



## **ECONOMICS BEHIND DHOKRA CRAFTSWITH SPECIAL REFERENCE TO BANKURA DISTRICT OF WEST BENGAL**

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### **ABSTRACT**

Bankura district of West Bengal has great prospective for expansion of small scale and cottage industry specially the handicrafts industries. The structure of the cluster (production unit) of Dhokra craft is very traditional handicraft unique, highly appalled and most of the units work single handedly with help of the family members including young Boys and Girls. This research study is basically tries to explore economics behind this handicraft item namely of Dhokra. This study finds that this handicrafts industry is also suffering from lot of problems mainly, reduction of the market demand, presence of middlemen, lack of capital, low literacy of the artisans etc. This study reveals that that there should be more encouragement from the Government or from the State Craft's Council to promote the craft at the national and the international levels. More Exhibitions and Sales outlet should be done that the common people get to know more about the Dhokra Craft and the craftsmen should be given exposition to the outer world directly for the sustainability of this handicraft items.

**KEYWORDS:** Handicrafts, Dhokra, Craftsmen, State Craft's Council, Exhibitions, Sales outlet

### **INTRODUCTION**

The term "Dhokra" has been named after the "Dhokra Domar" Tribes, who were the traditional metal smith of the West Bengal and Odisha. The original craft makers of Dhokra craft has been extended across many parts of India including Jharkhand, Chhattisgarh, Rajasthan, and Kerala. This ancient art form has been known since to the Indus Valley Civilization. Dhokra craft is non-ferrous metal casting using the low wax casting technique and it is copper-based alloys metals.

The history of Dhokra village is about 150 years old; early it was in Rampur of Bankura district. But in the early 90's, the West Bengal Govt. set up the new Dhokra village of Bikna which is 15 km away from Bankura Town and recognized for their own traditional heritage crafts work and independent artists. The principal emblem of the Dhokra crafts is primitive simplicity, attractive folk motifs, rural beauty and creative design. Brass craft has made the important change within the

heritage arts and cultures created by the artisans in India. Many handicrafts have been made crafts with brass such as bowls, lamps, containers etc. but in West Bengal in particular hub of the Dhokra village Bikna of Bankura district has been using the ancient metal lost wax casting technique of Dhokra to facilitate the use of brass.

### **An Outline of the Study Area:**

Bankura District, the fourth largest district of West Bengal, is located in the Western part of the state, which is popularly known as “Rarh” region. The total areas of this district is 688200 hectares out of which forest areas are 148930 hectares, high land and medium lands are 176915 and 150611 hectares respectively. There is a limited land for scope cultivation in the remaining area of land (2130 hectares in 2011). The economy of Bankura district is primarily agrarian and 90 percentage of the total population is rural population. This region is unproductive topography, very small size of the land holding, low fertility, and lack of irrigation facilities and resultant low productivity etc. offer limited scope for farm mechanization. But, there are large chunks of barren land which may be utilized for setting up industrial units and also there are traditional crafts and skilled workforce that could have been returned for picture larger economic return and mass export potential. This district has great potential for growth of activity in medium small scale, traditional handicrafts and cottage industry. The cottage and village traditional industries are of considerable importance to improve the economic condition of the rural population and they play an important role in the rural economy. The district is famous for some unique traditional crafts such as, Terracotta craft of the Panchmura village, Baluchari silk Sarees of Bisnupur, Dhokra work of Bikna, Patrasayer and Gopalpur, stone craft of Susunia are unique crafts.

Broadly, Bengal Dhokra craft can be divided into two segments- Bankura dhokra artisans and in purba Bardhaman district of Dariapur dhokra artisans. Dhokra craft of Bikna forms began under the Malla dynasty, during the late medieval period. Bankura famous for its Dhokra Brass metal art, for centuries this art have developed in the Bankura district. It is the karmakars of Bikna village, 15km away from Bankura Town. The Bankura wax Brass metal art has now come to be regarded as a representation of the artistic excellence of Indian rural handicraft which finds confirmation in its use as the official zenith –motif of the All India Handicrafts board.

