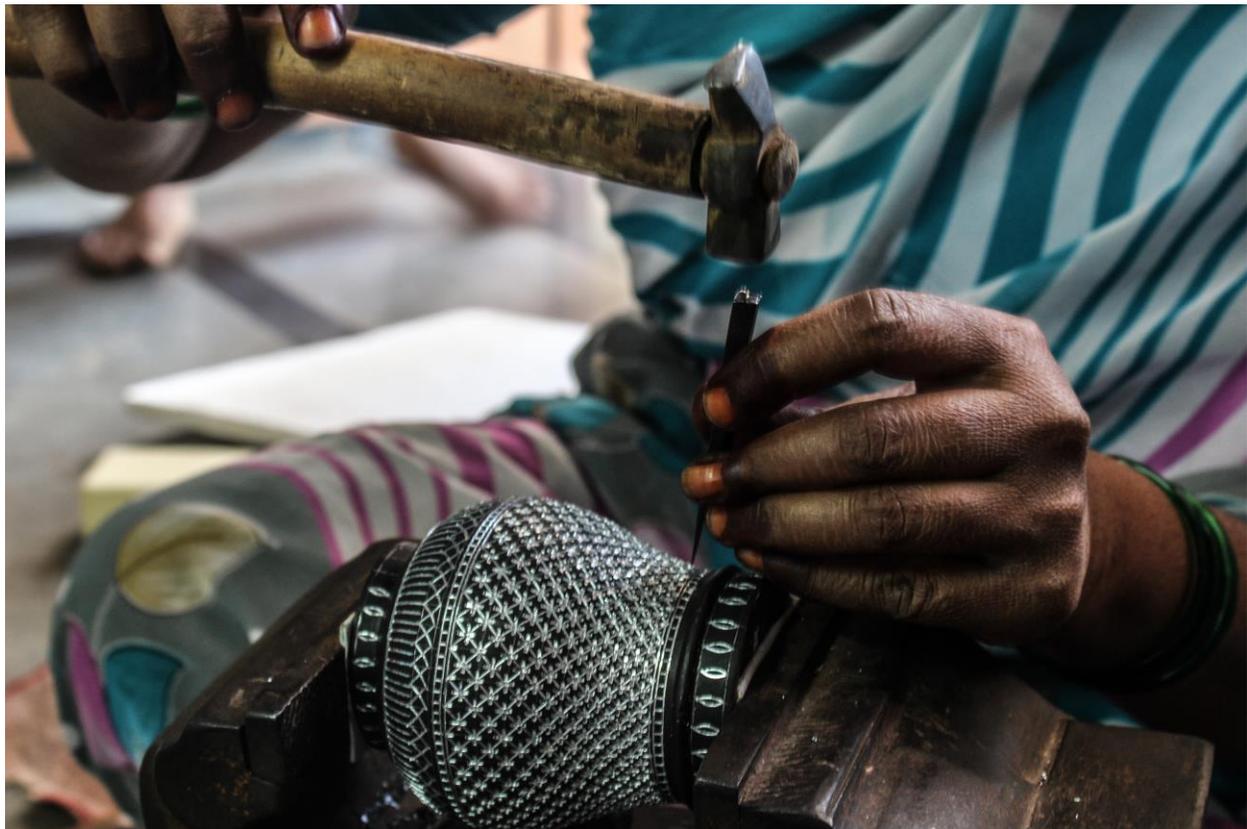




THE BLACK METAL MAGIC OF BIDAR: BIDRIWARE

DISCOVER INDIA PROGRAM 2016-17



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“The fact that I still find so much beauty in a handicraft is because my father taught me to see the craft not just as a product but as a symbol of labor and human creativity.”

~ Shah Rashid Quadri

National awardee, Bidri craft

CERTIFICATE

This is to certify that the work incorporated in this report entitled “*The black metal magic of Bidar: Bidriware*” submitted by the undersigned Research Team was carried out under my mentorship. Such material as has been obtained from other sources has been duly acknowledged.

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ABSTRACT

Bidri craft is an ancient metal craft made from the alloy of zinc and copper, it is identified by its characteristic black patina. The Striking pure silver inlay artwork against a blackened surface is a sight that attracts the eye. That's the magic of Bidriware. The term 'Bidri' is taken from Bidar, the town which is still the chief centre to manufacture this metal ware. Bidri has changed from an inlay of gold or silver on a steel base in the Persian times to an alloy of zinc and copper as the base metal in the Indian form. It is an Indian innovation of 500-year-old Persian Craft.

The technique of Bidri Craft is a legacy handed from generation to generation of skilled craftsmen.

Despite its beauty, the future of the craft is uncertain. The soil which is extracted from the Bidar fort is an essential ingredient in the final stages of the product. Even though Bidri has a coveted geographical indication tag it seems that the day the fort soil is exhausted, is the day Bidri work comes to an end. Gone are the days when the artisans of Bidar had special status in society for their contribution to the rich cultural heritage of this region.

The kings and nobles of Bidar used to honour the artisans during the festivals. Today, the wheel has come a full circle for them. Several skilled craftsmen work instead as mason, street vendors or laborers so they can earn better. The artisans confess that it is a lot of hard work, and while there is appreciation for the intricacies of the craft, this does not translate into monetary gains. The deterioration of people's aesthetic sense and lack of transparency in handicraft trade has made this profession a difficult pursuit.

The data in this report has been collected through preliminary research conducted during our on-field research. The research was conducted in Bidar and Hyderabad. This report aims to present Bidri ware from its origin to the present day with reference to its techniques, processes, sustainability and the initiative taken by the government bodies and non-governmental organisations to sustain this craft.

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CHAPTER 1:

INTRODUCTION

1.1. INTRODUCTION TO BIDRIWARE

Bidriware is a 500-year-old art that has Persian origins but which is purely an Indian innovation. It is an important export handicraft of India due to its striking inlay artwork and is prized as a symbol of wealth. It is a distinct style of work called 'Damascening' in silver. The contrast between the black oxidized background and the lustrous silver inlay gives a beauty to the Bidriware. Inlaying is a process of embedding metal (Gold/Silver/Brass) into the cavity of a surface, the surface being an alloy in case of Bidriware.



Figure 1: An important silver-inlaid Bidri basin Bidar, Deccan, India, 18th century

Bidriware develops its name from Bidar, a district of North Karnataka, where this art of engraving and inlaying was handed down by generations and was exclusive to Bidar for decades. ("WELCOME TO BIDAR DISTRICT").



