that the age of the heads or respondents of the surveyed households ranged from a minimum of 18 years to a maximum age of 80 years, with a mean of 41 years (Table 3).

➤ **Literacy Rate :** The Table 4 depicts that the literacy rate of the selected 240 household units varied between a

Table 3. Age of the Respondents Employed in the Conch Shell Units in the Study Area

Type of Unit	Descriptive Statistics / Sample Districts	Age of the Respondents				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Mean	37	49	39	40	41
	Minimum	19	25	25	24	19
	Maximum	64	79	62	61	79
Tied	Mean	39	45	40	38	40
	Minimum	19	18	23	19	18
	Maximum	62	80	65	80	80
Total	Mean	38	46	40	39	41
	Minimum	19	18	23	19	18
	Maximum	64	80	65	80	80

Table 4. Literacy Rate of the Family Members Employed in Conch Shell Units in Sample Districts (in %)

Type of Unit	Descriptive Statistics / Sample Districts	Literacy Rate				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Mean	73.35	73.10	71.90	77.92	74.71
	Minimum	57.14	57.14	57.14	40.00	40.00
	Maximum	100	100	81.82	100	100
Tied	Mean	68.33	73.57	61.94	67.35	67.73
	Minimum	25	50	0	33.33	0
	Maximum	100	100	100	100	100
Total	Mean	69.25	73.47	63.60	70.87	69.30
	Minimum	25	50	0	33.33	0
	Maximum	100	100	100	100	100

minimum of 0 % to a maximum of 100%, with a mean of 69.3%. In the 54 sample independent units, the literacy rate varied between a minimum of 40% to a maximum of 100%, with a mean 74.71%. Among 186 sample tied units, the average literacy rate was 67.73 %.

➤ **Family Members :** It was observed that the total number of family members in the selected 240 household units varied between a minimum of 3 members to a maximum of 12 members, with a mean of 6 members (Table 5). The average number of family members in the households of the independent units were 7 members with a minimum of 3 members. Among 186 sample tied units, the average number of family members was 6 members.

➤ **Adult Family Members :** The average number of adult family members in 54 sample independent household units was 5 members, with a minimum of 2 members. Among 186 sample tied units, the average number of adult family members was 5 members. It can be observed from the Table 6 that the total number of adult family members in the selected 240 household units varied between a minimum of 2 to a maximum of 9 members, with a mean of 5 members.

➤ **Years of Experience of Working in the Conch Shell Industry :** The Table 7 reveals that the years of experience of male workers of the selected 240 household units varied between a minimum of 2 years to a maximum of 53 years, with a mean 29 years. Average years of engagement in the conch shell industry by male workers of all

Table 5. Total Number of Family Members of each Household Employed in Conch Shell Units

Type of Unit	Descriptive Stats/ sample districts	Total Number of Family Members				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Mean	7	7	9	6	7
	Minimum	4	4	6	3	3
	Maximum	10	12	11	11	12
Tied	Mean	5	6	6	6	6
	Minimum	3	4	3	3	3
	Maximum	10	10	10	10	10
Total	Mean	6	6	6	6	6
	Minimum	3	4	3	3	3
	Maximum	10	12	11	11	12

Table 6. Total Number of Adult Family Members of Each Household Employed in Conch Shell Units

Type of Unit	Descriptive Statistics / Sample Districts	Total Number of Adult Family Members				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Mean	5	5	7	5	5
	Minimum	2	3	4	3	2
	Maximum	8	9	9	9	9
Tied	Mean	4	5	5	5	5
	Minimum	2	3	2	2	2
	Maximum	8	8	8	9	9
Total	Mean	4	5	5	5	5
	Minimum	2	3	2	2	2
	Maximum	8	9	9	9	9

Table 7. Duration of Engagement Years by Male Workers

Type of Unit	Descriptive Statistics / Sample Districts	Duration of Engagement Years by Male Workers				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Mean	35	35	39	29	34
	Minimum	17	5	8	6	5
	Maximum	52	53	49	48	53
Tied	Mean	23	31	27	30	27
	Minimum	5	2	2	3	2
	Maximum	53	53	47	47	53
Total	Mean	25	32	29	30	29
	Minimum	5	2	2	3	2
	Maximum	53	53	49	48	53