At present there are roughly 90 families in Bikna village of Bankura consisting 300dhokra artisans are depending on this Dhokra handicrafts for their livelihood. Mostly they belong to OBC-B (Karmakar community) and economically very poor. Although there is some prospects of development of Dhokra craft with respect to income of the artisan, employment of the area but still most of the artisans subsistence living brings a responsibility of a researcher to explore the reasons for such problems and tries to provide some of policies or tricks for the upliftment of the industry as well as artisans.

### **Objectives of the Study:**

- ❖ The main objectives are to highlight the economics behind the Dhokra crafts, which implies the analysis related to the opportunities and challenges faced by Dhokra crafts as well as Dhokra artisans. Moreover the other objectives are to investigate
- ❖ Item wise the cost and return of the crafts
- ❖ The socio cultural perspectives of the artisans which includes their education, experience, income living standard etc.
- ❖ The awareness of the artisans about various social security scheme provided by government
- ❖ Various health issues of the artisans due to direct involvement in Dhokra
- ❖ Financial sources of the artisans, their marketing strategy, and innovation related issues etc.

### **Literature Review:**

Chattopadhyaya. K (1970) in her book on “Indian handicraft” has described that the traditional handicrafts are the symbol of Indian heritage arts and cultures. She also highlighted that the Indian handicraft has been successful succeeded due to the strong folktale, they encourage and it is a fancy art and culture which is cherished and valued. This book may provide research work that a direction and guideline to the Government or non- Government organization and policy makers to find out various efforts to improve the rural handicrafts and economy.

Rajesh Kochar Visited the Bikna village in November 2000 and initiated a project to develop an efficient furnace for Bikna village. The main object was to collaborate with the craftsmen achieving a new design technology.

Dr. Bikash Kumar Ghosh (2014) in his article, Economics of eco-friendly Terracotta in Bankura District of West Bengal tried to through some light on Terracotta crafts. This research study is based on the primary data of the Panchmura Terracotta village in Bankura District. The main aim of his study is to explain the economics of behind of Terracotta industries and artisans in presence economic perspective. The author indicated the problems of the marketing and the presence of the middlemen. He also mentioned some important factors low income of the artisans is one of the important factors which is hindering the growth of this handicrafts industry. He also highlighted on craft exhibitions for better marketing of the products.

Hamid and Imtiyaz (2014) have explained the cost and returns analysis of the shawl industry in J &K State and they also estimated that the gross revenue earned over the total cost. They have opined that the shawl industry is highly profitable sector.

Hansen and Wethal (2015) expressed the small scale enterprises generally lack of information on sources of the financial supporting for the small scale industry. They also highlighted that how the application procedures were hindering the entrepreneurs to find the financial support and it was found as marginal and economic viability of the enterprise was suffering.

.Patel. R. and Shah. A. (2018) in their article on “Problems and Prospects of rural handicraft artisans” focused on the problems or challenges and prospects for the artisans engaged in handicraft sector of the Surendra nagar district in Gujarat. They also highlighted the socio-economic conditions of the artisans.

### **Research Gap**

From the above literature study it is clear that though there is plethora of works on handicrafts items and artisans but the study related to Dhokra handicrafts items and related artisans are very minimum, specially item wise cost and return related study is not available in the literature. Hence it is pertinent for a researcher to through some light on this handicrafts item.

### **Data and Methodology of the Study:**

This study is based on primary data collected through structured questionnaire. A sample survey was carried out among Dhokra artisans at Bikna village in Bankura district of West Bengal in India purposively. Belongs to the “Karmakar” community of the village Bikna, A total 50 households were randomly selected and interviewed. Total numbers of artisans in this study are 160 in which male artisans are 89 and the rests are female workers. So the multistage sampling technique is applied in this study.

The estimation of cost of production is an important factor of the information necessary for developing rational price policy and development strategies of performance of Dhokra production. In this study we have tried to compute this cost of production which covers both the variable cost and fixed cost. Variable costs include labour costs, cost for raw materials, fuels etc. and fixed cost is the interest paid on own capital assets and rental value of the town house.