Figure 2: Karnataka District Map ("Karnataka District Map")

The craft was introduced in Bidar by a Persian artisan called Abdulla-bin-Kaiser who was brought from Iran by Sultan Ahmed Shah Wali Bahmani along with other skilled artisans in the 15th

century. His exceptional skills in the craft impressed the Sultan who then arranged for the training of local craftsmen in Bidriware handicraft in the Mahmud Gawan Madarsa (Waghmare, Nalini Avinash). Thus, this craft which prospered under the royal benefaction of the Bahmani monarchs, the nobility and other rich families, reached a high degree of excellence. Over the span of the centuries, it was further developed in Bidar which became its most reputed center.

This art was also encouraged by the Nizam (Waghmare, Nalini Avinash). Since then, the craft has been handed down to successive generations mostly among the local Muslims and other sects of Bidar such as the Lingayat sects. About a century ago Ramanna Master (Sri Ramana Maslei) was known to be the most knowledgeable craftsman who is remembered even today. During recent years, Rashid Quadri, Laxmi Bai, M.A. Rauf and Rajkumar Nageshwar received National awards whereas Shriyuts Basappa, Sheikh Ahmed Saheb, Gulam Quddus and Manikappa received State awards for their excellent work in Bidriware. Rashid Quadri has also received the Shilp Guru Award ("A Brief History of Bidriware").

In recent years, some Bidri craftsman of Bidar migrated to Hyderabad and Aurangabad after the reorganization of the states ("A Brief History of Bidriware"). The practice of making Bidriware is now limited to Hyderabad in Andhra Pradesh, Bidar in Karnataka and Aurangabad in Maharashtra ("Bidri/ Inlay Metal Work").



Figure 3: Laxmi Bai, National Awardee of Bidri craft



Figure 4: M.A Rauf, National Awardee of Bidri craft

Bidriware is a distinct style of work called ‘Damascening’ in silver. The contrast between the black oxidized background and the lustrous silver inlay gives a beauty to the Bidriware. The initial motifs and designs were Persian in origin and verses from the Holy Quran were also inscribed (Waghmare, Nalini Avinash). Today however, the craftsmen follow both traditional and modern designs ("A Brief History of Bidriware"). The Bidriware designs are usually patterns such as the *Asharfi-ki-booti*, stars, vine creepers and stylized poppy plants with flowers. Traditional designs include the Persian Rose and passages from the Quran in Arabic script ("A Brief History of

Bidriware"). The most repeatedly used designs are conventionalized flowers, creepers and geometrical patterns.



Figure 5: An Indian Bidri bowl featuring the fish design

It is interesting to note that apart from the Muslim artists, the other artists engaged in this craft were the locals, and the Hindus of the Lingayat sect. There are various complex technical processes involved in the making of Bidriware which include casting, designing and engraving, inlaying, blackening and polishing. These processes are either performed entirely by a single artisan or by different artisans who have expertise in the various processes ("Bidri Work - Crafts Council of India").

Bidriware is made of a metal composed of 83.5 percent zinc, 12 percent of copper and 3 percent lead ("A Brief History of Bidriware"). The surface of the objects is made even and a solution of copper sulphate darkens it briefly for the next stage of engraving. The engraving tools cut the

design into metal, which is lighter in color than the darkened surface and allows the pattern to be seen more clearly.

The piece is then passed on to the inlayer after the engraver's work has been completed. The inlay may be of silver or brass as brass often has a gold-like look due to its high zinc content. Gold has hardly been used as an inlay as much as gilt silver ("Bidri Work - Crafts Council of India"). The inlay may be of wire or sheet metal and some of the finest pieces have a design cut out of silver sheet so that it acts silhouetted against the body of the object. This is usually known as *Aftabi*¹ ("Bidri/ Inlay Metal Work").



Figure 6: An example of Aftabi silver inlaid Bidri water pipe (huqqa) base, late 18th/19th century

¹ Aftabi: It is originally a Persian term which means 'the sun'. It is a technique within inlay work using silver sheet where the entire background is black and the design is white.

The last stage after the inlay has been polished is to blacken the surface of the piece so that the inlay stands out against it. This is done by rubbing a paste of ammonium chloride, potassium nitrate, sodium chloride, copper sulphate and Bidar fort soil, which blackens the body of the object while having no effect on the inlay. The paste is washed off and finally oil is rubbed into the piece to deepen the matt black background. These products are well known for their long shelf life (Waghmare, Nalini Avinash).

The various Bidriware articles made are vases, washstand basins and *ewers* (large jug with a wide mouth, formerly used for carrying water for someone to wash in), hookahs, *spittoons* (a metal or earthenware pot typically having a funnel-shaped top), cups, *flagons* (a large container in which drink is served, typically with a handle and spout), dishes, spice and cosmetic boxes, candlesticks, weights, and picture-frames. The industry was originally associated with the silver and gold inlay work on steel of the Arabs and Persians, but the substitution of the steel for alloy was a local development peculiar to India, particularly to the Deccan ("WELCOME TO BIDAR DISTRICT").



Figure 7: A Bidri bowl inlaid with silver, late 18th century

Present day Bidri production caters mostly to customer demands. In order to suit the modern tastes and promote the sale of articles, new designs are being introduced. The Bidri articles are marketed

locally and sent to big cities like Bangalore, Delhi, Calcutta, Madras and Hyderabad through the Karnataka Handicrafts Development Corporation and also through wholesale dealers. Bidri articles are also exported to 93 countries of the world including the United States of America, Italy, Singapore, England, Australia, France, Belgium, Canada, and Denmark, among others ("A Brief History of Bidriware").



Figure 8: Contemporary Bidri plate inlaid with silver, at a Bidri store in Hyderabad

1.2. HISTORICAL OVERVIEW AND GEOGRAPHICAL INFORMATION

1.2.1. THE HISTORY OF BIDAR

The word Bidar is derived from the word 'bidiru' which means bamboo. The city of Bidar in North Karnataka has previously been very well-known for its clusters of bamboo. Later it came to be renowned as 'Bidaroor' and therefore 'Bidare', 'Bidar' ("WELCOME TO BIDAR DISTRICT").

Sultan Ala-Ud-Din Bahman Shah Bahmani had occupied the city of Bidar in the year of 1347 under the establishment of the Bahamani Dynasty ("(Bidarinfo) BIDAR Information"). The entire Deccan and Bidar was under the control of Allauddin Khilji and was later followed by Muhammed-bin-Tugluq. The officers of the Sultan stationed in Deccan had rebelled in the middle of the 14th century ("WELCOME TO BIDAR DISTRICT"). This was followed by the establishment of Bahamani Dynasty at Gulbarga in 1347 A. D ("(Bidarinfo) BIDAR Information").

The first sultan of the Bahamani Dynasty, Sultan Ala-Ud-Din Bahman Shah had attributed to the history of the present fort in Bidar in the year of 1427 ("WELCOME TO BIDAR DISTRICT"). This was the period when he had shifted his capital from Kalburgi to the city of Bidar in Karnataka due its soothing climatic conditions. The land was very fertile and had good fruit bearing conditions.

