TRANSITIONAL TREND IN HANDICRAFT PRACTICES & ITS IMPACT ON THE INCOME OF ARTISANS

ISSN 2277-7733
Volume 8 Issue 1,
June 2019

Amisha Shah
Assistant Professor, Centre for Studies in Rural Management,
Gujarat Vidyapith, Randheja, District Gandhinagar.
Rajiv Patel
Professor, Centre for Studies in Rural Management,
Gujarat Vidyapith, Randheja, District Gandhinagar.

Abstract

Indian economy mostly depends on agriculture. Besides agriculture, rural handicrafts provide good employment opportunities to a large number of rural populations at their doorsteps and increase their income considerably. Crafts of Gujarat enjoys a significant position in the domestic as well as international markets. The land of Surendranagar district is also very prosperous with regards to the artistic nature of community living here. Weaving, Patola making, Stone carving, Embroidery-Bead work, Pottery, etc. are the distinct handicrafts of this region. But due to one or another reasons, these crafts seem disappearing with passage of time. The sustainability of these handicraft artisans is in question in today's fast developing age of industrialization and technological bombarding. Millions of handicraft artisans today depend on indigenous modes of production using traditional skills and techniques to earn livelihood. The artisans will have to learn to survive by meeting the demand of the contemporary market without compromising the essence of handicrafts. Thus, here is an attempt to focus on various handicraft practices done by rural artisans at Surendranagar district and the transitional trend taking place there in. The researcher has also tried to study the impact of 'adopting new technologies & innovations' on the income of handicraft artisans.

Keywords: *Handicrafts, Rural Artisans, Transitional Trend, Innovative Practice, Entrepreneurship, Rural Development.*

Handicraft - itself indicates the 'Craft work done with Hands'. It mean applying manual skills not huge machinery and sophisticated tools. Generally handicraft sector utilizes the traditional skills handed down from generation to generation and this industry uses conventional manual methods instead of advanced technology. It is an unorganized, decentralized, labour intensive cottage industry.

Though India handicrafts are the peculiarities of Indian cultural heritage and are famous worldwide since centuries, the scenario has rapidly been changing with passage of time. The current scenario of rural India exhibits that the rural handicraft artisans suffer from a series of weaknesses and threats towards their crafts. They have weak educational base, poor access to investment resources, technological obsolescence, low productivity and lack of modern marketing aptitude. Traditional rural artisans have been hit hard by the transformation pattern of village economy and society, as they are highly unorganized, stratified, scattered, and fragmented into narrow based groups. Therefore, they are being marginalized and even are not effectively covered under social security measures. In such circumstances, they have to be adaptive to change and modernization which definitely results in to transition and transformation in handicraft decisions. If such artisans keep on constant innovations keeping in mind the modern trends while retaining traditional flavour, they have a shining opportunity to be great artists having own recognition and unique identity.

Objectives of the Research Study

To study the handicraft practices of rural artisans and the transitional trend there in; To study the impact of 'adopting new technologies & innovations' on the income of handicraft artisans.

Hypothesis

Null Hypothesis: There is no significant difference between the handicraft incomes of two groups of artisans: Those who have adopted new technologies and innovations and Those who have not.

Here, the variable 'Adoption of new technologies and innovations' has the sub-variables like Changes in material & method of production', Changes in product designs & innovations, Changes in sources of energy, Changes in machinery, tools & equipment , Changes in marketing practices and; Use Internet facility.

Hence the following null hypothesis have been framed:

H_0: There is no significant difference between the handicraft incomes of two groups of…

Artisans: Those who have adopted changes in material & method of production and those who have not; Artisans: Those who have adopted changes in product designs & innovations and those who have not; Artisans: Those who have adopted changes in sources of energy and those who have not; Artisans: Those who have adopted changes in machinery, tools & equipment and those who have not; Entrepreneurs: Those who have adopted changes in marketing practices and those who have not; Artisans: Those who use Internet facility and those who do not.

Research Methodology

The study has been conducted on the rural handicraft artisans working at Surendranagar district of Gujarat. Rural artisans were selected as respondents from all the 10 blocks of Surendranagar District. 50 artisans from each of the eight selected handicraft categories were selected. Hence, there were total 400 artisans. But finally 316 artisans having work experience of at least five years were selected as respondents for this study.

The artisans have been selected from eight main handicraft categories of this region. They are: 1) Weaving/ Tangaliya 2) Patola 3) Stone Carving 4) Mud-work/ Wood-work 5) Tie and Dye 6) Embroidery/ Crochet work 7) Bead-work 8) Other Handicrafts.

