



# IDENTIFICATION OF FACTORS THAT INFLUENCES EMPLOYABILITY IN ZARI AND GEMS & JEWELLERY INDUSTRY IN INDIA: A STUDY WITH SPECIAL REFERENCE TO HOWRAH DISTRICT, WEST BENGAL

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## ABSTRACT

*Zari and Gems & Jewellery have a long heritage in India. These industries play important role on employability in India over the years. The Gems and Jewellery sector plays a significant role in the Indian economy, contributing around 7 per cent of the country's GDP and 15 per cent to India's total merchandise exports. It also employs over 4.64 million workers and is expected to employ 8.23 million by 2022. Howrah district of West Bengal plays an important role by supplying skilled worker in these industries over the years. The current study is an attempt to find out the factors which are influential for employability in these sectors in Howrah district, West Bengal. This study is conducted by collecting primary data from the persons directly engaged in the business of these sectors located in different blocks of Howrah district of West Bengal. For the purpose of the study different statistical tools like descriptive statistics, factor analysis, multiple regressions etc. are being used. It is found that Capital structure, outsourcing, credit sale, religion, age, business type and caste are the factors for employability in these sectors.*

**KEYWORDS:** *Zari, Gems & Jewellery, Factors of Employability, Howrah District, West Bengal, India.*

## 1. INTRODUCTION

Use of zari embroidery was an essential part of the dress work by the kings and queens. The existence of this industry can be traced back to past several centuries. Zari industry in India dates back to the 16<sup>th</sup> century reaching its height during the Mughal rule and is one of the leading industries after diamond and textiles. (MSME- Development Institute, Government of India)

Surat is considered as the home of Zari Industry in India. It make embroidery materials for machine and hand embroidery like zari thread/kesab, Nakshi, Salmo, Sadi, kangri and badle, woven trimmings, flat trimmings, metallic trimmings, fringes, metallic fringes. These can be found in different colours and different widths.

Total production of zari raw material in India is valued about Rs.500 crore at present. About 55% of these zari raw materials is catered by Surat. Except Surat Zari raw materials are produced at Barielly, Varanasi, Agra, Jaipur and Barmer. (MSME-Development Institute, Government of India)

Estimates suggest that more than 5 lakh people's livelihood depends on the local *zari* industry in Howrah's Panchla, Amta I and II, Udaynarayanpur, Sankrail, Domjur, Bagnan and Shyampur blocks, which account for 2,289 gram panchayat, 438

panchayat samiti and 37 zilla parishad seats.(**The Telegraph July 19, 2013**). So it is an important source of employability in West Bengal. Keeping in mind government of West Bengal decided to set up a Zari hub in Sankrail, Howrah. The workers of Bengal brings silk sarees from Surat, Gujrat through middlemen and sell it to these middlemen for lacking of market.

Gems and Jewellery industry also plays an important role in employment generation in India. Mainly in west Bengal it has a heritage. There is a lot of skilled worker in the field of Gems and Jewellery in West Bengal, especially in Domjur, Howrah. Lots of people are working in Mumbai, Gujrat even in Dubai as mechanic in Gems and jewellery. Keeping in mind the skill and competence the Government of West Bengal has been setting up a gems and jewellery park in Ankurhati, Howrah.

The Gems and Jewellery sector plays a significant role in the Indian economy, contributing around 7 per cent of the country's GDP and 15 per cent to India's total merchandise exports. It also employs over 4.64 million workers and is expected to employ 8.23 million by 2022.

The present study attempts to focus on of two industries in two specific geographical sites in West



Bengal: namely Domjur Gems and Jewellery industry and Panchla Zari and Embroidery industry.

It has been seen that number of women workers have been decreasing over the years (Dhar and Saha, Page 55). There is a lot of scope also to improve the skills and to give the effect to improve in the practical field to improve the employability and economy.

In spite of the long history and heritage of this industry, currently this industry is facing lots of trouble due to several reasons especially after Demonetization and introduction of GST in India as this industry is mainly operated by unorganised sector, so far as the information derived with the interaction with the industry personnel at the time of collection of Primary data.

## 2. REVIEW OF LITERATURE

**Soni (1992)** has pointed out some interesting features of Zari Industry, of urban Surat, India, based on the data obtained through questionnaire & interview from 600 women workers. It is revealed that position & status of workers have stayed virtually unchanged for decades. **Sarna & Shukla (1994)** examined physical health & neuroticism among 200 women engaged in the unorganized home-based production of chikan embroidery in Lucknow, India and the results indicated that women chikan workers were facing some serious health problems. **Roy (1999)** found in his study that the most of the manufacturing workers in South Asia are employed in industries relied on manual labour and craft skills. **Frater (2002)** inspected the embroidery & dress of Rabari Subgroups to construct historical migration patterns & cultural adaptations. The origins of embroidery & the toran (doorway hanging) are recounted. **Das and Borthakur (2013)** examined the status of export of gems and jewellery from India for a period of twelve years from 2000-01 to 2011-12 using secondary data and concluded that export has been increasing over the study period. **Saha (2015)** studied Zari & embroidery of Panchla block and Gems & Jewellery industry of Domjur block of Howrah district, West Bengal through survey method by using questionnaire. He concluded that the formation of informal localization is influenced by almost by same set of economic factors as derived from the classical and new geography school. **Agarwal et. al. (2017)** studied on problems faced by exporters of Gems and Jewellery industry for a period of four (4) years from 2011-12 to 2015-16 and concluded that import and export have been decreasing over the period of study and suggested that Government should take initiative to improve import and export of gems and jewellery.

## 3. RESEARCH GAP

From the above literature review it is very much clear that there is no such work on the impact analysis of Zari and Gems and Jewellery industry on the employability in West Bengal. There is no work on the factors on which the performance of these industries depends and the factors which are having influences on the employability in West Bengal. The current project work will try to find out the factors which are influencing the performance and employability in West Bengal especially in the district of Howrah.

## 4. OBJECTIVES OF THE STUDY

The Objectives of the study are as follows:

1. To see the present status of these industries in India.
2. To identify the factors influencing the employability in Zari industry in West Bengal.
3. To identify the factors influencing the employability in Gems and Jewellery industry in West Bengal.

## 5. RESEARCH QUESTION

Keeping in mind the research gap and objective of the study the research questions are:

1. What are the factors influencing the recruitment of employees in West Bengal?
2. What are the factors influencing the expectation of abilities of employees in West Bengal?