The variable cost which includes cost for labour. Dhokra artisans' family labour is the important components of dhokra production. The value of the hired labour is evaluated from the money wage (Rupees) paid households. The value of the family labour is controversial factor among the farm economists. It is assigned at the prevailing market wage rate of casual labour in the selected sample village. Finally Miscellaneous Cost which includes the expenditure on soil, Coal, pitch, Dhuno, Wood and small tools for using this craft.

Already mentioned about Fixed cost which incorporates a) Interest on capital and rental value of own land. The interest on capital with depreciation is evaluated at the rate of 10% per annum on the present value of fixed assets. But in this study, labour is the main ingredients since the use of capital is very limited because it depends on own creativities of the artisans in this dhokra crafts.  $Depreciation = (\text{Original cost} - \text{junk value}) / \text{Life of the assets}$

b) Rental value of own land: The rental value of the owned land is estimated on the basis of prevailing rents in the village for identical type of land.

Consideration has been given to some of the interaction of the factors affecting production of Dhokra crafts. It seems to be important to answer the question like what are the determinants of output and their extent of influence on output. Which inputs are significant in explaining variation in output?

### Various Types of Dhokra Crafts:



Artisans working the place



BOAT



Horse



ELEPHANTS



DEER



Various Types of Dhokra Crafts

**Empirical Findings:**

**Table1.** Average cost of the Dhokra Craft in the sample village

Cost components	Dhokra craft(Big Dura)	
A. Variable costs	1. Brass	Rs.1440 (34.78%)
	2.Fuel	Rs.900 (21.73%)
	3.Others material cost	Rs.1000 (24.15%)
	4. Hire Labour	Rs. 800 (19.32%)
	5.Family Labour	
	i)Men	Rs.1800 (60%)
	ii)Women	Rs.700 (40%)
	TOTAL	Rs.6640
B. Fixed Cost	5.Interest on own capital assets	Rs.121.8(58%)
	6.Rental value of own house	Rs.88.2 (42%)
	total	Rs.210 (100%)
TOTAL	(A+B)	Rs.6850

Source: Field Survey

**Table2.** Average cost of the Dhokra Craft in the sample village

Cost components	Dhokra craft(deer)	
A. Variable costs	1.Brass	Rs.148
	2Fuel	Rs.200
	3.Others material cost	Rs.300
	4. Hire Labour	200
	Family Labour:	
	i)Men	Rs.250
	ii)Women	Rs100
	TOTAL	Rs1198
B. Fixed Cost	5.Interest on own capital assets	12(66.66%)
	6.Rental value of own house	6(33%)
	total	18 (100%)
TOTAL	(A+B)	1216

Source: Field Survey

**Table3.** Average cost of the Dhokra Craft in the sample village

Cost components	Dhokra craft(Peacock)	
C. Variable costs	1.Brass	Rs.480
	2Fuel	Rs250
	3.Others material cost	Rs.300
	4. Hire Labour	Rs280
	Family Labour	
	i)Men	Rs300
	ii)Women	Rs150
	TOTAL	Rs1760
D. Fixed Cost	5.Interest on own capital assets	Rs30(58%)
	6.Rental value of own house	Rs20(42%)
	total	Rs50 (100%)
TOTAL	(A+B)	Rs.1810

**Table4.** Average cost of the Dhokra Craft in the sample village

Cost components	Dhokra craft(Maa Kali)	
A. Variable costs	1.Brass	Rs.960
	2Fuel	Rs900
	3.Others material cost	Rs.850
	4. Hire Labour	Rs400
	Family Labour	
	i)Men	Rs 500
	ii)Women	Rs 150
	TOTAL	Rs 3760
B. Fixed Cost	5.Interest on own capital assets	Rs 80(58%)
	6.Rental value of own house	Rs 60(42%)
	total	Rs 140(100%)
TOTAL	(A+B)	Rs 3900

