Chapter 1

INTRODUCTION

'*Craft is remembering that art is seen, felt and heard as well as understood, knowing that not all ideas start with words, thinking with hands as well as head.'*

- Mark Jones, Director, Victoria and Albert Museum

India is rich in its culture and history, with every region having its own distinctiveness in materials, language, art, craft, cuisine, dance, costumes and textiles, stories etc. Considering the variation in materials and objects, it can be observed in paper, metal, wood, glass, textiles, clay, walls, floors and many more. The identity, beauty, and skill of that particular craft, as well as the craftsmen themselves, are derived from the surrounding environment and the resources that are available in that particular place.

India has a long history of producing traditional textiles that are woven, embroidered, dyed, printed, and painted. India's history of producing excellent textiles is as old as its civilization. Cotton fabric that has been coloured has been found to date back to the Indus Valley civilization. Indian dyers have a good understanding of the technique of using mordants for dyeing some 5,000 years ago. India's ability to understand the chemistry of dyeing through this type of dyeing has made the country famous worldwide for its printed and dyed textiles. India has had a monopoly on cotton, especially on printed items, from ancient times.

As stated in the Gallery notes, Calico Museum of Textiles, India since antiquity has been known as an exporter of textiles to the East and West. Literary and archaeological evidence of trade between India and the outside world dates back to very early times. By the 1st century A.D., land and sea routes linking India, China, Mesopotamia, and Rome were well-established, and textiles were an important item for export.

Robinson S (1969) in his book on A History of Printed Textiles mentions that India since ancient times enjoyed a monopoly of cotton and in particularly of printed goods. Considering the great antiquity of India's skill of dyeing, its expertise in printing cloth with dyes and pigments probably matured early.

Prapassorn P. a privileged observer and researcher from Thailand in her book states that block printed textile both resist and mordant dyeing was a long-established textile art in western India by 15th century. Historical records shows that apart from woven textiles, printed -painted textiles were also exported from India across the Arabian Sea to various ports. Similar trade extended from East Africa to Southeast Asia and Japan until the 17th century. According to the study of Barnes, the patterned fabric excavated from Fustat, Egypt in the the early 20th century was produced in India and traded to Egypt. The oldest known patterned fabrics from India are from Gujarat. They were resist dyed and printed cotton. The stylistic delineation of the patterns was based on the decorative style of West Indian painting and design. The combination of printing and painting which is found in many of the textile fragment is also typical techniques used at present at Ahmedabad, Deesa in North Gujarat and in the printing centers of Kutch. (Desai J.)

The oldest and successful method of transferring designs to textiles was that of woodblock printing. One of the earliest methods of printing, woodblock prints were used to create book pages and later images. China is where the first indications of woodblock printing were discovered. The method was later adopted by the Japanese, who over generations elevated it to the peak of artistry and workmanship. The age-old traditions of decorating cloth by stamping it with dye or resists and carved wooden blocks has been known in India for over 3000 years. Everything from newspapers, flyers, and matchboxes to traditional apparel, bedspreads, and textiles have been printed using wood printing stamps and hand-carved wooden print blocks.

The main tool of hand block printing is a wooden block. Hand block is finely carved stamp made by trained craftsmen, which requires concentration, precision and patience. The craftsmen must have good knowledge of geometry to make a perfect block for seamless printing in terms of design, repeat and level of block. In South Asian nations including India, Burma, Bangladesh, Nepal, and Pakistan, the "woodblock" is referred to as *Chhapa*. Many communities around the world are connected to the woodblock (Chhapa) printing industry, while some of these communities view this industry as their traditional source of income.

Pethapur situated 40 kms away from Ahmedabad is the only surviving centre of wood block carving in Gujarat. *Gajjar* community of block makers in Pethapur village was closely involved with the *Saudagiri* trade with the Kingdom of Siam (modern day

Thailand). This trade continued vigorously until the advent of World War II which signaled a death blow to the *Saudagiri* trade route. The *Saudagiri* trade was controlled and monitored by three main trading companies namely *Maskati, Vashi, Malbari and Baghwal.* At its peak the village of Pethapur had more than three thousand craftsmen working in its workshops. (Chattopadhyay K.) It was this trade which had made Pethapur, a wood block making hub. The development of Screen-Printing Industry almost during the same period 1945 caused a gradual decline of this craft.