## 6. DATA AND METHODOLOGY

### 6.1 Research Design

#### 6.1.1 Research Purpose:

The purpose of this research is to assess the impact of the Zari and Gems & Jewellery industry on employability in West Bengal, especially in the district of Howrah.

#### 6.2 Sample Design

In Howrah district, West Bengal is the hub for Zari and Gems & Jewellery industry. In different blocks of Howrah district these works can be seen. The district of Howrah has in all 14 blocks drawn at random, keeping in mind the availability of data. Of these blocks Panchla, Amta I and II, Udaynarayanpur, Sankrail, Domjur, Bagnan and Shyampur blocks are noteworthy.

For the purpose of the research Domjur, Sankrail, Panchla, Amta blocks are purposively selected on the basis of convenience of collection of data.

### 6.3 Data and Data Source

#### 6.3.1 Primary Data:

Primary data has been used for the research work. Primary data has been collected through questionnaire and interview method from Five



Hundred (500) respondents of Domjur, Sankrail, Panchla, Amta blocks of Howrah district of West Bengal, Surat, Gujarat and Mumbai, Maharashtra. For framing the questionnaire 6 points **Rating Scale** has been used.

**6.3.2 Secondary Data:**

Different reports of Governments, online reports and online articles are being used as secondary source for this study.

**6.4 Variables used**

Primarily forty seven (47) variables had been selected for this research work. But after conducting reliability study of the data one (01) variable found unreliable. So for the study Forty Six (46) variables has been used out of which six (6) are demographic and forty (40) are financial performance indicators of these industries.

For this research work following two (02) dependent and forty four (44) independent variables have been used.

**Dependent variables** used for the study are Business actively recruits employees and The abilities match your expectations.

**Independent variables used for the study are** Business type, Marital status, Age, Education, Religion, Caste, The approximate percentage of skilled workers, The approximate percentage of total workers, The approximate percentage of recruiting skilled workers recently, The approximate percentage of recruiting total workers recently, The workplace is healthy, The culture of workplace is good, Business's fiscal is comfort and stable, The business operates in a socially conscientious manner, Business's work positively affects public lives, Provides the job security, Business have a written policy related to the outsourcing of planning, design, etc. Business ever outsourced for planning, design, etc. Customers interface with your outsourcing contractors Potential

risk in outsourcing the management of planning, design, etc. is high, Business is profitable during the whole year, Have achieved expected profits every year, Profit has increased in recent times, Opinion on the salary administration, Opinion towards incentives scheme, Wages per unit of production in compare to other work, Business actively recruits workers, Recruitment and selection is done systematically, The approximate percentage of cash sales, The approximate percentage of credit sales, Amount of Credit sales collected during the year, Rate of cash discount is given, Importance attached to the capital structure decisions, Size of operations has any influence on the capital structure decisions, Factors Influencing capital structure, Problems in raising funds from others, The approximate percentage of other expenses, Other expenses is higher than wages, The approximate percentage of production, Production match demand, Cost of production, Imported raw materials, if any, Increase in procurement costs, Difficulty in quality control.

**6.5 Tools used**

In the course of analysis of the study, descriptive statistics, frequency analysis, factor analysis and multiple regression technique including t-test method has been used. SPSS 17 software has been used in this study.

**7. RESULTS AND INTERPRETATIONS**

**7.1 Reliability Test:**

There are different factors which may have impact on employability of Zari and Gems & Jewellery industries in West Bengal. It is important to know the factors which are having impact of Zari and Gems & Jewellery industries on the employability in West Bengal. Primarily forty seven (47) variables are taken for the study.

**Table 1 Reliability Statistics**

Reliability Statistics	
Cronbach's Alpha	N of Items
0.775	46

After collecting the data from five hundred (500) respondents, it is essential to check whether the data is reliable or not. Reliability test of the data has been carried out and the results of reliability test are given in Table 1. The Cronbach's Alpha value is 0.775, which is more than the standard (0.70) after removing the demographic variable 'Gender'. This means the questionnaire is reliable with forty six (46) questions

and that gives the accurate information what is expected from the data.

**7.2 Frequency of variables used**

After reliability test it is important to test the frequency of the variables used for the study. This segment of the study deals with the response of the respondents about the forty six variables used for the study.


**Table 2 Frequency of Demographic variables**

<b>Business type</b>	Zari- 300	Gems & Jewellery- 200		
<b>Marital status</b>	Divorced- 6	Married- 95	Unmarried- 399	
<b>Age</b>	<30 Years- 200	30Years<45 Years- 255	45Years and above -45	
<b>Education</b>	Primary- 154	Madhyamik- 267	Higher secondary- 61	Graduate and above- 18
<b>Religion</b>	Muslim- 45	Hindu- 455		
<b>Caste</b>	SC/ST- 162	OBC- 37	Gen-301	

From the table 2 it is very much clear that out of 500 respondents, 300 respondents are from Zari industry which equals to Sixty percent (60%) of the total respondents. On the other hand 200 respondents are from Gems and Jewellery industry which equals to forty percent (40%) of the total respondents. Out of 500 respondents 6 are divorced which is 1.2% of the total respondents, 95 are married which is 19% of the total respondents and 399 are unmarried which is 79.8% of the total respondents. Out of 500 respondents 200 respondents are below 30 years of age which is 40% of the total respondents, 255 respondents are from 30 years and up to 45 years, which is 51% of the total respondents and 45 respondents, are above 45 years which is 9% of the total respondents. In case of educational qualification

out of 500 respondents 154 have studied only up to primary level which is 30.8% of the total respondents, 267 respondents have studied up to Secondary level which is 53.4% of the total respondents and only 18 respondents are qualified graduate and above which is 3.6% of the total respondents. Out of 500 respondents 45 are of Muslim religion which is 9% of the total respondents and 455 are of Hindu religion which is 91% of the total respondents. Out of 500 respondents 162 are of Schedule caste or schedule tribe category which is 32.4% of the total respondents, 37 are from other backward class category which is 7.4% of the total respondents and 301 respondents are from general category which is 60.2% of the total respondents.