Table 8. Duration of Engagement Years by Female Workers

Type of Unit	Descriptive Statistics / Sample Districts	Duration of Engagement Years by Female Workers				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Mean	11	15	19	0	16
	Minimum	10	5	12	0	5
	Maximum	12	25	32	0	32
Tied	Mean	9	15	11	0	12
	Minimum	2	3	1	0	1
	Maximum	17	32	34	0	34
Total	Mean	9	15	13	0	13
	Minimum	2	3	1	0	1
	Maximum	17	32	34	0	34

Table 9. Number of Male Family Workers Employed in Conch Shell Units

Type of Unit	Descriptive Statistics / Sample Districts	Number of Male Family Workers				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Mean	2	3	3	2	2
	Minimum	1	1	2	1	1
	Maximum	4	5	4	3	5
Tied	Mean	2	2	1	2	2
	Minimum	1	1	1	1	1
	Maximum	3	4	3	4	4
Total	Mean	2	2	2	2	2
	Minimum	1	1	1	1	1
	Maximum	4	5	4	4	5

sample independent units was 34 years, with a minimum engagement of 5 years. Among the 186 sample tied household units, the average years of engagement was 27 years.

It was observed that the average years of engagement in the conch shell industry by female workers of all sample independent household units was 16 years, with a minimum engagement of 5 years. Among the 186 sample tied household units, the average years of engagement of female workers was 12 years. The Table 8 depicts that the duration of engagement years for female workers of selected 240 household units varied, with a minimum of 1 year to a maximum of 34 years, with a mean of 13 years.

➡ **Employment Pattern :** From the Table 9, it can be inferred that the number of male workers of the selected 240 household units varied, with a minimum of 1 male worker to a maximum of 2 male workers, with a mean of 2 workers. The average number of male family workers in 54 sample independent household units was 2 members, with a minimum of 1 to a maximum of 5 workers. Among 186 sample tied units, the average number of male family workers was 2, with minimum of 1 to a maximum of 4 workers. The average number of female family workers in 54 sample independent household units was 2, with a maximum of 3 workers. Among 186 sample tied units, the average number of female family workers was 1 worker.

It can be observed from the Table 10 that the number of female family workers of selected 240 household units varied from a minimum of 0 female workers to a maximum of 3 workers, with a mean value of 1 worker. It can be inferred from the Table 11 that the number of male hired workers from the selected 240 household units varied

Table 10. Number of Female Family Workers Employed in Conch Shell Units

Type of Unit	Descriptive Statistics / Sample Districts	Number of Female Family Workers				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Mean	1	1	2	0	2
	Minimum	1	0	1	0	0
	Maximum	1	2	3	0	3
Tied	Mean	1	1	1	0	1
	Minimum	1	0	1	0	0
	Maximum	2	2	3	0	3
Total	Mean	1	1	2	0	1
	Minimum	1	0	1	0	0
	Maximum	2	2	3	0	3

Table 11. Number of Male Hired Workers Employed in Conch Shell Units

Type of Unit	Descriptive Statistics / Sample Districts	Number of Male Hired Workers				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Mean	6	1	2	4	3
	Minimum	1	1	1	2	1
	Maximum	32	2	2	6	32
Tied	Mean	2	1	1	2	2
	Minimum	1	1	1	1	1
	Maximum	3	1	2	4	4
Total	Mean	4	1	2	3	3
	Minimum	1	1	1	1	1
	Maximum	32	2	2	6	32

from a minimum of 1 worker to a maximum of 32 workers, with a mean of 3 workers. The average number of male hired workers in 54 sample independent units was 3 workers, with a minimum of 1 worker to a maximum of 32 workers. Among 186 sample tied units, the average number of male hired workers was 2 workers, with a minimum of 1 worker to a maximum of 4 workers.

The Table 12 depicts the distribution of industrial units by number of workers. In the conch shell industry, 52.50% of the total 240 sample units employed less number of workers, from the size of a class ranging between 3 and 5 workers (the highest percentage of units had a class size of 3-5 workers) followed by class sizes of between 1 and 2 workers (35.83%), and 10.83% of the units had 6 - 9 members in one class. A small percentage of independent units (0.83%) employed a relatively large number of workers, with a class comprising of between 10 - 20 workers.