The capital city of the Bahmani Kingdom was Bidar during the rule of Ahmad Shah I (1422-1486) ("WELCOME TO BIDAR DISTRICT"). In the history of Bidar, Mahmud Gawan who was a notable figure had become the Prime Minister in 1466 ("WELCOME TO BIDAR DISTRICT"). During Aurangzeb's reign, Bidar remained under the Barid Shahi Dynasty. Aurangzeb was appointed as the Prince of Deccan by Shah Jahan ("WELCOME TO BIDAR DISTRICT").

1.2.2. GEOGRAPHY OF BIDAR

Bidar is a hill top city which is situated on the Deccan plateau. It is exactly situated in the north-eastern part of the state of Karnataka. From the state capital of Karnataka, Bangalore, the city of Bidar is located at 700 km ("WELCOME TO BIDAR DISTRICT"). Bidar is in border with Andhra Pradesh and Maharashtra.

Bidar is located at 17° 55' 12.0000" N and 77° 31' 10.9992" E. ("Bidar, Its History and Monuments"). Bidar's elevation is 677 meters' height which is equal to 2,221 feet ("Bidar, Its History and Monuments").

In the Archaeological Map of India, the city of Bidar has a prominent place due to its rich heritage ("WELCOME TO BIDAR DISTRICT"). In Bidar, there are 30 tombs located in and around the city of Bidar as noted in the book "Bidar Heritage" which was published by the State Department of Archaeology, Museums and Heritage. The city of Bidar is nicknamed as "The City of Whispering Monuments" ("WELCOME TO BIDAR DISTRICT").

In Bidar, the essence of rich history and products of handicrafts is well known. In north Karnataka, Bidar is the coldest and the wettest place and was ranked 22nd among the cleanest cities in India in the year 2009 ("WELCOME TO BIDAR DISTRICT").

Bidri craft was born in Bidar. The craft then expanded to Hyderabad after the craft developed in Bidar in the 14th century. The craft gradually migrated to Patna, Lucknow and Murshidabad. The craft was patronised during the period of Bahamani rulers in 1422. The people of Iran had come and gifted the Sultans of Bijapur some items and named it as Bidri.

1.2.3. THE HISTORY OF HYDERABAD

Telangana, the state with the richest and colourful histories, came into existence on 2nd June, 2014 with Hyderabad as the capital, which was founded by Mohammed Quli Qutub Shah, the fifth Sultan of Qutub Shahi dynasty in the year 1512 ("History - Hyderabad"). In 1512, Mohammed Quli Qutub Shah took control over the Bahamani kingdom. He played a significant role in the process of establishment of the Golconda, the fortress city ("History - Hyderabad").

Hyderabad was established under the rule of several kingdoms which included Buddhists and the Hindu royalty. The Qutub Shahi dynasty led to the establishment of the history of the city of Hyderabad ("History - Hyderabad").

The fifth Sultan of the dynasty built the city of Hyderabad on the Musi River, which is to the east of Golconda by five miles. In 1686, the Mughal Empire Hyderabad's fame finally caught the attention of Aurangzeb due to the fame of the city, the strategic location as well as the Golconda's legendary wealth ("Hyderabad History: Hyderabad, Andhra Pradesh, India").

Aurangzeb was the Mughal prince who had laid Siege in Golconda. For overseeing the parts of the Mughal Empire on behalf of the Mughal Emperor, Mir Qamar-Ud-Din Siddiqi was honoured with the title of Nizam-Ul-Muk. The Mughals were the key source of domination of the southern areas of India which was surpassed by the Nizams. The area of their domination included 125 million acres which is equivalent to 510,000 square kilometres ("Hyderabad History: Hyderabad, Andhra Pradesh, India").

When most of the parts of India were under the British and the French, the Nizams had played a game of balance during that particular period (Hyderabad History: Hyderabad, Andhra Pradesh, India"). The Nizams made their intention of becoming independent known in 1947, when India had gained its independence. This could be done by them either by attaining a dominion status by the Empire of British, or as a sovereign ruler ("Hyderabad History: Hyderabad, Andhra Pradesh, India").

A standstill agreement was signed by the Nizam with the Indian Union which had resulted in surrounding of him on all sides. Soon followed by this, there was breakdown of law as well as order which had led to several fights between the supporters of both Nizam and the Congress. Due

to the uncontrollable violence, there was an initiation of a police action called Operation Polo by the Government of India ("History - Hyderabad").

1.2.4. GEOGRAPHY OF HYDERABAD

The capital of Telangana that is Hyderabad is located on the banks of the Musi River in the Deccan Plateau. Hyderabad, the 'City of Nawabs' houses a population of 6.8 million. It is also known as the 'City of Pearls' which comprises of 7.75 million residents, which is accounted as the fourth most populated city in India ("Geography and Location of Hyderabad").

It is also known as one of the most tourist attracted cities in India which is due to the presence of Charminar as well as the Mecca Masjid ("Geography and Location of Hyderabad"). The new city of Hyderabad comprises of various mall and the film city.

Topography of the Hyderabad city is spread over an area of 260 km and is located in Deccan Plateau which rises up to 536 meters above the sea level at latitude of 17.366° N and a longitude of 78.476° E ("Geography and Location of Hyderabad"). The city is comprised of red sandy type of soil and rocks which are 2500 years old. Banjara Hills is the highest point in the beautiful city of Hyderabad ("Geography and Location of Hyderabad").

The contour level in Hyderabad falls from west to east which had eventually led to the formation of a trough near the River of Musi which runs through the city of Hyderabad. It has also helped in facilitating various water supplies to the city ("Geography of Hyderabad District")

The climate of Hyderabad is mostly moderate throughout the year. October to February is considered the best season to visit the 'City of Pearls' ("Geography of Hyderabad District"). The district of Hyderabad is connected through the National Highways- NH-7, NH-9 as well as NH-202 to the rest of the country. It is also well connected to the rest of the country through railways and airways ("Geography of Hyderabad District").

1.3. RESEARCH TOPIC

1.3.1. RESEARCH STATEMENT

The research focuses on tracing the evolution of Bidriware from when it originated to today's date with respect to the techniques used to make the wares through different processes and to study its sustainability with respect to the soil being used, the financial returns to the artisans, funding done from the government as well as non-governmental organizations. Hence, our research statement-

“To study Bidriware from its origin to the present day with reference to its techniques, processes and sustainability”

The study would be done taking into consideration certain themes that are listed as our aims and objectives below.

1.3.2. AIMS & OBJECTIVES

The aims and objectives listed below will help us in answering the questions related to our research topic to the best of our abilities.