**Table 3 Frequency of other variables**

	Unacceptable	Poor	Weak	Average	Good	Excellent
The approximate percentage of skilled workers			448	11	17	24
The approximate percentage of total workers			6	47	447	
The approximate percentage of recruiting skilled workers recently		20	24	10	446	
The approximate percentage of recruiting total workers recently		27	22	4	447	
The workplace is healthy		3	27	20	450	
The culture of workplace is good		2	28	24	446	
Business's fiscal is comfort and stable		1	51	2	446	
The business operates in a socially conscientious manner		3	47	450		
Business's work positively affects public lives		6	45	3	446	
Provides the job security	4	452	44			
Business have a written policy related to the outsourcing of planning, design, etc	13	24	15	1	447	
Business ever outsourced for planning, design, etc	1	25	22	4	448	
Customers interface with your outsourcing contractors	447	41	10	2		



Potential risk in outsourcing the management of planning, design, etc. is high		29	24		447	
Business is profitable during the whole year		449	33	18		
Have achieved expected profits every year		449	15	36		
Profit has increased in recent times	2	450	48			
Opinion on the salary administration		1	43	456		
Opinion towards incentives scheme		1	47	452		
Wages per unit of production in compare to other work		448	49	2	1	
Business actively recruits workers		2	29	22	447	
Business actively recruits employees		2	34	17	447	
The abilities match your expectations		4	30	16	449	1
Recruitment and selection is done systematically	3	7	480	1		
The approximate percentage of cash sales	451	38	10	1		
The approximate percentage of credit sales	1	2	10	2		485
Amount of Credit sales collected during the year		5	9	486		
Rate of cash discount is given	7	490	3			
Importance attached to the capital structure decisions	464	1		35		
Size of operations has any influence on the capital structure decisions		452	6	26	17	
Factors Influencing capital structure		40	7	4	449	
Problems in raising funds from others		9	5	37	2	447
The approximate percentage of other expenses		24	471	5		
Other expenses is higher than wages		471	24	5		
The approximate percentage of production		3	10	466	1	20
Production match demand		2	8	474	16	
Cost of production	1	3	7	16	469	4
Imported raw materials, if any	446	25	22	3	2	
Increase in procurement costs		3	3		40	454
Difficulty in quality control	1	2	3		39	455

As per table 3 it is clear that out of the total 500 respondents 448 persons think that the approximate percentage of skilled worker in these industries are **Weak** which is 89.6% of the total respondents. 11 persons think that that the approximate percentage of

skilled worker in these industries is **Average** which is 2.2% of the total respondents. 17 persons think that that the approximate percentage of skilled worker in these industries is **Good**, which is 3.4% of the total respondents. 24 persons think that that the





approximate percentage of skilled worker in these industries is **Excellent**, which is 4.8% of the total respondents. Now as far as approximate percentage of total worker is concerned 6 persons think that the approximate percentage of total worker in these industries is **Weak** which are 1.2% of the total respondents. 47 persons think that that the approximate percentage of skilled worker in these industries is **Average** which is 9.4% of the total respondents. In case of skilled worker, 447 persons think that that the approximate percentage of skilled worker in these industries is **Good**, which is 89.4% of the total respondents. 20 persons think that the approximate percentage of recruiting skilled workers recently in these industries is **Poor** which are 4% of the total respondents. 24 persons think that the approximate percentage of recruiting skilled workers recently in these industries is **Weak**, which is 4.8% of the total respondents. 10 persons think that that the approximate percentage of recruiting skilled workers recently in these industries is **Average** which is 2% of the total respondents. 446 persons think that that the approximate percentage of recruiting skilled workers recently in these industries is **Good**, which is 89.2% of the total respondents. 27 respondents think that the approximate percentage of recruiting total workers recently in these industries is **Poor** which represent 5.4% of the total respondents. 22 persons think that the approximate percentage of recruiting total workers recently in these industries is **Weak**, which is 4.4% of the total respondents. 4 persons think that that the approximate percentage of recruiting total workers recently in these industries is **Average** which is 0.8% of the total respondents. 447 persons think that that the approximate percentage of recruiting total workers recently in these industries is **Good**, which is 89.4% of the total respondents. 3 persons out of 500 respondents think that healthy situation of the work place is **poor**, which is 0.06% of the total respondents. 27 persons think is **weak**, which is 5.4% of the total respondents. 20 persons think that it is **average** that is 4% of the total respondents and 450 persons think it is **good**, which is 90% of the total respondents. 2 respondents out of 500 respondents think culture of the work place are **poor**, which is 0.04% of the total respondents. 28 persons think is **weak**, which is 5.6% of the total respondents. 24 persons think that it is **average** that is 4.8% of the total respondents and 446 persons think it is **good**, which represents 89.2% of the total respondents. 1 person out of 500 respondents think fiscal position of the industries are is **poor**, which is 0.02% of the total respondents. 51 persons think is **weak**, which represents 10.2% of the total respondents. 2 persons think that it is **average** that is 0.4% of the total respondents and 446 persons think it is **good**, which represents 89.2% of the total respondents. It is also found that 3 persons out of 500

respondents think the business are operated in a socially conscientious manner or not is **poor**, which is 0.06% of the total respondents. 47 persons think is **weak**, which is 9.4% of the total respondents. 450 persons think it is **good**, which is 90% of the total respondents. It is found that 6 persons out of 500 respondents think business's work positively affect the public lives is **poor**, which is 1.2% of the total respondents. 45 persons think is **weak**, which is 9% of the total respondents. 3 persons think that it is **average** that is 0.6% of the total respondents and 446 persons think it is **good**, which is 89.2% of the total respondents. It is found that 4 persons out of 500 respondents think industries provide the job opportunity is **unacceptable**, which is 0.8% of the total respondents. 452 persons think it is **poor**, which is 90.4% of the total respondents and 44 persons think it is **weak**, which is 8.8% of the total respondents. It is found that 13 persons out of 500 respondents think Business has a written policy related to the outsourcing of planning, design etc is **unacceptable**, which is 2.6% of the total respondents. 24 persons think it is **poor**, which is 4.8% of the total respondents. 15 persons think it is **weak**, which is 3% of the total respondents. 1 person think that it is **average**, which is 0.2% of the total respondents and 447 think it is **good**, which is 89.4% of the total respondents. It is found that 1 person out of 500 respondents think Business has ever outsourced for planning, design etc. is **unacceptable**, which is 0.2% of the total respondents. 25 persons think it is **poor**, which is 5% of the total respondents. 22 persons think it is **weak**, which is 4.4% of the total respondents. 4 persons think that it is **average**, which is 0.8% of the total respondents and 448 think it is **good**, which is 89.6% of the total respondents. It is found that 447 person out of 500 respondents think Customers interface with the outsourcing contractors is **unacceptable**, which is 89.4% of the total respondents. 41 persons think it is **poor**, which is 8.2% of the total respondents. 10 persons think it is **weak**, which is 2% of the total respondents. 2 persons think that it is **average**, which is 0.4% of the total respondents. 29 persons think Potential risk in outsourcing the management of planning, design etc. is **poor**, which is 5.8% of the total respondents. 24 persons think it is **weak**, which is 4.8% of the total respondents. 447 persons think that it is **average**, which is 89.4% of the total respondents. 449 persons think profitability of the business is **poor**, which is 89.8% of the total respondents. 33 persons think it is **weak**, which represents 6.6% of the total respondents. 18 persons think that it is **average**, which is 3.6% of the total respondents. 449 persons think business has achieved the expected profits is **poor**, which comes to 89.8% of the total respondents. 15 persons think it is **weak**, which is 3% of the total respondents. 36 persons think that it is **average**,