In the researcher's Masters dissertation (Trivedi V, 2011) on the life history of master wood block maker Shri Maneklal Trikamlal Gajjar, it was found that there were only a few craftsmen engaged in this craft, and it was concluded that intense efforts needed to be made for the better survival of the craft. Thus, the researcher undertook the same locale and craft to further study the evolution of this craft, including factors that affected the growth and decline of the craft with reference to the *Saudagiri* trade in terms of design, size of block, raw material (wood and tools used then and now), cost of raw material and block, method of block making, and quality. There has also been a community shift in craft practices. The process of making a wood block is tedious, time-consuming, and skill-oriented, starting from buying the wood to carving a finished wood block. It takes minimum three years to acquire the accurate skill of block making. This was one of the reason that younger generation is least interested in learning. The number of craftsmen engaged to this craft have decreased and at present it is less than twenty. Traditionally the craft was practiced by the '*Gajjar'* i.e. carpenter community (*Suthars'*) and now it is taken over by the '*Prajapati'* i.e. potter community. According to the carpenter community narrative, it is believed to be the offspring of *Vishvakarma,* who created the flying chariots and all of the gods' weapons. Only a small number of Gajjars remain now after the Prajapatis, or potters, community began practicing their trade three decades ago. At present only one craftsman is in this craft is from the carpenter community.

As the number of craftsmen has decreased to less than twenty, efforts were needed for the better survival of the craft and the craftsmen. There was also a need to upgrade and expand the craft and the craftsmen for its survival in this globalized economy. Enhancing the capacity of the craftsmen could lead to better development and survival. This would increase their work efficiency and expand their knowledge. Capacity building in various areas needed to be done, such as craft skills, technological

upgradation, and financial assistance. It was identified by the researcher that ergonomic analysis, technological upgradation, and awareness of various beneficiary schemes are the different areas to build capacity amongst craftsmen.

The term 'ergonomics' is derived from the Greek words 'ergon' (labour) and 'nomos' (natural rules). Murrell (1965) defines it as "the scientific study of man's relationship with his working environment." It is also known as 'human factors engineering,' which is the scientific field concerned with man's conduct in relation to his work (Grandjean, 1980). It addresses all aspects of human activity, including physical, cognitive, social, organizational, and environmental concerns.

The craft of wood block making is performed by sitting continuously at the same place and in the same posture for an extended period of time. This resulted in a number of work-related musculoskeletal disorders (MSDs). These are injuries or pains in the human musculoskeletal system, which includes the joints, ligaments, nerves, tendons, muscles, and structures that support the upper and lower limbs, as well as the neck and back. MSDs can be caused by abrupt exertion, repetitive actions, repeated force exposure (hand, arm, or entire body), or uncomfortable postures (Singh A.K., 2019).

Ergonomic studies are taken up in large scale industries more than the small scales and handicraft sector. Small scale industries and handicraft sectors lack the awareness about ergonomics, good work environment, right postures etc. (Sain, M. K., & Meena, M. L. (2016)). Studying the ergonomic risks related to the craft would surely help in increasing work efficiency of the craftsmen.

Making wood blocks is a laborious and time-consuming craft. It requires skilled craftsmen. As discussed above, the number of craftsmen in this particular craft has decreased, and a need for manpower arises to meet the target and increase production. The decreased number of craftsmen in particular crafts is an alarming sign that they are endangered. It is essential that researchers, government and non-government organizations, and design professionals work together to safeguard it. It takes a minimum of three years of training to learn the woodblock making craft.