1. To study origin of Bidriware.
2. To examine and study the transformation of different techniques used.
3. To document the change over time in the method, materials, and tools used in Bidriware.
4. To ascertain the sustainability of Bidriware.
5. To discuss the efforts of government, different NGOs, international organizations (UNESCO) and other critical factors in preservation and promotion of Bidriware.
6. To explore gender participation and contribution in Bidriware.

1.4. RESEARCH METHODOLOGY

Our preliminary research was the initial step towards the in-depth understanding of the Bidri craft of Bidar. The secondary data included resources from various sources which include books, interviews, newspaper archives and other scholarly papers.

1.4.1. SECONDARY SOURCES

Our online resources included the use of Internet and the information which was available on JSTOR and Google Scholar. Given the lack of secondary sources, our research was exploratory in nature as there were not enough insights on various aspects of our study such as the origin of the art form, role of women artisans and the sustainability of the art form. Bidar being the place of origin of this craft was our primary place of research and then we visited Hyderabad as the craft migrated then migrated Hyderabad.

We performed a mix of descriptive and exploratory study on-field to study Bidriware. Our focus was on documentation of the making process and on the interpretation of the craft and the role of NGO's and government officials in Bidar as well as Hyderabad. The sampling design being used by us is a mix of Judgmental and snowball. We used Judgmental sampling where we selected the artisans, curators and the local vendors who were to be interviewed. Through snowball sampling our existing participant will provided us future volunteers from among their acquaintances.

1.4.2. PRIMARY SOURCES

Interviews- We conducted semi-structured interviews in order to get in-depth information. We divided the respondents into categories to organize our research data. The five groups are as follows: -

- **Artisans-** We interviewed the Independent men and women artisans as well as artisans funded by the Government bodies. They were National Awardee Laxmi Bai, Shahida Begum and State Awardee Noora Begum. They told us about the women's participation and contribution in this craft. We had an opportunity to interview number of male National awardees of Bidriware namely Mr. Rashid Quadri who is the *Shilp Guru* and Mr. MA Rauf.

He gave us a lot of information about the making of the craft. In the interview with National awardee Mr. Nageshwar we got an in-depth overview of the method of collecting the soil and also about the craft. We got a lot of information from Dr. Rehaman Patel who did his thesis in Bidriware about the origination of the craft. We also interviewed Raheema Begum who is the only female artisan in Hyderabad. The interview with artisan Khalil Ahmed in Hyderabad gave us information about the recent programs currently being held to increase the participation of women in the making of the Bidri craft.

- **Non-governmental organization** - We visited Sahayog which is a Non-governmental organization in Bidar which works for the development of various handicrafts in India. At Sahayog we interviewed Mr. Mohammed Shafiuddin who gave us an insight into the various workshops, exhibitions that are being conducted by them for the upliftment of the artisans. They play a key role in managing and allocating the actions taken by the various Government initiatives for Bidriware. Their main focus is towards improving the financial and marketing capabilities of the artisans. They also play a major role in providing awareness programmes for the artisans.
- **Government bodies**- We got an opportunity to interview the Deputy Commissioner of Bidar district, Mr. Anurag Tewari who provided us an insight into the efforts that are being made for the revival of the craft. We interviewed the Project Manager of the Bidri craft complex, Mr Mainak Mondal who gave us information about the resources which are being provided to the artisans.
- **Curators**- We interviewed the curator of Salar Jung Museum, Mr. Ahmed Ali who gave us contacts of the workshops currently running in Hyderabad. He also helped us by giving us secondary information.

Apart from the semi-structured interviews our other tools of data collection were non-participant observation as we observed the process of making the craft. Through the tools of videography and photography we documented the entire making process and the techniques which are involved in the process.

**CHAPTER TWO:
LITERATURE REVIEW**

2.1. ORIGIN OF BIDRIWARE

2.1.1. FROM CENTRAL ASIA TO INDIA

Bidriware is one of the most well-known traditional metal craft that originated in ancient India. It was developed in Bidar (North Karnataka) by a Persian artisan called Abdullah-bin-Kaiser (Waghmare, Nalini Avinash) who was brought from Iran by Sultan Ahmed Shah Wali Bahmani along with other skilled artisans in the 15th century. This art of engraving and inlaying is handed down across generations and practiced in Bidar, Hyderabad and Aurangabad ("WELCOME TO BIDAR DISTRICT").

For many centuries, metalwork was a principal art form that influenced decoration in another medium. Much of Islamic secular art, like religious art, is decorated only with geometric and vegetal patterns and inscriptions. An increasingly prominent use of inscriptions was a feature of Mamluk art (Hattstein and Delius). The presence of art over the world has been affected by ideological, social, religious, historical, or geographical restraints; thus, each individual society had artistic traditions which differed from each other. *Islamic art and culture* is one of the many artistic traditions that have had a lasting impression on the world and remains to have so (Hattstein and Delius).

Islamic culture traversed far and wide from the Ottoman and Safavid empires to Mughal India. There were many important channels of artistic expression in the Islamic world and each of these were ornamented with particularly Islamic vocabulary of surface decoration (see figure 10) such as calligraphy, *arabesques*², scrolling patterns and floral or plant designs as well as geometric designs (Hattstein and Delius; Gardner). Islamic art (whether religious or secular) was produced in lands under Muslim governance. It would however be unwarranted to assume that the makers and its patrons are all Muslims (Hattstein and Delius; Gardner).

Most of the design elements of Islamic ornament are based on plant motifs which are sometimes fused with symbolic geometric figures and with human and animal shapes. But the natural forms

² *Arabesque*: It means floral or plant-like designs. Vegetal (floral patterns) were widely used in Islamic Art, as Islam does not encourage the representation of figures, especially in religious settings like mosques. In Islam, the drawing of God, Angels and all Prophets is forbidden

often become so stylized that they are lost in the purely embellished tracery of the tendrils, leaves and stalks (Gardner; (The Metropolitan Museum of Art).

Until the sixteenth century, the Middle East was literally the center of the known world, the heart of an almost global trade. The arts of the object were a more palpable means for the give-and-take of artistic culture, and one that functioned multi directionally (Islam the Empire of Faith).



Figure 9: Qur'an Bookbinding with Floral Arabesques and an Inscription from the Hadith

People and goods moved through Islamic lands to and from China and Europe, India and Africa, passing on their own artistic cultures and taking some of Islam's away with them (Gardner).

The lands newly subjugated by the Muslims had their own pre-existent artistic traditions and, initially at least, those artists who had worked under Byzantine or Sassanian patronage continued to work in their own indigenous styles but for Muslim patrons (The Metropolitan Museum of Art).