which is 7.2% of the total respondents. 2 persons think profit has increased in recent times is **poor**, which comes to 0.4% of the total respondents. 450 persons think it is **weak**, which is 90% of the total respondents and 48 persons think that it is **average**, which represents 9.6% of the total respondents. 1 person think salary administration is **poor**, which is 0.2% of the total respondents. 43 persons think it is **weak**, which is 8.6% of the total respondents and 456 persons think that it is **average**, which comes to 91.2% of the total respondents. 1 person think incentive schemes is **poor**, which comes to 0.2% of the total respondents. 47 persons think it is **weak**, which is 9.4% of the total respondents and 452 persons think that it is **average**, which is 90.4% of the total respondents. 448 persons think salary administration is **poor**, which is 89.6% of the total respondents. 49 persons think it is **weak**, which represents 9.8% of the total respondents. 2 persons think that it is **average**, which is 0.4% of the total respondents and 1 person thinks that it is **good**, which is 0.2% of the total respondents. 2 persons think recruitment of worker by the business is **poor**, which is 0.4% of the total respondents. 29 persons think it is **weak**, which is 5.8% of the total respondents. 22 persons think that it is **average**, which is 4.4% of the total respondents and 447 persons think that it is **good**, which is 89.4% of the total respondents. 2 persons think recruitment of employees is **poor**, which is 0.4% of the total respondents. 34 persons think it is **weak**, which is 6.8% of the total respondents. 17 persons think that it is **average**, which is 3.4% of the total respondents and 447 persons think that it is **good**, which is 89.4% of the total respondents. 4 persons think matching the abilities of employee is **poor**, which is 0.8% of the total respondents. 30 persons think it is **weak**, which is 6 % of the total respondents. 16 persons think that it is **average**, which is 3.2% of the total respondents. 449 persons think that it is **good**, which is 89.8% of the total respondents and 1 person thinks that it is **excellent**, which is 0.02% of the total respondents. 3 persons think Recruitment and selection is done systematically is **unacceptable**, which is 0.6% of the total respondents. 7 persons think it is **poor**, which is 1.4 % of the total respondents. 489 persons think that it is **weak**, which is 97.8% of the total respondents and only 1 person thinks that it is **average**, which is 0.2% of the total respondents. 451 persons think approximate percentage of cash sales is **unacceptable**, which is 90.2% of the total respondents. 38 persons think it is **poor**, which is 7.6 % of the total respondents. 10 persons think that it is **weak**, which is 2% of the total respondents and only 1 person thinks that it is **average**, which is 0.2% of the total respondents. 1 person thinks approximate percentage of credit sales is **unacceptable**, which is

0.2% of the total respondents. 2 persons think it is **poor**, which is 0.4 % of the total respondents. 10 persons think that it is **weak**, which is 2% of the total respondents. Only 2 persons think that it is **average**, which is 0.4% of the total respondents and 485 persons think that it is **excellent**, which is 97% of the total respondents. 5 persons think approximate percentage of credit sales out of total sales is **poor**, which is 1% of the total respondents. 9 persons think it is **weak**, which is 1.8 % of the total respondents. 486 persons think that it is **average**, which is 97.2% of the total respondents. 7 persons think approximate Rate of cash discount is **unacceptable**, which is 1.4% of the total respondents. 490 persons think it is **poor**, which is 98 % of the total respondents. 3 persons think that it is **weak**, which is 0.6% of the total respondents. 464 persons think Importance attached to the capital structure decision is **unacceptable**, which is 92.8% of the total respondents. 1 person thinks it is **poor**, which is 0.2 % of the total respondents. 35 persons think that it is **average**, which is 7% of the total respondents. 452 persons think Size of operation has any influence on the capital structure decision is **poor**, which is 90.4% of the total respondents. 5 persons think it is **weak**, which is 1% of the total respondents. 26 persons think that it is **average**, which is 5.2% of the total respondents and 17 persons think that it is **good**, which is 3.4% of the total respondents. 40 persons think factors influencing capital structure of the business is **poor**, which is 8% of the total respondents. 7 persons think it is **weak**, which is 1.4% of the total respondents. 4 persons think that it is **average**, which is 0.8% of the total respondents and 449 persons think that it is **good**, which is 89.8% of the total respondents. 9 persons think it Problems in raising funds from others is **poor**, which is 1.8% of the total respondents. 5 persons think it is **weak**, which is 1% of the total respondents. 37 persons think that it is **average**, which is 7.4% of the total respondents. 2 persons think that it is **good**, which is 0.4% of the total respondents and 447 persons think that it is **excellent**, which is 89.4% of the total respondents. 24 persons think approximate percentage of other expenses is **poor**, which is 4.8% of the total respondents. 471 persons think it is **weak**, which is 94.2% of the total respondents and 5 persons think that it is **average**, which is 1% of the total respondents. 471 persons think it other expenses is higher than wages is **poor**, which is 94.2% of the total respondents. 24 persons think it is **weak**, which is 4.8% of the total respondents and 5 persons think that it is **average**, which is 1% of the total respondents. 3 persons think approximate percentage of production is **poor**, which is 0.6% of the total respondents. 10 persons think it is **weak**, which is 2% of the total respondents. 466 persons think that it is