Primary as well as secondary data have been used in this research work. Structured schedule was used as a tool of primary data collection during personal interview of the respondents by the researcher. Besides interview method, group discussion and observation method have also been used to gather the realistic data from the focused group. The collected data have been analyzed with the soft-wares like Statistical Package for Social Sciences (SPSS), Microsoft Excel and other open sources. Statistical techniques such as Frequency Percentage, Measures of Central Tendency, Cross-tabulation, etc. have been applied to analyze the data. Besides, the researcher has used Mann-Whitney U Test of two independent variables for testing the hypothesis under study.

All the respondents from eight handicraft categories were asked whether they have adopted any changes in current handicraft decisions and practices as compared to earlier. Various types of responses were received from the focus group; they all have been grouped as shown in the table:

Table 1 Handicraft Categories and Adoption of Changes in Handicraft Decisions

Changes in Handicraft Decisions		Handicraft Categories								Total
		Weaving/ Tangaliya	Patola	Stone Carving	Mud-work/ Wood-work	Tie and Dye	Embroidery/ Crochet work	Bead-work	Other Handicrafts	
Material and Method of Production	No.	40	36	20	29	8	21	37	28	219
	% R	18.26%	16.44%	9.13%	13.24%	3.65%	9.59%	16.89%	12.79%	100.00%
	% C	86.96%	85.71%	48.78%	72.50%	22.22%	61.76%	82.22%	87.50%	69.30%
Product Designs & Innovations	No.	45	42	41	40	36	31	43	31	309
	% R	14.56%	13.59%	13.27%	12.94%	11.65%	10.03%	13.92%	10.03%	100.00%
	% C	97.83%	100.00 %	100.00 %	100.00 %	100.00 %	91.18%	95.56%	96.88%	97.78%
Energy Sources	No.	0	32	29	28	10	1	0	6	106
	% R	0.00%	30.19%	27.36%	26.42%	9.43%	0.94%	0.00%	5.66%	100.00%
	% C	0.00%	76.19%	70.73%	70.00%	27.78%	2.94%	0.00%	18.75%	33.54%
Machinery, Tools and Equipment	No.	11	16	40	24	9	2	2	8	112
	% R	9.82%	14.29%	35.71%	21.43%	8.04%	1.79%	1.79%	7.14%	100.00%
	% C	23.91%	38.10%	97.56%	60.00%	25.00%	5.88%	4.44%	25.00%	35.44%
Use of Internet	No.	2	12	7	8	8	1	3	4	45
	% R	4.44%	26.67%	15.56%	17.78%	17.78%	2.22%	6.67%	8.89%	100.0%
	% C	4.35%	28.57%	17.07%	20.00%	22.22%	2.94%	6.67%	12.50%	14.24%
Total		46	42	41	40	36	34	45	32	316

Note: %R=Row-wise Percentage; %C=Column-wise Percentage

Weaving/ Tangaliya: The table reveals that amongst 46 Weaving/Tangaliya artisans, 87% have adopted changes in material and method of production and 98% artisans told that they have accepted changes in product designs and are interested in innovations. The artisans told that traditionally Tangaliya weaving was done on hand spun sheep wool which was very rough. People used to purchase such raw-wool and to process manually to convert it in to yarn. But now a day processed yarns are available in the market. Hence, very few do all the pre-processes themselves. Besides wool, Tangaliya weave is now done with machine-made cotton, silk and acrylic yarns too. People have started using textiles wastes to make mats and rugs. Two artisans told that they have made experiments with various other textile materials and methods after getting training from NIFT, SATH and other institutions. With the efforts of such institutes, a new product range in cotton, acrylic and silk material has been developed especially for the contemporary market such as Kurties, Dupattas, stoles, shawls, decorative patches, etc. Traditionally, Daana weaving was used only to weave products like Ramraj, Charmalia, Dhunslu and Lobdi for the Bharwad community only.

Some weavers have now started weaving a new range of products such as mats, rugs, carpets, shawls, dress material, khadi-denim, etc. as per the requirement of time and demand of market. As the weaving artisans work on hand-loom, no electricity or other source of energy is required in the production process. Only 24% artisans answered that they have made changes in machinery, tools and equipment since the time of starting handicraft work. Some have replaced pit loom (Khada Shal) with stand loom (Ghoda Shal); while some have done some changes in the sitting arrangement while working on loom. Very minor changes have been introduced in

other tools and equipments. All the artisans are well versed with the existing structure of machinery and equipments.