Inlay with gold or silver seems to have become common from the twelfth century, increasing westward from Seljuk Iran. What has been called a “silver famine” beginning about the same time may have driven craftsmen to adopt inlay as a means to make limited resources go further (The Metropolitan Museum of Art). But the popularity of the glittering bronze or brass vessels perhaps also responded to a religious avoidance of gold and silver, which were shunned by the Prophet (Islamic Art and Culture [A resource for Teachers]).

Some people believe that these designs have deep spiritual and mystical significance, while others believe they are simply beautiful patterns. Believers are free to see in these designs whatever they like — this sense of ambiguity is one of the trademarks of Islamic art (The Metropolitan Museum of Art).

It is more noteworthy then that, even under these situations, Islamic art has always retained its intrinsic quality and unique identity (The Metropolitan Museum of Art). Much of Islamic secular art, like religious art, is adorned only with geometric and vegetal patterns and inscriptions (Islam the Empire of Faith).

The early Islamic vessels were based on ancient models. They were mostly cast, and their timeless forms were embroidered only with simple grooves or embosses. On an ewer signed and dated by the master craftsmen Ibn Yazid (see figure 11), with an inscription saying that it was produced in Basra (Iraq), the requirement for ornament felt in Islamic art is satisfied in the engraved arabesques and the leaf-shaped thumb-rest that rises from its handle (The Metropolitan Museum of Art).

Al-Jazari (a craftsman) provides an account of inlaying techniques, in which various metals were combined together. The design would first be cut out on the background metal and its surface roughened. Then sheet copper, silver, or gold would be hammered into it, sometimes using a black resin as glue (Islamic Art and Culture [A resource for Teachers]). This labor-intensive technique established the prominence of Islamic metalwork, the reputation of which had spread beyond the bounds of the Islamic world the latest by the 14th century (Hattstein and Delius).



Figure 10: Ewer, signed by Ibn Yazid

These *arabesques* form a pattern that will cover an entire surface, be it that of a small utensil or the wall of a building. The relationship of one form to another in Islamic art is more important than the totality of the design: the repetitive patterns serve to suggest divine infinity and indefinability. This system offers a potential for boundless growth, as it permits extension of the designs in any chosen direction (Gardner).

Most characteristic, perhaps, is the design's unconventionality of its carrier; neither the item's size (within limits) nor its forms are dictated by anything other than the design itself (Gardner).

This arbitrariness imparts a certain quality of impermanence to Islamic design, a quality that may mirror the Muslim taste for readily movable furnishings, such as rugs and hangings (Gardner).

The Arabs plundered large quantities of precious metals on their campaigns of subjugation in the 7th and 8th centuries. They developed a taste for luxury tableware, with which they would demonstrate their wealth at festive banquets, even if this was frowned on by the Islamic tradition (Hattstein and Delius).

The powerful amassed fine metal goods and saw them as both a symbol and the basis of political and economic power. Collections of gold and silver were always affected by the ups and downs of history (Islamic Art and Culture [A resource for Teachers]). In times of calamity they were used as the raw materials for casting gold and silver coins. Thus, very little medieval metalwork has survived (Hattstein and Delius).

The eastern Islamic refugees from the Mongols had a wealth of experience in these techniques, and inlaying began to flourish in the Jazira and in Syria when they reached in the 13th century (Islamic Art and Culture [A resource for Teachers]). The Armenian Badr al-Din Lulu (1218-1259), who rose from being in the vizier to the Zangids to become an independent prince, supported the crafts of his capital Mosul by placing many assignments. He also created the best possible conditions for artisans exporting to neighboring territories (Islam the Empire of Faith).

Many craftsmen worked to perfect the techniques of inlaying in this traditional trading center under the supervision of the masters Shuja ibn Mana and Ahmed al-Dhaki. There was now a trend for the inlaying of intricate figurative scenes. The masters of Mosul signed their work and specified their own origins with the by the name al-Mausili, which was recognized as a quality mark for over a century (The Metropolitan Museum of Art).

Under the Mamluks and Mongols, figurative representation was increasingly ignored in favor of majestic calligraphic designs with gold and silver inlays. Inlaid wares were no longer solely reserved for the upper classes. However, as the Mamluk historian al-Maqrizi, testified in the early 15th century, they were still luxury goods for the rich (The Metropolitan Museum of Art).

In the 15th century, copper and brass goods began to be decorated with intricate patterns of exceptional virtuosity. Late Mamluk, Timurid and Safavid products are covered in spirals of leaves and tendrils to form networks and well-arranged symmetrical patterns (Hattstein and Delius).

Similar inlay work was done under the Mughal rulers which were known as “*Bidri-ware*” after the city of Bidar in the Deccan where they were made. Most of these cast pieces were bell-shaped or circular water bottles for hookahs (*huqqa*), which the Mughal period show as vital accessories for luxurious lifestyle. They bear deeply incised floral patterns, which shimmer with inlaid silver, gold, or brass.

2.1.2. BIDRIWARE IN INDIA

Bidriware is one of the most well-known traditional metal craft that originated in ancient India. Bidriware develops its name from Bidar, a district of North Karnataka. It is a 500-year-old art that has Persian origins but which is purely an Indian innovation. This art of engraving and inlaying is handed down by generations and is exclusive to Bidar ("WELCOME TO BIDAR DISTRICT").

A Persian artisan called Abdulla-bin-Kaiser who was brought from Iran by Sultan Ahmed Shah Wali Bahmani along with other skilled artisans in the 15th century to introduce the craft to Bidar. His exceptional skills in the craft impressed the Sultan who then arranged for the training of local craftsmen in Bidriware handicraft in the Mahmud Gawan Madarsa (Waghmare, Nalini Avinash).

Thus, this craft, which prospered under the royal benefaction of the Bahmani monarchs, the nobility and other rich families, reached a high degree of excellence. In the course of the centuries, it was further developed in Bidar which became its most reputed center. In recent years, some Bidri craftsman of Bidar migrated to Hyderabad and Aurangabad after the reorganization of the states ("A Brief History of Bidriware").

Bidriware is a distinct style of work called ‘Damascening’ in silver. This art was also encouraged by the Nizam. The contrast between the black oxidized background and the lustrous silver inlay

gives a beauty to the Bidriware. The initial motifs and designs were Persian in origin and verses from the Holy Quran were also inscribed (Waghmare, Nalini Avinash).

The craftsmen follow both traditional and modern designs. Since the 15th century, the craft has been handed down to successive generations mostly among the local Muslim and other sects of Bidar. About a century ago Ramanna Master (Sri Ramana Maslei) was known to be the most knowledgeable craftsman who is remembered even today. During recent years, Shriyuts Basappa, Sheikh Ahmed Saheb, Gulam Quddus and Manikappa received State awards for their excellent work in Bidriware ("A Brief History of Bidriware").