**average**, which is 93.2% of the total respondents. Only 1 person think that it is **good**, which is 0.02% of the total respondents and 20 persons think that it is **excellent**, which is 4% of the total respondents. 2 persons think Production match demand is **poor**, which is 0.4% of the total respondents. 8 persons think it is **weak**, which is 1.6% of the total respondents. 474 persons think that it is **average**, which is 94.8% of the total respondents and 16 persons think that it is **good**, which is 3.2% of the total respondents. 1 person thinks it Cost of Production is **poor**, which is 0.2% of the total respondents. 3 persons think it is **weak**, which is 1.4% of the total respondents. 7 persons think that it is **average**, which represents 3.2% of the total respondents. 469 persons think that it is **good**, which comes to 93.8% of the total respondents and 4 persons think that it is **excellent**, which is 0.8% of the total respondents. 448 persons think it Imported Raw Materials is **unacceptable**, which is as high as 89.6% of the total respondents. 25 persons think it is **poor**, which is 5% of the total respondents. 22 persons think that it is **weak**, which is 4.4% of the total respondents. 3 persons think that it is **average**, which is 0.6% of the total respondents and 2 persons think that it is **good**, which is very low at 0.4% of the total respondents. 3 persons think increase in procurement cost is **poor**, which is 0.6% of the total respondents again 3 persons think it is **weak**, which is 0.6% of the

total respondents. 40 persons think that it is **good**, which is 8% of the total respondents. 454 persons think that it is **excellent**, which is as high as 90.8% of the total respondents. 1 person thinks it difficulty in quality control is **unacceptable**, which is 0.2% of the total respondents again 2 persons think it is **poor**, which is 0.6% of the total respondents. 39 persons think that it is **good**, which is 7.8% of the total respondents. 455 persons think that it is **excellent**, which is as high as 91% of the total respondents.

### 7.3 Identification of key variables

The KMO and Bartlett's test Sphericity is used for knowing the appropriateness of exploratory factor analysis. The KMO determines the sampling adequacy and it should be more than 0.60 for a satisfactory factor analysis to proceed. Tables 4 shows that the KMO measure is 0.769, this indicates the data is appropriate for exploratory factor analysis. At the same time, Bartlett's test of Sphericity is significant for exploratory factor analysis as its probability is less than 0.05. Table 4 shows that Bartlett's test of Sphericity is 0.00, this indicates the data is appropriate for exploratory factor analysis. Both the test results demonstrate that the collected data is appropriate for factor analysis. Exploratory factor analysis has been carried on after the test of reliability.

**Table 4 KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.769
Bartlett's Test of Sphericity	Approx. Chi-Square	10879.277
	df	105
	Sig.	0.000

### 7.4 Factor analysis statistics:

Primarily forty seven (47) variables are being primarily used for the study. After reliability test,

variable 'Gender' has been removed. So factor analysis has been conducted with 46 variables, result of which is shown in table 5 below:

**Table 5 Factor Analysis Statistics**

	Component				Communalities
	Capital structure and Outsourcing affects Employability	Credit sale	Religion and Age	Business type and Caste	
Importance attached to the capital structure decisions (V35)	0.941				0.916
Business ever outsourced for planning, design etc.(V18)	0.936				0.942
Business's work positively affects public lives (V15)	0.874				0.940
<b>Business actively recruits employees (V28)</b>	0.848				0.935
Business has a written policy related to outsourcing of planning, design etc.(V17)	0.831				0.953





<b>The abilities (of employee) match your expectations (V29)</b>	0.826				0.862
Provides the job security (V16)	-0.825				0.691
Problems in raising funds from others (V38)	0.784				0.921
Customers interface with your outsourcing contractors (V19)	0.711				0.929
Amount of credit sales collected during the year (V33)		0.890			0.817
Other expenses is higher than wages (V40)		-0.690			0.647
Religion (V5)			0.798		0.678
Age (V3)			0.786		0.656
Business Type (V1)				0.815	0.699
Caste (V6)				0.688	0.542
Eigen Value	8.23	1.603	1.241	1.054	
% of variance	44.363	20.073	8.561	7.856	

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Table 5 shows that 9 variables in the vein of Importance attached to the capital structure decisions (V35), Business ever outsourced for planning, design etc.(V18), Business's work positively affects public lives (V15), **Business actively recruits employees (V28)**, Business has a written policy related to outsourcing of planning, design etc.(V17), **The abilities (of employee) match your expectations (V29)**, Provides the job security (V16), Problems in raising funds from others (V38), Customers interface with your outsourcing contractors (V19) have formed Factor 1 named "**Capital structure and Outsourcing affects Employability**" with loading score 0.941, 0.936, 0.874, 0.848, 0.831, 0.826, -0.825, 0.784 and 0.711 respectively.

On the other hand, 2 other variables Amount of credit sales collected during the year (V33), Other expenses is higher than wages (V40) have formed together Factor 2 named "**Credit Sales**" with loading score 0.890, and -0.690 respectively.

Moreover, Factor 3 named "**Religion and Age**" has created by 2 more variables are Religion (V5) and Age (V3) with loading score of 0.798 and 0.786 respectively.

Again Factor 4 named "**Business type and Caste**" has created by 2 more variables are Business Type (V1) and Caste (V6) with loading score of 0.815 and 0.688 respectively.

The factors and variables that are explained above helped for explaining the impact of Zari and Gems & Jewellery industries on Employability in West Bengal. This result demonstrates that these fifteen quality indicators can influence the employability of zari and Gems & jewellery business in West Bengal.

## 7.5 Multiple regression results:

Most sophisticated multiple regression techniques have been applied to study the joint influence of all the 12 selected independent ratios on 'Business actively recruits employees' and 'The abilities match your expectation' (dependent variable). For this purpose the regression coefficients have been tested with the help of the most fashionable 't' test.

After regression analysis of 12 independent and 2 dependent variables it is found that there is a multicollinearity problem with the independent variable Importance attached to the capital structure decisions. This independent variable is excluded for the regression analysis. So ultimately impact of rest 12 independent variables are being judged on 2 dependent variables.

The linear regression model utilized in this investigation is:

$$\text{Business actively recruits employees} = \lambda + \beta_1 V1 + \beta_2 V3 + \beta_3 V5 + \beta_4 V6 + \beta_5 V15 + \beta_6 V16 + \beta_7 V17 + \beta_8 V18 + \beta_9 V19 + \beta_{10} V33 + \beta_{11} V38 + \beta_{12} V40 + \epsilon_t$$

(unexplained variables or error terms) Where  $\lambda$ ,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ ,  $\beta_5$ ,  $\beta_6$ ,  $\beta_7$ ,  $\beta_8$ ,  $\beta_9$ ,  $\beta_{10}$ ,  $\beta_{11}$  and  $\beta_{12}$  are the independent variables having impact on the employability in Zari and Gems & Jewellery industry in West Bengal.

### 7.5.1 Multiple regression results on Business actively recruits employees

Table 6 shows the regression test results of independent variables on dependent variable taken for the study.