However during the discussion, some of the artisans of Weaving/Tangaliya and Patola categories pointed out that they were ready to adopt new technology, machinery and equipments but such practices require use of electricity. In fact they are not allowed to use electricity in hand-loom production, as it is considered as power-loom. Hence, they revealed their helplessness in adopting some changes even if they are the demand of today's age of modernization and technology. Thus, even though some artisans are capable and eager to adopt latest machinery and advanced technology, they seem afraid of overruling the "Handicraft/Hand-loom Criteria".

Patola: 86% Patola artisans have witnessed changes in raw-material and production method. Majority of them revealed that as per the requirement of time, they introduced certain changes but on minor level only, as most of them have this art in their blood. Bangalore silk is the main raw material procured in the form of skeins which are processed before using on loom. Skeins are firstly bleached and then dyed using resist dying process according to the motif, designs and layout. Such procedures are still conventional and done manually using own sight and skills. Silk is available in various quality, colours and standards which is available from the distributors at Surendranagar city. Some artisans have widened the production base and started out-sourcing the processes like bleaching, dying, etc. They have prepared new samples for participating in fairs and exhibitions.

Generally Patola designs are repetitive and often geometrical including purely geometrical designs, floral & vegetable patterns and the designs depicting animals, birds and human figures. Majority of artisans under the study area are making Single Ikkat Patola, while a few have recently started making Double Ikkat Patola too. There is a possibility of divergent motifs and designs but the tradition Patola has still been the most valued according to the artisans.

76% artisans have introduced a change in the sources of energy; while only 38% artisans have accepted changes in machinery, tools and equipment. During the field work, all the Patola artisans have been found using stand loom (Ghoda-Shal), while some told that their forefathers were using pit looms (Khada-Shal). Some artisans have made minor modifications in such looms. Electricity is not required to run such kinds of looms whether using fly-shuttle or throw-shuttle for insertion of wefts. The other processes prior to weaving such as preparations of warp & weft, marking on weft silk yarns, tying on wefts, dying of warps & wefts, preparing of warp beams, filling of bobbins, etc. do not require electricity but fuel is required in dying process, as it is hot dying process. Traditionally people used wood, animal waste, etc. as fuel; while many have kerosene stoves or gas stoves today. No major changes are found in other tools and equipments.

Stone Carving: Nearly half of the Stone carving artisans have not introduced any changes in their material and production process, while the remaining half adopts changes as per the requirement of clients and market. All such artisans responded positively about adopting changes in product designs and innovations; while 71% artisans have adopted change in energy source and 98% have adopted changes in machinery, tools and equipment at a certain level.

Traditionally stone carvers used to work on Dhrangadhra Stone only but gradually, they have shifted their focus on red stone and marble of Rajasthan, Kota stone, etc. Most of them were engaged previously in renovation and beautification of temples. Hence, they worked on site. But presently carving on entry gates of various city and towns, pillars, house construction, sculptures at malls and public places, benches of gardens, statues, idols and other monuments are the best examples of stone work. With advent of heavy transportation facilities and machinery, majority of the carving work is done at their workshop near own village and then the articles are assembled at the targeted place of clients. Two artisans have started making designs with the help of computer softwares such as Autocad and Corel-draw.

Previously the whole stone carving process was done with simple tools like Tankna, Hathodi (hemmer), Aniyu and Chhini with manual labour only; but now majority during the visit were found adopting change in energy source, as they have started using electricity operated machines such as cutter, grinder, drills, etc. But still the traditional tools are in practice, as the stone available from Dhrangadhra is quite rough and it results into frequent breakage of cutter blades.

Mud-work/ Wood-work: 73% Mud-Wood work artisans have introduced changes in material and method of production. All these artisans have adopted change in product designs; 70% have adopted change in energy source, while 60% told that there were certain changes in machines, tools and equipment.

Majority of traditional potters (The Kumbhars) found within the study area were of old age. They told that traditionally, earthen-wares had been utilized for each and every routine activities of cooking and storage of water, grain, oil, jaggery and pickles. Potters were respected and known as 'Prajapatis', who used to make 36 varieties of products such as Matla, Tavdi, Patiya, Gotrij, Rampatra, Kuldi, Dhochki, Gola, Gagardi, Zari, Ramaiya and many more. All such items had their own unique peculiarities, designs and utility. But now plastic wares, metal products and ceramic items have captured the market being more durable and cheap substitutes. Most of the traditional potters sighed that only a few items are now demanded in the market. Hence, their product mix decision has been narrowed down with limited product items in product lines. But certain products like Lamps, Matka (for water storage), Tavdi, Garba, etc. are still in demand. Besides, products used in religious & social rituals are still demanded. Some of the artisans of Thangadh have started manufacturing decorative painted white Matkas which are used for storage of water for a special type of clay available at local level.