There are various complex technical processes involved in the making of Bidriware which include casting, designing and engraving, inlaying, blackening and polishing. These processes are either performed entirely by a single artisan or by different artisans who have expertise in the various processes ("Bidri Work - Crafts Council of India").

Bidriware is made of a metal composed of 83.5 percent zinc, 12 percent copper and 3 percent lead ("A Brief History of Bidriware"). The surface of the objects is made even and a solution of copper sulphate darkens it briefly for the next stage of engraving. The engraving tools cut the design into metal, which is lighter in color than the darkened surface and allows the pattern to be seen more clearly. The piece is then passed on to the inlayer who puts in silver or brass in the articles after the engravers work has been completed. The inlay may be of silver or brass as brass often has a gold-like look due to its high zinc content. Gold has hardly been used as an inlay as much as gilt silver ("Bidri Work - Crafts Council of India").

The inlay may be of wire or sheet metal and some of the finest pieces have a design cut out of sheet silver so that it acts silhouetted against the body of the object. This is usually known as Aftabi ("Bidri/ Inlay Metal Work"). The last stage after the inlay has been polished is to blacken the surface of the piece so that the inlay stands out against it. This is done by rubbing a paste of ammonium chloride, potassium nitrate, sodium chloride, copper sulphate and mud, which blackens the body while having no effect on the inlay. The paste is washed off and finally oil is rubbed into the piece to deepen the matt black background.

The various Bidriware articles made are vases, washstand basins and ewers, hookahs, spittoons, cups, flagons, dishes, spice and cosmetic boxes, candlesticks, weights, and picture-frames. The industry was originally associated with the silver and gold inlay work on steel of the Arabs and Persians, but the substitution of alloy instead of steel was a local development peculiar to India, particularly to the Deccan ("WELCOME TO BIDAR DISTRICT").

The Bidriware designs are usually patterns such as the *Asharfi-ki-booti*, stars, vine creepers and stylized poppy plants with flowers. Traditional designs include the Persian Rose and passages from the Quran in Arabic script ("A Brief History of Bidriware").

Present day Bidri production caters mostly to tourist demands. In order to suit the modern tastes, to promote the sale of articles, new designs are being introduced. The Bidri articles are marketed locally and sent to big cities like Bangalore, Delhi, Calcutta, Madras and Hyderabad through the Karnataka Handicrafts Development Corporation and through wholesale dealers. Bidri articles are also exported to 93 countries of the world like America, Italy, Singapore, England, Australia, France, Belgium, Canada, Denmark, etc. ("A Brief History of Bidriware").

2.2. SOIL

Soil is a unique factor to ornament the Bidri craft due to its oxidising agents (Journey Joy and Kay Ferguson). The lustrous black colour of the craft is due to the ingredients of the soil (Waghmare, Nalini). The soil has an impressive nature of converting silver and zinc metals to black (Waghmare, Nalini). Hence, for finding this out several items of Bidri craft were analysed using techniques such as Debye-Scherrer powder X-ray diffraction technique (XRD) and atomic absorption spectrometry (AA) (La Niece, Susan, and Graham Martin). They recreated the soil found in Bidar which is used in Bidri craft. According to the researchers, the soil used for Bidri craft is taken from old buildings which can be used. This soil typically has latrine leading which is rich in nitrates (Waghmare, Nalini). Hence, a combination of the alkali reacting with zinc and copper according to them is the key towards obtaining a black patina (La Niece, Susan, and Graham Martin).

For identification of the soil there are no scientific methods or processes (Waghmare, Nalini). Instead, it is done by tasting the soil. The soil is tasted in order to determine which soil is suitable for the process of manufacturing of the craft and is taken from forts or graveyards (Waghmare, Nalini). The soil is usually tasted by the tip of the tongue and is reported as being slightly pungent in taste (Waghmare, Nalini).

The soil which is generally selected for making of the craft is usually collected from old historic buildings which have received no sunlight or rain for centuries (Reddy, S. & Aparna, P). Moulding, designing, engraving and inlaying artist are the four different kinds of artisans that work on the selection of the soil (Waghmare, Nalini). By the method of casting Bidriware is made from an alloy of copper and zinc by the method of casting. In the alloy of copper and zinc there is also addition of lead to this alloy. The mass production of the Bidriware artefacts is impeded due to the paucity of the raw materials (Waghmare, Nalini).

GAPS

Our primary research would focus on finding out whether the future of this craft depends on the availability of the soil to the artisans.

2.3. GEOGRAPHICAL INDICATION TAG (GI TAG)

The Geographical Indications of Goods (Registration and Protection Act) was passed by the Indian Parliament in December 1999. It aimed to protect GI goods by giving them a registration certificate under this act (Kadhir, Preetha).

Quality is an indispensable aspect in GI products and hence there is no room for compromise on quality. Bidriware has been granted a Geographical Indication certificate by the Geographical Indications Registry because of its ineradicable link to the historical town- Bidar (Desai, Rishikesh). This has enabled its producers in preventing others like Bidriware producers in Hyderabad from exploiting the products without the permission of the actual makers of Bidriware (P, Manoj).

The need for the GI tag arose as artisan families of Bidar started shifting to other occupations as they were not given enough incentives that were equivalent to the artisans in Bangalore and Hyderabad (Desai, Rishikesh). The identity given by GI tag to Bidriware helps in legal protection of the articles as well as boosts its exports. It further ensures that the economic prosperity of the artisans, the creators of these objects is promoted (Kadhir, Preetha).

GAPS

With all the research on the necessity of GI tag and reasons for its allocation to Bidriware, the impact of this registration on the social and economic life of artisans is yet to be studied and analyzed. We would hence conduct our primary research on this area through our objective ‘To ascertain the sustainability of Bidriware’.

2.4. WOMEN PARTICIPATION

Women work as inlayers in the process of making Bidriware (Narayanan, Hema). The work of inlay includes techniques where contrasting color pieces are inserted in base objects to form ornaments or articles (“Inlay”).

GAPS

Little is known about the involvement of women in other processes like molding, filing, designing and engraving and hence our primary research would focus on exploring their participation and contribution in Bidriware.

CHAPTER 3:
TRACING THE ROOTS OF
BIDRIWARE

ORIGIN

According to Shilp Guru of Bidri craft, Mr. Rasheed Quadri, this craft was born in Bidar. The craft then spread to Hyderabad which was the capital of Golkonda Kingdom of Deccan Sultanate, after it developed in Bidar in the 14th century under the Bahmani Kingdom. The craft then gradually migrated to Patna, Lucknow and Murshidabad. The craft had flourished during the period of Bahmani rulers in 1422 (Dr. Rehman Patel, personal interview). The people of Iran had come and gifted the Sultans of Bijapur some items and named it as Bidri. Hence the craft is also now practiced in Patna, Lucknow and Murshidabad but is not known as Bidri craft.