The newcomers would only be interested in taking up this craft as a profession if it allowed them to improve their quality of life. The researcher also felt that, in addition to updating craftsmen with technology by enhancing skills and saving time and

energy, a healthy work environment is the most important thing that should be a taken care in order to maintain their good health, which is the foundation for any work they choose to engage in.

Change is the only constant factor responsible for the growth. It is essential to preserve and promote the craft by adapting to changes. Craftsmen have started taking assistance from some machine tools in preparatory processes other than carving, which has resulted in reducing labour and saving time by maintaining quality and increasing productivity. Technological advancement is one of the ways to help the craft survive and motivate the craftsmen to perform better. The invention of computer-controlled (CNC) wood carving machines known as routers made the wood carving process fast, more precise, and crafting skills independent. (Lupupa C. and Moses K., 2019). Hence, an exploratory attempt using a CNC machine was made in the present study, and the opportunities and constraints of technological advancement were examined.

The handicraft sector has suffered as a result of its unorganized nature, with additional challenges such as a lack of education, a lack of exposure to new technologies, a lack of finance, bad infrastructure, and a lack of market information, among others. To overcome these obstacles, the Ministry of Textiles started so many schemes to support handicrafts, but these schemes are not accessible to the actual needy craftsmen. The Ministry of Textiles announced many awards, like Shilp Guru, a national award for outstanding contributors who live up to our old tradition, and different national merit certificate awards as well, to promote and motivate the craftsmen. But most craftsmen have no information about the different schemes of handicrafts. This is the biggest hurdle to the growth and development of the sector. Several studies have reported that Government needs to take some fruitful steps to overcome these problems and they can use personal and non-personal methods to increase the awareness of schemes in urban and rural areas. The present study also included the component of imparting knowledge of various government schemes to the craftsmen by organizing awareness workshops as it also would help in boosting the capacity of the craftsmen indirectly.

Promoting the craft is a method that the researcher firmly believes should be applied in order to sustain and raise awareness of the unique art of wood block making among the general public and children. Wood block making crafts have received the Geographical Indication (GI) tag and are registered as Pethapur Printing Blocks. As

wood block is not an end product, there is less awareness amongst people about this craft as compared to hand block printing. Hence, promotion of the craft using various methods by increasing its visibility and identity through physical reach as well as digital means should be done. The present study researcher has made an effort to promote craft in the best possible way to make people aware of and sensitized about the craft of wood block making.

1.1 Rationale of the study

Wood block is the main tool and pre requisite for hand block printing. It is a finely carved stamp using teak wood. Wood block making craft is as old as hand block printing. A perfectly carved wood block is a must for seamless printing. Pethapur is one of the surviving centers of wood block making in Gujarat. Pethapur is famous for its finely carved wooden blocks all over the globe since the time of *Saudagiri* trade. During this period (1839 - 1940) the craft flourished and more than 1500 craftsmen were engaged in this craft. At present the number of craftsmen engaged in this craft has decreased to less than twenty. Thus, the study was undertaken to delineate growth factors and the reasons behind the gradual decline by studying the evolution of the craft. The in-depth study of evolution of the craft can portray a whole picture or story about the craft in the last seven decades such as factors that influenced the growth and decline, past events, education, technology and interrelationships and present status to develop a systematic document for future references.

The rationale behind this research lies in the need to preserve and promote the traditional craft of wood block making in Pethapur, which is not only a part of the local identity but also contributes to the economic sustenance of the craftsmen involved. With the advent of modernization and changing consumer preferences, there is a risk of the craft losing its relevance and economic viability. By understanding the evolution of the craft and identifying potential avenues for promotion, this research aims to provide insights that can contribute to the sustainability of the wood block making industry in Pethapur. The researcher understands that the crafts sector is a major contributor to the economy, it aids in job creation and culture preservation too, thus, it becomes imperative to safeguard the interests of the creator of crafts and promote the craft for their better sustenance at all times.