Traditionally pottery artisans followed conventional method of production which is still continued by many of them. First of all the clay is dug from the ground (generally found nearby own village) and mixed with various types of clay in certain cases. Then it is soaked and moistened for at least one day with a systematic process. After removing impurities, quality clay dough is found which is mixed with tempering material to increase pliability, smoothness, durability and strength of products. Traditionally the mixing process was done manually with a tool known as 'Mogari'; but now Pug-mill machine is available which reduces the laborious hard work in the process. Some artisans have started using this machine, while some are planning for that.

Then shaping work is done with the help of Potter-Wheel. Artisans informed that simple conventional wheels were used previously but now they are available with

modified designs with bearing so it rotates fast, easily and smoothly. Some have started using electric wheels too. It results in to fast production. After shaping on wheel, certain products are manually enlarged with the tools like 'Tapla' and 'Pinda'. Such processes are still done manually which require great skill and practice otherwise all the previous painstaking efforts may go in waste.

The method of baking the pottery is of two types, i.e. firing in a kiln and open firing in Nimbhada (baking place). Most of the traditional potters have been found using open firing techniques using wood, husks, agriculture wastes and animal wastes as source of energy. Preparation of firing ground or pit and piling process plays a very important role in firing process, as the durability and finishing of products rely upon this procedure. Majority of the artisans told that such processes have been followed from their generations without any major changes.

Most of the carpenters/ wood workers at rural level in the research area have been found engaged in basic furniture work and repairing of agricultural tools and equipment only. Wood is used as structural material in the ceiling/roof structure of building too. Timber-bonding is applied to bricks, mud and stone-work even today in rural houses. Lintels of doors and windows, as well as supporting pillars to roofs are made of wood. Besides, wooden cupboards (Patara), wooden beds (Khatla), cradles legs, windows & doors of buildings are made by carpenters at rural level. Some artisans of Chotila have started making wooden hangings, Toran, etc. Traditionally simple tools such as hammer (Hathodi), Chhini, Randho, etc. were used; while majority have started using electrical cutters, drills, etc.

Tie and Dye: The whole production process of Tie & Dye work includes mainly three activities, i.e., Tracing the designs, Bandhej Tying and Dying. Traditionally, the designs were traced using engraved wooden blocks. But now plastic sheets are used for such work, which make work easy and fast. Master craftsmen trace various designs; and tiers apply their skill in tying by pinching two or four layers (according to the thickness of fabric) of fabric with cotton thread. Many artisans have started using narrow plastic pipes for making such tying process easy, accurate and safe for their fingers. Generally ink refill of used ball point pen is utilized for this purpose. Actually in certain regions of Kachchh and Rajasthan, 'Nakhuna' (A pointed metal cone to be worn on the index finger) is used to facilitate lifting the cloth for pinching while tying. But, such tool is not found with the respondents of the research area.

While majority of 'Entrepreneurs' of Tie & Dye craft told that they have made changes in selection of fabric, colours and other supplementary materials too. Bandhej is now done on silk, satin cotton, woolen, acrylic, etc. fabric besides cotton. Saree had been the main product initially, but now tie and dye is done on various items like dress material, bed-sheets, shawls, Dupattas, etc. A variety of colour combination is in practice with novel motif designs using multiple dying process according to colour patterns. Some of the 'Entrepreneurs' told that they had to go to the bank of river for washing and drying the wet fabric before 20-25 years. Now all such facilities are found at their work places. Traditionally wood was used as fuel for burning fire (Chula) during the process of dying. But majority use kerosene or gas stove today. With introduction of gas stove, washing machine, etc. there is a considerable change in production process as stated by the respondents.

Embroidery/ Crochet work and Bead-work: More than 90% of artisans in both the handicraft categories (Embroidery/Crochet-work and Bead-work) have introduced changes in product designs according to the orders and demands of market. 62% artisans of Embroidery/Crochet-work and 82% artisans of Bead-work got agreed while asking about the changes in material and production method. Majority of Embroidery/Crochet-work artisans explained that cotton, silk, wool and heer threads are used as prime material for hand embroidery which are available in variety of colours and qualities; but traditionally there had been a limited range of colours. Wool (used for crochet work) is also available with different types of texture, colour and quality which makes the articles attractive and eye catching.