According to Mainak Mondal, the Project Manager of Bidri Craft Complex, Bidri is the craft of Bidar and it had originated in Bidar in Karnataka so it's known as Bidriware. Hence, the craft is a product of Bidar even though it's practiced in Patna, Lucknow and Murshidabad.

The rulers Ahmed Shah Bahmani and his son Allauddin Bahmani II played a major role in introducing the Bidri art between 1422 and 1436. The earliest known craftsman was Abdullah bin Kaiser, who had made a great contribution in developing this art. The Bidri works had a heavy influence of the typical Islamic features of the time (Rasheed Quadri, Personal interview). Swirling silver floral motifs framed by geometric patterns, set against black background has since become the hallmark of the Muslim metal work in India.

The manufacture of Bidri art is carried out under a defined system of division of labour. The craft is made in seven stages with around 1-17 workers. The important stages include moulding, filing, designing, engraving, inlaying and oxidizing (patination). The different processes are performed by three classes of people which include the moulder, the engraver and the inlayer (Rasheed Quadri, Personal interview). In the first stage, the moulder after preparing the alloy and casting the vessel, turns it into required shape with the help of his lathe and passes it on to the engraver who cut designs on the vessel. Next that the piece of art pass to the inlayer, who inlays gold, silver or brass into the engraved designs and finally colours and polishes the article (M.A. Rauf, Personal interview).

From the interview of Jagdish Mittal, the origin of Bidriware should be about 1610-1615. When Bidar was conquered by the Ajisahi's of Bijapur, earliest piece is from 1634. This one that is the basis, if this is of 1634 and of this quality then this must be from earlier but after 1600 because we don't find any material earlier from 1600. Second evidence is that the huqqa was not known by the Mughal court when Assad bay came to Bijapur. So it means huqqa bases were started being made at the time of 16th century, so did Bidriware. I would say that it started between 1600-1634 (Jagdish Mittal, Personal interview). Pure and beautiful Bidriware has originated in the 1600s because he knew people who have written about Bidri in many ways.

In the 16th century when the Bidar fort was being built, an artisan called Abdullah bin Kaiser used to work with iron and silver and used to inlay with stones. This work can still be seen in the fort. He used to work in secret and wouldn't show his methods to anyone. During that time in Bidar water pots (made of clay) used to be made, zinc metal was used because drinking water from a vessel made of zinc metal purified the blood. This entire process was performed by the Shetty family art (Rasheed Quadri, Personal Interview). Some of the artisans who belonged to the Shetty family were behind Abdullah bin Kaiser to steal his technique of making Bidriware as he didn't share it with anyone and wanted to keep it a secret. Then in order to find out about the secret technique of Abdulla bin kaizer the artisans of the Shetty family used to go through the garbage of Abdulla bin Kaiser's house. They found that the tool used by them was chisel which he used to destroy them and further discard it art (Rasheed Quadri, Personal Interview). Then the artisans of the Shetty family had managed to acquire the tool and hence indulged in the process of making of the chisel. They stole it from Abdulla bin Kaiser and learnt. Since it was learnt in Bidar, the name Bidri work was given to it. Two artisans used to practice this for a while, they got into a fight, and one of the artisans took a vow that this craft will spread to every street of Bidar. During that time, there was no money art (Rasheed Quadri, Personal Interview). Those who had money were landowners and had time as well. To start work, the artisan went to the land owners. The artisan had convinced the landowners to indulge in the process of learning of bidri work. We would find out free time for the conduction of the teaching lessons. The work articles used to be very heavy, people used to sell it then on weighing scales Bidri work used to be there and in the other the currency of that time. Later on a man called Ulam Sattar learnt this craft from the landowners and in order for a better future for the work; he went to *Kusum Gali* at *Chaubara* in Bidar and taught

the people over there art (Rasheed Quadri, Personal Interview). The people over there used to work as vegetable sellers. He then distributed the work among the people who used to sell vegetables, the flower vendors etc from the royal people art (Rasheed Quadri, Personal Interview).

According to the author of the book Bidriware and its Damascene by Padma Shree Jagdish Mittal, the large bulk of Bidri object started appearing in the market. but there were also old families who had some other Bidri, you know the main difference is that two metal Bidri's brass and silver, they were made until up to 1700-1725, afterwards to cut down costs and to save time they started making only silver. and the shapes also changed.

In the paintings of the 18th century the Bidricraft appears more frequently, some of which have been dated, the overwhelming majority which has been playing a significant role in the process of depicting *huqqas* rather than other artefacts (Dr Rehman Patel, Personal interview). Two such miniatures are to be found in an album in the British Museum which belonged to Himmat Yar Khan Bahadur. The seal of Hyderabad dignitary is at the beginning of the album and incorporates a date corresponding to 1784 (Dr. Rehman Patel, personal interview).

The early Bidri's are colloquial huqqas or plates. The later Bidri's the shapes started skirting. The more they skirt later is the object, that's a sign. So since old families were disposing off the Bidri's, they were some 17th century Bidri's, 18th century Bidri and 19th century Bidri's. During this time, he started buying very select samples of Bidri. They were one or two dealers who had 500 pieces at a time. But now it's very difficult to get old Bidri's. Now the techniques of Bidri are also in many varieties (Dr. Rehman Patel, personal interview). Either they are crushed with a surface, when they design pieces are cut and inlayed. or in relief, they are either a line work, where actually they can cut and along with they go on tapping and it gets settled. Then the more difficult is the Art work, when they have to set in reverse then the background is cut and silver sheets of the same size are cut and fixed.

The introduction of the Bidri art to the world in the 1851 Great Exhibition at Crystal Palace in London was done by John Forbes Royle (Dr Rehman Patel, Personal interview).

Jagdish Mittal stated that he had started collecting pieces of Bidri work in the year 1951. The first piece that he had collected was in Hyderabad in 1951 March. They had been many old families

who used to own Bidri which was sometimes given as dowry (Dr. Rehman Patel, personal interview).

There are no differences in the design of Bidriwork. Nowadays we see combinations of the designs. The combinations of designs can change, the textile work can change is what we see in the Banaras Kalka the coroners have the Kalka design, which they call paste cut design. But the forms change if you see in Bengal kata and the Banaras sari's, the shapes change. So according to the need, the shapes have to change. They can only be geometric, they can only be floral, and they can be anything (Jagdish Mittal, Personal interview). Good design does not mean that they should be copied. Taking an expression that the leaves should be cut you can have your own pattern or certain squares, rectangles or arches have to be cut and made into a shape. Bidri work had purely originated in Bidar. In spite of this fact there are no differences in the design form and format in Bidriware in Bidar from that of Bidriworks in Hyderabad.