**Table 6 Regression Analysis on Business actively recruits employees**

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	1.718	0.165	10.431	0.000
Business Type (V1)	0.011	0.010	1.170	0.242
Age (V3)	0.006	0.008	0.834	0.405
Religion (V5)	0.009	0.017	0.522	0.602
V6 Caste (V6)	0.001	0.005	0.113	0.910
Business's work positively affects public lives (V15)	0.102	0.032	3.155	0.002
Provides the job security (V16)	0.086	0.028	3.058	0.002
Business has a written policy related to outsourcing of planning, design etc.(V17)	0.142	0.026	5.479	0.000
Business ever outsourced for planning, design etc.(V18)	0.320	0.034	9.327	0.000
Customers interface with your outsourcing contractors (V19)	-0.691	0.049	-14.036	0.000
Amount of credit sales collected during the year (V33)	0.103	0.032	3.184	0.002
Problems in raising funds from others (V38)	-0.141	0.027	-5.281	0.000
Other expenses is higher than wages (V40)	0.281	0.031	9.151	0.000
	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	S. E. of the Estimate
	0.984(a)	0.967	0.967	0.10167
	F			Durbin-Watson
	1204.582			2.007
				Sig.
				0.000(a)

a Dependent Variable: Business actively recruits employees (V28)

From Table 6 it can be seen that there is a positive linkage between business type (0.011), age (0.006), religion (0.009) and caste (0.001) the demographic variables and recruitment of employees. It signifies that four demographic variables positively influence the recruitment of employees. It signifies that business type, age, religion and caste are positively influential in recruitment of employees in zari and gems & jewellery industry in Howrah district of West Bengal. Positive relation can also be seen between six independent variables like business work positively affects public lives (0.102), job security (0.086), written outsource policy (0.142), business ever outsourced design etc.(0.320) amount of credit sales collected (0.103) and excess of other expenses over wages (0.281) and dependent variable recruitment of employees. It signifies that recruitment increases if job security and

collection from credit sales increases. On the other hand if other expenses increased i.e. if wages expenses decreases then recruitment increases. At the same time recruitment also increases if business positively affects public life and on the outsourcing policy of the business.

But a negative linkage can be seen between Customers interface with outsourcing contractors (0.691) and Problems in raising funds from others (0.141) and recruitment of employees. It signifies that if the customers interface the outsourcing contractors then recruitment of employees has decreased. At the same time recruitment also decreased when the problems in raising funds from others for the business increased.

The multiple correlations among the dependent variable recruitment of employees and the independent variables taken together were 0.984. It indicates that the recruitment

of employees was strongly responded by its independent variables. It was also apparent from the value of  $R^2$  that 96.7 per cent of variation in recruitment of employees was accounted by the joint variation in independent variables. Adjusted 'R'square ( $R^2$ ) signifies that 96.7 per cent of the positive variations in the recruitment of employees are explained by the independent variable. Standard Error of regression coefficients is very low (0.10167), demonstrates that best fit to line of estimates

among the variables. The VIF is not too high in any case of independent variables that is an indication that there is no multicollinearity problems. Also Durbin-Watson statistics (2.007) indicates that residuals are not serially correlated.

### 7.5.2 Multiple regression results on The abilities match your expectation

Table 7 shows the regression test results of independent variables on dependent variable taken for the study.

**Table 7 Regression Analysis**

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	0.103	0.291	0.356	0.722
Business Type (V1)	0.021	0.017	1.220	0.223
Age (V3)	0.012	0.014	0.893	0.372
Religion (V5)	0.016	0.030	0.535	0.593
V6 Caste (V6)	0.010	0.009	1.075	0.283
Business's work positively affects public lives (V15)	0.086	0.057	1.504	0.133
Provides the job security (V16)	0.253	0.050	5.073	0.000
Business has a written policy related to outsourcing of planning, design etc.(V17)	-0.002	0.046	-0.036	0.972
Business ever outsourced for planning, design etc.(V18)	0.513	0.060	8.481	0.000
Customers interface with your outsourcing contractors (V19)	-0.553	0.087	-6.373	0.000
Amount of credit sales collected during the year (V33)	0.350	0.057	6.115	0.000
Problems in raising funds from others (V38)	-0.062	0.047	-1.321	0.187
Other expenses is higher than wages (V40)	0.397	0.054	7.337	0.000
	R	Adjusted R <sup>2</sup>	S. E. of the Estimate	Durbin-Watson
	0.949(a)	0.901	0.17939	2.025
F = 368.185 (Prob. 0.00)				

a Dependent Variable: The abilities match your expectation (V29)

From table 7 it can be seen that there is a positive linkage between business type (0.021), age (0.012), religion (0.016) and caste (0.010) the demographic variables and the abilities match expectation. It signifies that four demographic variables positively influence the abilities match expectation. It signifies that business type, age, religion and caste positively influence in matching the expectation about the abilities of employees

in zari and gems & jewellery industry in Howrah district of West Bengal.

There is also a positive relation between five independent variables like public lives (0.086), job security (0.253), outsourced design etc.(0.513) amount of credit sales collected (0.350) and excess of other expenses over wages (0.397) and dependent variable the abilities match expectation. It points out that abilities increase if job



security and collection from credit sales increases. But if other expenses increased i.e. if wages expenses decreases then matching of abilities increases. At the same time recruitment also increases if business positively affects public life and on the outsourcing policy of the business.

A negative linkage can be seen between written outsource policy (0.002), Customers interface with outsourcing contractors (0.553), and Problems in raising funds from others (0.062) and abilities match expectation. It indicates that if the customers interface the outsourcing contractors and there is written outsource policy then matching of expectation of the abilities of employees has decreased. At the same time matching of expectation of the abilities of employees also decreased when the problems in raising funds from others for the business increased and vice versa.

The multiple correlations among the dependent variable recruitment of employees and the independent variables taken together were 0.949. It indicates that the abilities match expectation was strongly responded by its independent variables. It was also apparent from the value of  $R^2$  that 90.1 per cent of variation in abilities match expectation was accounted by the joint variation in independent variables. Adjusted 'R'square ( $R^2$ ) signifies that 89.8 per cent of the positive variations in the abilities match expectation are explained by the independent variable. Standard Error of regression coefficients is very low (0.17939), demonstrates that best fit to line of estimates among the variables. The VIF is not too high in any case of independent variables that is an indication that there is no multicollinearity problems. Also Durbin-Watson statistics (2.025) indicates that residuals are not serially correlated.