Mirror work, Herring bone stitch, Long & short stitch, Chain stitch, Stem stitch, Satin stitch, Button hole stitch, Running stitch, etc. are beautifully applied on various types of articles ranging from garments to decorative artifacts such as quilts, Ghaghras, Odhanies, Cholis, bed sheets, pillow covers, bags, animal decorations and other home decoration items. In addition to that artisans have started using stones, Tikis, Sitara, beads, Aari-zari material, lace, etc. too. Artisans apply their inherent sight and skill and introduce changes from time to time as per the demand of market and orders of clients.

It was known from the Bead-work artisans that glass beads have been replaced with plastic, acrylic, wooden and metal beads which are now available in varied colours and types. Women make various designs and motives on two dimensional (Wall-pieces & hangings, Toran, Sakh-Toran, etc.) and even three dimensional products (work around solid objects like pots, coconuts, bottles, Indhonis, ropes of swings & cradles, etc).

There is no use of electricity or any other source of energy, as it is a wonderful outcome of the coordination of 'Needle and Thread'. Similarly no sophisticated machinery, tools and equipment are used in such crafts. However, some have applied minor changes in supporting tools such as embroidery frames, needles, etc.

Other Handicrafts: This category involves Horse decoration, Imitation Jewellery and other articles. 88% of such artisans have welcomed changes in material and method of production. 97% have experienced changes in the designs of product; while change in source of energy have been adopted by 19% artisans and 25% have adopted changes in machines, tools and equipment.

Artisans make a variety of products with particular characteristics and specialty for decorating horses such as Movad, Lagam, Chokdu, Dali, Morda, Jhool, etc. Generally fabric, wool, threads, ropes, leather, namda, beads, mirrors, sea-shells (Kodi) etc. are used as main raw material for making such products which have been used for many years with minor changes; while tools like needles, poker, scissors, etc. are used. But now sewing machines and rope making machines are also in practice. Artisans revealed that traditionally a few articles for cows and bullocks were made only. But now various products are demanded for the decoration of horses and camels too. According to demand, they introduce changes in designs and patterns.

Artisans of imitation jewellery are involved in making ornaments like necklace, ear-rings, bracelets, bangles etc. The raw material is provided by traders or master craftsmen and they work as per the orders; but they have observed changes in variety of raw-material. Such artisans use soldering iron machine and other tools like cutter, plucker, etc. So, gas and electricity are used as source of energy.

Testing of Hypothesis: To study the effect of adoption of such changes, income of artisans has been compared by applying Mann-Whitney U test, as the data is not normally distributed. Hence, non-parametric tests can only be applied on such data-set. The Mann-Whitney U test is used to compare differences between two independent groups when the dependent variable is either ordinal or continuous, but not normally distributed. Hence, it is suitable here as an alternative to t-test of independent variable.

There is no significant association between Income of Hadicraft Artisans and their adpotion of new technologies and innovations.

For testing the above null hypothesis, the variables such as Change in Material and Method of Production; Change in Product Designs & Innovations; Change in Energy Sources; Change in Machinery Tools and Equipment; Change in Marketing Practices; and Usage of Internet Facility have been selected. The income of artisans of two different groups (first, artisans who have adopted changes and secondly artisans who have not) has been compared by applying Mann-Whitney U test (being a non-parametric test), as the data received were not normally distributed. The Mann-Whitney U test is used to compare differences between two independent groups when the dependent variable is either ordinal or continuous, but not normally distributed. Hence, it is suitable here as an alternative to t-test of independent variable. The result is summarized as under:

Table 2 Hypothesis Test Summary (Mann-Whitney U Test) (Handicraft Income)

Handicraft Decisions	Z	U	Mean Rank		Sig.	Decision
			Yes	No		
Change in Material and Method of Production	-5.011	6874.000	175.61 [10084.93]*	119.87 [4530.41] *	0.000	H_0 is Rejected
Change in Product Designs & Innovations	-3.204	317.000	160.97 [8550.65] *	49.29 [842.86] *	0.001	H_0 is Rejected
Change in Energy Sources	-9.369	3958.500	226.16 [15838.68] *	124.35 [4615.00] *	0.000	H_0 is Rejected
Change in Machinery, Tools and Equipment	-9.023	4426.500	220.98 [15187.50] *	124.20 [4642.40] *	0.000	H_0 is Rejected
Change in Marketing Practices	-5.625	308.000	64.74 [19323.17] *	25.41 [6000.00] *	0.000	H_0 is Rejected
Use of Internet Facility	-6.770	2261.500	243.74 [20940.00] *	144.35 [6294.28] *	0.000	H_0 is Rejected