➡ **Working Days :** A male worker's average working day in a conch shell unit in Paschim Medinipur was of 11 hours ; in Purba Medinipur, the working day comprised of working for 10 hours, and in Bankura & North 24 Parganas, the working day was of 9 hours. A female worker at a conch shell unit was expected to put in 5 hours of work each day with the exception of North 24 Parganas because of zero female workers' participation in sample units in this district. In case of hired workers, an average working day required them to work for 11 hours in each district, with North 24 Parganas being an exception, as here, the workers put in 10 hours of work on an average

Table 12. Frequency Distribution of Sample Craft Units by Number of Workers and Production Organization in Sample Districts

No. of workers/ Organization	Number of Units by Worker Size			
	1 to 2	3 to 5	6 to 9	10 to 20
Independent	0 (0.00)	30 (55.56)	22 (40.74)	2 (3.70)
Tied	86 (46.24)	96 (51.61)	4 (2.15)	0 (0.00)
Total	86 (35.83)	126 (52.50)	26 (10.83)	2 (0.83)

Note: parentheses indicate the percentage shares.

Table 13. Per day, Per Unit, per Worker Work Hour of Workers Employed in Conch Shell Units

Type of Unit	Descriptive Statistics / Sample Districts	Per day Per Unit Per Worker Work Hour				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Male Worker	10	10	8	9	9
	Female Worker	4	6	6	0	6
	Hired Worker	10	11	11	10	10
Tied	Male Worker	11	10	9	9	10
	Female Worker	5	5	5	0	5
	Hired Worker	11	11	11	10	10
Total Units (60 units per districts)	Male Worker	11	10	9	9	10
	Female Worker	5	5	5	0	5
	Hired Worker	11	11	11	10	10

day. Hence, it can be inferred that in the sample tied household units, the average work day was of 10 hours, which is more than what was put in by a male worker employed at an independent household unit (9 hours per day) (Table 13).

The Table 14 depicts the data (for male, female, and hired workers) regarding the per unit monthly average work days for conch shell workers employed in conch shell units in the sample districts. It was observed that in the Paschim Medinipur district, the per unit monthly average work days for workers employed in 60 sample units for male, female, and hired workers were 26, 22, and 24 days respectively. In Purba Medinipur district for male, female, and hired workers, the figures stood at 26, 22, and 27 days respectively. In Bankura district, the monthly average work days for male, female, and hired workers were 26, 22, and 27 days. In North 24 Parganas district, the per unit monthly average work days for male, female, and hired workers were 26, 0 (zero), and 26 days respectively. In North 24 Parganas, we could not observe any female worker employed in any of the sample surveyed units.

Overall, for the 240 household units, the per unit monthly average work days for male, female, and hired workers were 26, 22, and 26 days respectively. In sample independent household units, the per unit monthly average work days for hired workers were 26 days, which is more than what was for the sample tied units (25 days) because independent units have more capability to recruit more workers for continuing the production work. In all sample districts, we observed that the per unit monthly average work days for male workers (as compared to the work days for female workers) were more in number.

Problems Faced by the Artisans of the Conch Shell Industry

India is known for its rich and diverse culture. The tradition of women wearing bangles dates back to ancient

Table 14. Monthly Average Work Days for Conch Shell Workers Including Hired Workers (Per Conch Shell Unit Sample Districts)

Type of Unit	Type of Worker/ Sample Districts	Monthly Average Work Days by Conch Worker				Total 240 Units
		Paschim Medinipur	Purba Medinipur	Bankura	North 24 Parganas	
Independent	Male Worker	26	26	26	26	26
	Female Worker	21	22	22	0	22
	Hired Worker	26	27	27	26	26
Tied	Male Worker	26	26	26	26	26
	Female Worker	22	22	22	0	22
	Hired Worker	23	26	25	26	25
Total Units	Male Worker	26	26	26	26	26
(60 units	Female Worker	22	22	22	0	22
per districts)	Hired Worker	24	27	27	26	26

times when bangles were considered as a symbol of marriage; they still hold the same significance, but the trend has changed over the years. Traditionally, the bangles worn by brides at weddings vary depending upon the religion the bride follows and the region she comes from. Modern brides don't go with the conventional colours and patterns, and neither do they believe in wearing dozens of bangles as a symbol of matrimony. Modern brides are opting for more contemporary designs and are experimenting with styles; they choose bangles which complement their outfits. Hence, this change in attitude has impacted the sales of conch shells bangles.