Source: Field Survey

#### Data Analysis:

The construction of the cluster (Dhokra crafts) is very unique, highly concentrated and most of the units work with the help of all family members including young boys and girls. In the sample village households in terms of the main occupation is the dhokra crafts (98%) and only near about 2% people are engaged other activities. Dhokra crafts, such as, Maa Durga, Deer, Peock Vessel, Turtile, image frame, Jali boat, Ganesh, Palankin, Tribal image, Lion face, Elephant, Owl, Maa kali etc. are the most important products for local, national and International market. In the above tables represents the average cost of Dhokra crafts in the various sizes in the sample village. The important observations, we get that

- I. The variable cost constitutes the significant major combination 89% to 98% of the total cost for all sizes dhokra crafts.
- II. Out of total labour cost (45% to 60%) is the major cost factors for the all sizes Dhokra crafts.
- III. Male labour (55% to 65%) occupies of the highest contribution of these activities and the female workers (25% to 35%)
- IV. The fixed cost component, interest on capital has the major contribution for all sizes Dhokra crafts. The Fixes cost is near only 2% to 10 % varies of the making Dhokra crafts.

**Table 5.** Economic Indicators of Dhokra crafts production in the sample village

	Various types of Dhokra crafts							Maa Durga(Big)	Tribal image	Cow car
	Elephant	owl	Peacock vessel	turtle	boat	Lion face	horse			
Sizes (Inchies)	5"x 3"	6X4	12.x3	4x3	6x4	5x3	8.6x 3.6	18x8	6x2	6x6
Gross returns (Rs.)	700	1250	1800	450	1100	550	850	8500	800	1200
Gross costs (Rs.)	600	1100	1650	400	1000	450	700	7500	700	1000
net returns (Rs.)	100	150	150	50	100	100	150	1000	100	200
B-C ratio	1.16	1.13	1.12	1.12	1.1	1.22	1.21	1.13	1.14	1.2
Maximum Production (Per Month)	10	4	2	10	3	4	2	2	5	2
Net Returns (Rs.)	2000	600	300	500	300	400	300	2000	500	400

Source: Field Survey 2022

However, the investigative the economic issues of the Dhokra production crafts are;

- I. Cost
- II. Return
- III. Profitability

In this research study relevant some important outcomes (Table 5) such as;

- I. The net benefit of some important Dhokra products are Rs,100 for Elephant craft,owl craft for Rs.150, Peacock vessel for Rs. 150, turtle craft for Rs.50, boat for Rs. 100, Lion face for Rs. 100, horse for Rs. 150, Maa Durga(Big) craft for Rs. 1000, Tribal image for Rs. 100 and Cow car for Rs. 200
- II. The benefit –cost ratio (BCR) of the Dhokra crafts production for survey (2022) are as, 1.16, 1.13, 1.12, 1.12, 1.1, 1.22, 1.21, 1.13, 1.14 and 1.2. Moreover, BCR for the all Dhokra crafts are considerable higher than unity. So, the investment for Dhokra industry is highly economically feasible in the study area.
- III. All the households are engaged in the Dhokra production, per month net income Rs. 2000, Rs. 600, Rs. 600, Rs. 300, Rs. 500, Rs. 300, Rs. 400, Rs. 300, Rs. 200, and Rs. 500 Rs. 400 from the above dhokra crafts items of the table 5.
- IV. In this research study, the above results indicate that the net economic returns of Dhokra production are highly for the marginal artisans during the current year of the study Table 5 and Table 1, 2, 3 and 4. The labour and raw materials costs work out to be major contribution of the Dhokra crafts. But the major problems of this sector are that shrinkage of the market, presence of market middleman and some important constraints the income of the households are not regularly. Important note that dhokra crafts production depend on ordering the production and seasonal of tourist visiting the Bankura district.