## 8. CONCLUSION

As the situation of zari and gems & Jewellery industry is deteriorated in India in recent times, Government have to take initiative to improve the condition of these industries for the better performance. These industries are facing the fund problems also, especially the zari industry in West Bengal. This sector need more boost up especially in case of capital assistance to meet the requirement. There is no doubt that these industries are very much effective in employment generation, but Government initiative should be made to stabilize these industries.

## 9. ANSWER TO THE RESEARCH QUESTIONS

- a) Business, age, religion, caste, business work positively affects public lives, job security, written outsource policy, business ever outsourced design etc., amount of credit sales collected, excess of other expenses over wages factors influencing positively the recruitment of employees in West Bengal. But Customers interface with outsourcing contractors and Problems in raising funds from others factors influencing negatively the recruitment of employees in West Bengal.
- b) Business, age, religion, caste, business work positively affects public lives, job security, business ever outsourced design etc., amount of credit sales collected, excess of other expenses over wages factors influencing positively the expectation of abilities of employees in West Bengal. But written outsource policy, Customers interface with outsourcing contractors and Problems in raising funds from others factors influencing negatively the expectation of abilities of employees in West Bengal.

## 10. SCOPE OF FURTHER RESEARCH

The research project is confined in the district of Howrah, West Bengal only. The linkages of this district with other states are being made in this research project. But it could have been more extensive if all the districts of West Bengal and other states would have been made.

## BIBLIOGRAPHY

### Books:

1. *Survey Scales: A guide to Development, analysis, and Reporting.* Robert L. Johnson and Grant B. Morgan (The Guilford Press).
2. *Sustainability in the Textile Industry.* Subramanian Senthilkannan Muthu (Springer).
3. *The Gold Arc: A study of the jewellery industry.* Shantanu Rajguru.
4. *Financial Statement Analysis: A practitioner's guide.* Martin Fridson and Fernando Alvarez (Wiley Finance).

### Journals:

1. Adhikari, Ramesh and Yang Yongzheng. (Sep. 2002), "What will WTO Membership Mean for China and its Trading Partners". *Finance & Development, International Monetary Fund*, PP. 22-25.
2. Agarwal, Dr. Parul; Devgun, Ms. Richa; Bhatnagar Dr. J.S. (2017). "Study on Problems Faced By Exporters of Gems and Jewellery Industry". *IOSR Journal of Business and Management (IOSR-JBM)*, Volume 19, Issue 4. PP 01-07.





3. Ahmed, Masood. (2002), "Building Consensus on Poverty Reduction". *Finance & Development*, June Volume 39, PP. 8.
4. Ames, Brian, Bhatt, Gita and Plant, Mark. (2002), "Taking Stock of Poverty Reduction Efforts". *Finance & Development*, June, Volume 39, PP. 9-12.
5. Bagchi, Gour Chandra, Sinha, Sukumar. (1972), *Village Survey Monograph on upper Pedong; Census of India, 1961. West Bengal & Sikkim*, Delhi, Anu Press.
6. Baldacci, Emanuele and Mello, Luiz de and Inchauste, Gabriela. (2002), "Financial Crises, Poverty, and Income Distribution". *Finance & Development*, June, Volume 39, PP. 24-27.
7. Baldwin, R. E., R. Forslid, P. Martin, G. I. P. Ottaviano and F. Robert-Nicoud (ed.), *Economic Geography and Public Policy*,
8. Banerji, Amiya Kumar. (1972), *West Bengal District Gazetteers Howrah*, Saraswati Press Ltd. Calcutta, PP. 191-192.
9. Bangio Sanskriti Parisad. (2007), *Howrah Guide -2007; Industrial & Business Directory and History of Howrah*, Bangio Sanskriti Parisad, Ethical Advertising.
10. Basak, Sila. (2006), *Nakshi Kantha of Bengal*, Gyanpublishing house, New Delhi.
11. Basham, A.L. (1954), *The wonder That was India*, Picador, London.
12. Bathla, H.V.L. and Jha, G.K. (2006), *Manual on horticulture and Spices Statistics*, Indian Agricultural Statistics Research Institute, New Delhi
13. Bengal District Gazetteer, (1933), Howrah District; B. Volume; Statistics; 1921- 1922 to 1930-1931, Bengal Secretariat Book DePat, Calcutta, P. 9.
14. Berg, Andrew and Krueger Anne. (September 2002), "Why Openness Helps Curb Poverty". *Finance & Development*, International Monetary Fund, PP. 16-19.
15. Bhardwaj, S. P. (2005), "Study of Lac Marketing in India". *Journal of the Indian Society of Agricultural Statistics*. Apr. 2005, Volume 59, No. 1, PP. 42.
16. Bhattacharya, Jayati. (March 2008), "Colonial Capital and National Retrieve : Profile of an Entrepreneur". *The Indian Historical Review*, Volume xxxv, Number 1, (January 2008), PP. 108-127.
17. Bhunia, Swati. (January 2008), "The Aged and their Socio- Economic Condition- A Case Study in West Bengal". *Loukik*, Volume 2, Number 1, Kolkata, PP. 127-135.
18. Bio-Tchane, Abdoulaye and Christensen, Benedicte Vibe. (2006), "Right Time for Africa: Africa needs to build on its recent success to catch up". *Finance & Development*, December, Volume 43, Number 3, PP. 8-13.
19. Bloom, David E and Khanna, Tarun. (2007), "The Urban Revolution". *Finance & Development*, September, Volume 44, No.3, PP. 9-14.
20. Brulhart, M. (1998), 'Economic Geography, Industry Location and Trade: The Evidence', *The World Economy*, 21(6), 775-801.
21. Bulir, Ales and Lane, Timothy. (December 2002), "Managing the Fiscal Impact of Aid". *Finance & Development*, PP. 28-30.
22. Bureau of Applied Economics & statistics (2009), *statistical Abstract 2008*, Govt of W.B. Silpabarta Printing press Ltd, PP. 150-167.
23. Buston, David and Zanello, Alessandro. (2007), "Asia Ten years After, A decade after the Asian financial crisis, the region is growing rapidly but still has a long to-do list". *Finance & Development*, June. PP.22-25.
24. Census of India. (2004), *Housing Atlas of India 2001*, India.
25. Chandra, Satish (1982). *The Cambridge Economic History of India*, Vol. IC 1200-C. 1750. PP. 458-471.
26. Chattapadhya, Brajadulal. (1987), *Essays in Ancient Indian economic History*, Munshiram Monoharlal publishers Pvt. Ltd, PP. 95-109, 111-119.
27. Chaudhuri, Binay Bhushan. (2005), *Economic History of India from Eighteenth to twentieth Century*, PP. 60-106.
28. Chaudhuri, K.N. (1985), *Trade and Civilisation in the Indian Ocean; An Economic History from the Rise of Islam to 1750*, Munshiram Monoharlal Publishers Pvt. Ltd.
29. Chottopadhyaya, D.P. (2005), *History of science, Philosophy and culture in Indian Civilization*, Volume 111 Part-3.
30. Das P. and Borthakur S., "Gems and jewellery: The dark horse of Indian exports", *International journal of research in commerce, economics & management*, 3(4), 2013, 76-79.
31. Digby, Simon (1982), "The Maritime Trade of India", *Cambridge Economic History of India*, Vol. 1, C.1200-C.1750.
32. Dhar, Pranam and Saha, Amit. (2016), *A STUDY OF EMPLOYMENT SCENARIO OF ZARI WORKERS IN WEST BENGAL*, Multi Disciplinary Edu Global Quest (Quarterly), Volume 5, Issue 1#17, pp 49-83.
33. Frater Judy (2002) „This Is Ours”: Rabari Tradition and Identity in a Changing World, *Nomadic Peoples*, Vol. 6, No.2, PP. 156-169.
34. Fujita, M. (1989), *Urban Economic Theory: Land Use and City Size*, Cambridge, Cambridge University Press.
35. Fujita, M., P. Krugman and A. Venables (1999), *The Spatial Economy: Cities, Regions and International Trade*, Cambridge, MIT Press.
36. Gayer, H. S. (ed.) (2002), *International Handbook of Urban Systems: Studies of Urbanization and Migration in Advanced and Developing Countries*, Cheltenham, Edward Elgar.
37. Glaeser, E. L. and D. C. Mare (2001), 'Cities and Skills', *Journal of Labour Economics* 19(2), pp. 316-342.
38. Habib, Irfan (2006) *India Economy 1858-1914*. P 95-96, 100.
39. Handerson, J. Vernon and Jacques-Francois Thisse (ed.) (2004), *Handbook of Regional and Urban Economics*, Vol. 4, *Cities and Geography*, Amsterdam, Elsevier.