The raw materials for the conch shell industry come from coastal towns of southern parts of India, and traders of different towns buy and take the final product. As a consequence, none of the artisans were able to import raw materials directly from abroad (Sri Lanka) or from the distant state of Tamil Nadu on their own due to scarcity of funds, and the import market was eventually captured by the big merchants and traders (*mahajanas*). The craftsmen depend on master craftsmen, dealers for the raw materials or for marketing of their produce. The intervention of *mahajanas* in this industry and persistent dependence on them by the artisans has forced them to work on *bani* (making charge) system. In spite of high profit margin of all types of organizations in this industry, due to lack of capital, inability to purchase intact conch raw materials at high prices from merchant traders through the cash payment system, some tiny tied units were forced to shut down their business and continue their traditional work on the *bani* system.

In the conch shell industry, producers in remote rural areas have been linked with important cities and towns directly or through traders or formal producers. This trade is highly dependent on several layers of agents and middlemen. Multilevel marketing is present in distribution of finished *sankhas* or conch products. The major marketing channels constitute door-to-door sales, sales in hatts, bazaars, and so forth for supplying the product to fixed sellers, sales through own counters, contract with local traders, or middlemen of traders, contract with master artisans, or wholesale traders, through advertisements, contracts with cooperative societies, marketing societies, fairs, department stores, jewellery shops, stationary stores, and so forth. Moreover, small independent artisans suffering from scarcity of working capital and proper information about the market carry on sales by tying up at the local level (vendor and local retailer).

The Table 15 depicts the types of problems faced by the sample household units. Overall, all selected 240 sample units comprised of tied (186 units) and independent units (54 units). These units faced the major problem of continuous price increase of raw materials and increase in cost of production ; 96.67% of the sample household units faced the problem of non-availability of raw materials ; 83.33% of the sample households were troubled by monopoly exerted by the raw material supplier, and 77.08% of the sample household units suffered due to the lack of capital.

Table 15. Percentage Share of the Industry Problems Faced by the Conch Shell Industrial Units in the Sample Districts

No. of Units/ Organization	Independent (54 units)		Tied (186 units)		Total (240 units)	
	%	Rank	%	Rank	%	Rank
Continuous increase in prices of raw materials	100	1	100	1	100	1
Cost of production increases	100	2	100	2	100	2
Non-availability of raw materials	94.44	3	97.31	3	96.67	3
Monopoly of Raw material supplier	81.48	4	83.87	4	83.33	4
Lack of capital	72.22	6	78.49	5	77.08	5
Electricity problem	70.37	7	75.27	6	74.17	6
Decrease in quality of raw materials	74.07	5	73.12	7	73.33	7
Delay in payment	68.52	8	63.98	8	65	8
Substitute products	62.96	9	63.98	9	63.75	9
Change in value systems	55.56	11	63.44	10	61.67	10
Competition among industrial units	59.26	10	59.68	11	59.58	11
Health hazards	25.93	12	22.04	12	22.92	12

Conclusion and Recommendations

The conch shell craft is being practiced in West Bengal since ages. The present study revealed various types of problems - like institutional, financial, and marketing problems faced by the artisans employed in the conch shell industry in West Bengal. The socioeconomic, cultural, and environmental factors, and not the economic factors alone, sustain the conch shell industry. Irregularities in the supply of raw materials and increasing cost of production cause severe problems to the artisans. Also, the artisans are troubled due to lack of capital, competition from substitute products, and so forth.

The state government has a vital role to play in sustaining and developing the conch shell industry in the state of West Bengal. Firstly, the government should take measures to contain the steep increase in price of intact conch shells, which are the main raw material for this industry. Secondly, marketing is still largely left to private traders. Since there are no focused efforts to service craftsmen in terms of raw materials, credit, marketing, and so forth, no discernible impact is felt on their earnings and standard of living. Hence, the government has to take steps to introduce an attractive package and services offered for implementation of protectional, promotional, and developmental schemes for the conch shell industry in crucial areas such as design, production, technology, and marketing. Thirdly, for the survival of the industry, there is a need for product diversification, that is, manufacturing various sorts of other conch shell products that are novel artistic specimens. Apart from engraved shells, other conch shell crafts include making items like table lamps, brooches, pendants, incense holders, ashtrays, vermilion containers, spoons and forks, and jewelry items from the shells.

The limited sample size is an inherent limitation of the present study. Future studies can conduct an in-depth analysis of the labour, raw materials, capital, and product markets of the conch shell industry to broaden the scope of the present study in the future.

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