1.2 Statement of the Problem

The wood block making craft in Pethapur, Gujarat, has endured a transformative journey shaped by historical transitions, socio-economic changes, and the persistent efforts of its craftsmen. Trivedi's (2011) seminal Master's dissertation on the life history of master wood block maker Shri Maneklal Trikamlal Gajjar unveiled critical insights into the challenges faced by this traditional craft. The findings revealed a dwindling number of craftsmen, with less than twenty practitioners remaining, signaling a looming threat to the survival of this art form.

In light of the alarming decline and recognizing the urgent need for intervention, the present research seeks to extend Trivedi's (researcher herself) exploration into the evolution of the wood block making craft in Pethapur. Specifically, this study aims to comprehensively investigate the factors influencing the growth and decline of the craft, with a particular focus on the *Saudagiri* trade. The examination will encompass critical elements such as design evolution, block size variations, shifts in raw material utilization (both wood and tools), alterations in the cost structure of raw materials and finished blocks, changes in the block-making methodology, and shifts in quality standards.

The community dynamics surrounding the craft have also undergone a notable transformation. Traditionally practiced by the 'Gajjar' community, primarily comprising carpenters, the wood block making craft has experienced a significant shift to the 'Prajapati' community, traditionally associated with pottery. This shift not only alters the demographic landscape of the craft but also introduces new perspectives and practices, impacting its trajectory in unforeseen ways.

A crucial challenge identified by Trivedi was the reluctance of the younger generation to engage in the meticulous and time-consuming process of wood block making. The arduous journey from selecting the right wood to carving a finished block demands a minimum of three years to acquire the intricate skills necessary for mastery. The dwindling number of practitioners raises concerns about the preservation of this cultural heritage.

Recognizing the urgency for action, the researcher took a multi-faceted approach to ensure the survival and revitalization of the wood block making craft. Capacity building emerges as a central theme, encompassing the enhancement of craft skills, technological upgradation, and financial assistance. In particular, the

researcher underscores the importance of ergonomic analysis, technological adaptation, and fostering awareness about various beneficiary schemes as critical areas requiring intervention to empower and sustain the dwindling community of wood block craftsmen in Pethapur. One of the primary issues is the diminishing number of woodblock makers in the face of it being a laborious craft calling for hours of working in a seating position with a greater strain on the eyes too. Additionally, the lack of infrastructure, lack of technological advancements, and least marketing efforts has left the craftsmen in Pethapur struggling to adapt to contemporary market dynamics. Furthermore, the younger generation seems less inclined to pursue traditional crafts as a livelihood, posing a threat to the transmission of the craft skills from one generation to the next.

This research seeks to address these challenges by exploring the historical roots of wood block making in Pethapur, analyzing the current state of the craft, and proposing strategies for its sustainable promotion. By doing so, it aims to contribute to the preservation of cultural heritage, the economic well-being of the craftsmen, and the overall socio-economic development of Pethapur. This research, therefore, aspires to contribute meaningful insights and actionable recommendations towards the holistic development and survival of this traditional craft in the face of a globalized economy, ensuring the continued vitality of the wood block making craft in Pethapur.

1.3 Specific objectives of the study

1.3.1 To study the origin and the history of the craft with special reference to '*Saudagiri'* prints and its trade

1.3.2 To study the socio-economic status of the craftsmen residing in Pethapur

1.3.3 To study the changes taken place over the years in wood block making craft

1.3.4 To analyze the work pattern of the craftsmen and their workplace using ergonomic approach

1.3.5 To explore the opportunities for capacity building of wood block makers of Pethapur

1.3.6 To promote the craft and craftsmen of wood block making at different platforms:

Promotion of craftsmen:

i) ergonomic analysis of the work pattern and workplace of the craftsmen,

ii) Integration of technology in wood block making craft

iii) Imparting knowledge of various Government Schemes

Promotion of the craft

i) Increase visibility of Pethapur wood blocks

ii) Creating digital identity

1.4 Delimitation of the study

1.4.1 The period to study the evolution of the craft was considered from 1949 onwards i.e. after the period of *Saudagiri* trade