Note: [ ] * = Mean Value

The Table revels that there are two groups of artisans. The respondents who have accepted the change are grouped as 'Yes' and the other are 'No'. Hence, it has been found that in all above handicraft decisions, the mean rank of income of group 'Yes' is greater than that of group 'No'. Therefore, it can be concluded that the artisans who have adopted new technologies and innovations earn more as compared to those who have not adopted such changes in handicraft practices.

Hence, the above Null Hypothesis is rejected. Hence, it can be concluded that the difference between incomes of two groups is statistically significant.

Conclusion

It is the fact that handicraft artisans now a days have to struggle for their existence due to rapid economic growth, industrialization and technological changes. Simultaneously, this is the time for reaping advantage of global horizons and limitless markets. But the very first condition is that the artisans must widen their scope and become adaptive to changes. Modern market offers a wide platform full of

tremendous opportunities, if they start thinking in an transitional way but without compromising with the "Handicraft" criterion. The study shows that transitional trend of handicraft practices of artisans involved in various handicrafts. It is also found out that the artisans who have adopted new technologies and innovations earn more as compared to those who have not adopted such changes in handicraft practices.

Bibliography

Chattopadhyay, K. (1985). The Glory of Indian Handicrafts. Clarion Books, New Delhi.

Development Commissioner (Handicrafts). In Pursuit of Fine Handicrafts: Compendium of Handicrafts Schemes for 12th Five Year Plan, Ministry of Textiles, Government of India.

Dhamija, J. (1985). Crafts of Gujarat: Living Traditions of India. Mapin International, New York.

Jadav, S. Indian Handicrafts: Growing or Depleting?. Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668, PP 07-13.

Jain, R., & Tiwari, A. (2012, October). An Insight into the Traditional Bandhej Craft of Sikar City of Rajasthan. Indian Journal of Traditional Knowledge, 11(4), 733–737.

Jaitly, J. (1990). The Craft Traditions of India. Luster Press, New Delhi.

Jaitly, J. (2001). Visvakarma's Children. Concept Publishing Company, New Delhi

Jani, V. A. & Pandya, B.A. (1994). Rural artisans and Modernization. Illustrated Book Publishers, Jaipur, ISBN:81-85683-10-7.

Ministry of Textiles- Annual Reports (2001-02 to 2016-17). Government of India.

Mittal, V. & Chhaya, V. Tangaliya Weaving or Daana Weaving. All India Artisans and Craftworkers Welfare Association (AIACA). Retrieved from http://www.craftmark.org/sites/default/files/Tangaliya%20Weaving.pdf.

National Institute of Fashion Technology (Ministry of TEXTILES, GOI). (2005). A Baseline Survey Report on Artisans and Crafts of Surendranagar, Gujarat. Under Special SGSY Project (Ministry of Rural Development, GOI).

Shah, A. (2017). A Study on the Sustainability of Rural Artisans in Handicraft Sector. Unpublished Ph.D. thesis submitted to Gujarat Vidyapith.

Shah, A. & Patel, R. (2017). Problems and Challenges Faced by Handicraft Artisans. Voice of Research- An International Refereed Journal for Change and Development. 6 (1), 57-61, ISSN:2277-7733, Impact Factor: 3.522.

Vijayagopalan, S. (1993). Economic Status of Handicrafts Artisan, NCAER, New Delhi.

Village and Town Wise Primary Census Abstract (PCA). District Census Handbook-Surendranagar, Series-25, Census of India 2011, Directorate of Census Operations, Gujarat.

Websites and Internet Links

www.censusindia.gov.in
www.cottage.gujarat.gov.in
www.cottageemporium.in
www.craftofgujarat.gujarat.gov.in
www.craftrevival.org
www.craftroots.org
www.handicrafts.nic.in
www.indiastat.com
www.nift.ac.in
www.shodhganga.inflibnet.ac.in
www.voiceofresearch.org
www.surendranagardp.gujarat.gov.in/surendranagar/english/sitemap.htm
www.gujarathandicrafts.in