40. Huriot, J. M. and J. F. Thisse (eds.) (2000), *Economies of Cities: Theoretical Perspectives*, Cambridge, Cambridge University Press.
41. India, *Report on the Survey of the Brocade Industry at varanasi*, All India Handicrafts Board (Delhi, 1960). Two-thirds of the zari requirements of this industry came from within the town op. cit. Roy, Tirthankar. *Traditional Industry*. P.115.
42. Krugman, Paul (1991), *Geography and Trade*, Cambridge, MIT Press.
43. Krugman, Paul (2010), *The New Economic Geography, Now Middle-Aged*, presented to The Association of American Geographers, Apr. 16.
44. Marshall, A. (1890), *Principles of Economics*, London, MacMillan.
45. McCann, Philip (2007), *Urban and Regional Economics*, New York, Oxford University Press.
46. Mueller Peggy & Turkovich Marilyn (1987), *Cloth Crafts of India: Cotton and Silk, Trade and History*, Report: ED407337. PP-53.
47. Pathania Raj, Kaur Praveen, Pathania Pawan, *Gender Differentials in Participation of Tribal Adolescents in Various Activities*, *Studies of Tribes and Tribal*, Vol. 5, No. 1, PP. 1-4.
48. Princeton, Princeton University Press, pp. 213-235.
49. Ray, Tirthankar (1999), *Traditional Industry in the economy of Colonial India*, Cambridge University Press PP. 99-128.
50. Rosenthal, S. S. and W. C. Strange (2003), 'Geography, Industrial Organization, and Agglomeration', *Review of Economics and Statistics* 85(2), pp. 377-393.
51. Roy, Tirthankar (1999) *Traditional Industry In the Economy of Colonial India*. PP. 67-68.
52. Saha, Sukanta (2011), *The 'Unprotected' Sector of Gold and Jewellery in West Bengal*, Extended Abstract Publication, Conference Volume, The Indian Society of Labour Economics, Annual Conference organized by Mohanlal Sukhadia
53. Saha, Sukanta (2014), 'An Inquiry into the Location of Industries', in Chatterjee, K. and A. Pal (ed.) 'Emerging Issues in Business and Economics in India', Rachayita, Kolkata.
54. Saha, Sukanta (2015), *Argument for Informal Cluster Industry Formation: The Case of Sinthi Gold and Jewellery Industry*, *Journal Desh Vikas*, Vol. 2 Issue 1 April-June.
55. Saha, Sukanta (2015), *Localized Informal Agglomeration: A Classical Syntax*, *Journal Desh Vikas*, Vol. 2 Issue 2 July-Sep.
56. Saha, Sukanta (2015), *Spatial Concentration: Specificity and Informality*, *Journal Social Vision*, Vol. 1 Issue 4 Jan-March.
57. Sarna Tripti & Shukla, Archana, *A Study of Physical-Health and Neuroticism among Women Engaged in the Home-Based Production of Chikan Embroidery*, *Social Indicators Research*, Vol. 32, No. 2, PP. 179-191.
58. Soni Jayshree (1992), *Zari Industry and Women Workers*, *Guru Nanak Journal of Sociology*, Vol.13, No.1, PP. 62-72.
59. Tandon, Neeti and Berry, Shefali, "Women in the Unorganized Sector: An Economic Perspective", *Indian women*, PP. 198-199. University, Udaipur, Rajasthan, India.
60. Mondal, Sekh Rahim (Nov. 2002), "Women in Craft Production – A case study of Zari Embroidary in Bengal" Abstract, *Indian Anthropological Society*, Vol. 37, No. 3, PP- 269-275.
61. Wheaton, W. C. and M. J. Lewis (2002), 'Urban Wages and Labour Market Agglomeration', *Journal of Urban Economics* 51, pp. 542-562.

### Reports:

1. IBEF Report 2017
2. ICRA, 2006
3. GJEPC Annual report (2012-13)
4. GJEPC Annual report (2014-15)
5. GJEPC Annual report (2015-16)

### Websites:

1. <https://blog.soch.in/2017/11/24/the-history-of-zari-work>
2. <https://blog.soch.in/2017/11/24/the-history-of-zari-work>
3. [www.ibef.org](http://www.ibef.org)