Infrastructural and Economic Bottlenecks:

1. All the artisan households (95%) are challenged for availability of proper raw materials problems.
2. Above 85% of the total respondents in the study area faced another two important problems: high upgrade of modern technology and Kharagpur IIT set up the modern furnace which is now cost at two lakh rupees more and but the traditional Bati fuel consumption cost only Rs.3000 to Rs. 4000. They are inability bear the modern furnace huge cost. The Bikna village is a full of poor economic conditions but their designs and artistic performance of the traditional wax- metal Dhokra crafts famous which are known widely in the country. The traditional metal artisan's families live and work in a cluster but they have no proper facilities to development traditional heritage crafts.
3. The another severe economic problems is low income of the Dhokra artisan's family. The daily income of the households of the poorest of this community is around Rs. 300 to Rs 400. It is difficult with such a poor income family to maintain their life properly and maintain their children's education. In the recently, survey the study area, their education level is very low.
4. High cost of fuel and less interest of the next young generation to engage this crafts activities.

Insufficiency of capital and steady technicality of the Government of India as well as West Bengal are gradually pushing the poor and marginal traditional artisans to extinction

Perception about the various problems of the Industry:

Various constraints being faced by sample village households were categorized under mainly two groups:

- a) Infrastructure and economic constraints
- b) Marketing constraints.

**Table .6.** Economic constraints

	constraints	No. of the Respondent Households	% of Households
A	Infrastructure and economic constraints		
1	No availability of raw materials	15	30%
2	Low performance of co-operative society	18	36%
3	Production depends on demand	35	70%
4	High cost for modern technology	25	50%
5	Low income from this occupation	45	90%
6	High cost for fuel	38	76%
7	Next generation less interested	27	54%
B	Marketing constraints	42	84%
1	Transportation cost high	32	64%
2	High packaging cost for large products	40	80%
3	Limited market for sale	48	96%
4	Low price	31	62%
	Total house	50	

Source: Field Survey 2022

**Marketing constraints:**

Proper marketing strategy is the most important issue for any product now a day. But the handicraft artisans are still depending on the local market. Although government is taking some initiatives for trade exhibition but due to transportation cost and other problems they are not taking the benefits of such kind of initiatives. Some of the artisans send their crafts to Kolkata, Delhi through the middle men.

Dhokra work is labour intensive and time consuming. Since, a whole day sometimes spent in making one item; hence they don't want to spoil the whole day for selling their product in the other remote markets.

**Summary and Conclusion:**

Unavailability of raw materials specially brass , lack of upgraded tools for the perfection or good finishing of the products, lack of packaging activities and more over products dependence on local market specially in the arrivals of tourists and in the festive seasons shrinking the market for this great handicrafts items. In addition to that the presence of middlemen takes the advantage - especially in the fair or selling outside the village. Artisan's pension scheme and other government's facilities are there although maximum numbers of artisans are unaware of these facilities provided by the government of West Bengal.

In the above analysis of the present research study outcomes that net economic return of Dhokra production are highly for the marginal artisan workers during the current year of study and labour cost works out to be the major contribution. But due to shrinkage of the market, presence of the market middlemen and some important constraints the income of the households are not regular.

.There should be more encouragement from the Government of India or the State Craft's Council to encourage the artisans and providing the market facility to sell their own crafts directly at the national and the international market levels. More Exhibitions and Sales outlet should be done that the common people get to know more about the Dhokra Craft and the craftsmen should be given exposition to the outer world directly. The craftsman should be given freedom to experiment the activities the production of the crafts, so that more new design /pattern / motifs can be produced. The craftsman should be given discussion to the outer world so that they know what people like and what they should add more to their crafts.

It shows that though their monthly income of artisans is above poverty line, due to uncertainty of demand of the product, some internal problems, their economic conditions are very low in the present situation of the economic perspective. There are lacks of modern technology (They use the traditional hand turns and traditional Bati or oven to preparation of making Dhokra crafts). Lack of proper market and inter activeness of the dhokra artisan's co-operative society etc are main problems for Dhokra crafts production.

There should be more encouragement provided by Government of India as well as the state government. More and more exhibitions and sale outlet for the artisans should be arranged. Finally the most important issue is that there should be proper development digital market (on line marketing facilities and infrastructure) with proper advertisement for the traditional handicrafts is very essential, although encouragement of new design and patterns, items of the Dhokra crafts is also another important issue that needs to be addressed by the artisans as well as governments.

Inactiveness of artisan's cooperative society etc. is also the other major problems for Dhokra production in Bankura district.

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