This is because the same families had migrated in Hyderabad. And the patterns were the same. Whether the work was done in Bidar or here, the patterns were the same. The official Nawabs and Nizams themselves, they were the patrons. So, designs didn't matter at all. The only difference was when Bidri was used in Musheerabad or Lucknow because of minor differences (Rasheed Quadri, Personal Interview).

In the year of 1950, special units had been set up and the Government had begun to involve itself in training the Bidri workers.

In the beginning of the year of 1956, after the reorganization of the states Bidar was completely separated from Hyderabad, which was the city which had a major contribution in the production of most of the demand for Bidriware. Thus, many of the Bidri craftsmen had planned to shift to Hyderabad where there is now a considerable industry. The state government had also taken a hand in aiding the craftsmen, whose wares are now marketed mainly through the "All India Handicrafts Board" (Rasheed Quadri, Personal Interview).

The craft had flourished in Purnea, Musheerabad, and Hyderabad. According to the curator Mr Ahmed Ali of the museum in Kashmir, the curator said, it's their product in Kashmir, but then Jagdish Mittal had stated that it was Bidri. Due to the availability of huqqa there so that's sort of

wrong information they give to people. Without knowing that it's a Bidri product. A Bidri product has a certain design type, Lucknow-Bidri has a certain design type, Murshidabad has design type and without understanding it's claiming it is from Kashmir. Suppose some four scholars claim that Bidri done from Kashmir so it will be like that.

Bidri's origin is in Bidar itself and a fact should be fact, there is no question of it being done in Kashmir. There are certain design types which are typical in Kashmir, but Kashmiri' craftsmen don't know the Bidri type at all. In Lucknow because there was a Nizam's court, like a council in Lucknow, so the craftsmen had started making Bidri there.

In the last 900 years, there was a tradition which had developed which can be linked with the Bahmani Empire of Deccan. The Bahmani kingdom was introduced to the technique from Iran via Iraq. Khawaja Moinuddin Hasan Chishti (1192 AD) had first brought the metal art domestic items first to India. The first Sufi had come from Sijistan (Iran) to teach Islam. He had landed in Ajmer in Rajasthan (Rasheed Quadri, Personal Interview). Another source says that a group of the damascene craftsmen moved from Syria or Damascus to India. As we know that in Northern Sultanate already metal art was entered but not like black Bidri. Some metal artists were at Ajmer and hit upon the idea that damascening could be done on the base of high zinc low copper alloy.

East India Company had nominated Dr. Royle, who was the doctor of the pioneer of economic botany in India, to source exhibits from artisans. He had travelled the length and breadth of India which made him ideally suited for the job and was looking for unique plant species, and other materials of value (Dr. Rehman Patel, personal interview).

In the middle of 19th century there was the fall of Mughal Empire. It leads to all the traditional arts in India witness lean days, since Mughals were patrons of arts for centuries. The Bidri art was also a part of the suffering. In the late 19th and early 20th centuries, the Nizam of Hyderabad had been trying very hard to revive the art and had also provided royal patronage to the artists and that is how instead of Bidar, Hyderabad is better known today for excellent Bidri work examples that are displayed in its own museums.

The entire industry had been confined to Bidar in the 20th century. Until the last few decades, goods were produced at Bidar in a completely traditional manner. The craftsmen working at home had been using a narrow range of simple tools. They had been also indulging in training their children to continue their respective family business (Dr. Rehman Patel, personal interview).

On behalf of Karnataka Tableau Shah Rashid Ahmed Quadri represented a live demonstration of Bidri art in the year 2011 on the occasion of the Republic day at Raj path in New Delhi. The Govt. of India awarded him with *Shilpguru* award in 2012.

Bidriware in recent times:

The Metropolitan Museum of Art in New York was organized landmark exhibition entitled ‘Sultans of Deccan India: Opulence and Fantasy’ by Navina Najat Haidar, curator of the Department of the Islamic Art, a lady of Indian origin, who successfully out put the show in 2015 (Dr. Rehman Patel, personal interview). It was represented by 15 examples of the refined Bidri metalwork that was among the Deccan’s most distinctive luxury goods: vessels cast in a nearly black alloy and incised with foliate and geometric motifs with silver or brass inlay.

Producing more than 200 types of articles marketed through the Karnataka Handicrafts Development Corporation and many private organizations to the major Indian cities. Now a day’s online marketing through internet is also available.

At present, however, the craft lingers only in Bidar and Hyderabad. It could have totally been extinguished from that region also, had it not been for, thanks to the custom of the Mohammedan gentry there, to make a presentation of a complete set of Bidriware in marriages ceremonies (Dr. Rehman Patel, personal interview). It bespeaks the sad tale of how so many traditional crafts of India have traversed the path of oblivion after the fall of royal houses and great landed aristocracies of the country. The quality turned out in Bidar at present is nothing but poor caricature of its former glory.

The manufacture of Bidri art is carried on under a system of division of labour. It is carried out in about ten stages, with 1-17 *karigars*. Of this, important stages are moulding, filing, designing, engraving, inlaying and oxidizing. The different processes are performed by three classes people,

viz., the moulder, the engraver and the inlayer. The moulder, after preparing the alloy and casting the vessel, turns it into required shape with the help of his lathe and passes it on to the engraver who cut designs on the vessel (Dr. Rehman Patel, personal interview). Next that piece of art pass to the inlayer, who inlays gold, silver or brass into the engraved designs and finally colours and polishes the article.

About 350 artisans in Bidar are involved in preparing Bidriware articles including female and children. Bidri colony and *Chowbara* road are the attractive areas of Bidri productions having showrooms and kaarkhanas. Some artisans are working with self-help group, some with self-investment and some are working on daily wage on government projects. The Bidri artisans always stepped forward and made some new items which fetch them State and National awards in competition with other crafts in India (Dr. Rehman Patel, personal interview). The awardees also had shown their skills by exhibiting varieties of Bidri art in foreign countries. Among them is internationally renowned Bidri artist Shah Rashid Ahmed Quadri.

According to the Census of India 1961, Syed Tassaduq Hussain- a first National awardee (1969) was the Head of the Gulistan Cooperative Society, Bidar. The other notable national awardees are Abdul Hakeem, Mohammed Najeeb Khan, Shah Majid Quadri, Mohammed Moizuddin, and Mohammed Abdul Rauf.

More than 50 Bidri artisans who received the Karnataka State Award honoured by the Karnataka State Handicrafts Development Corporation names are included.

Apart from these artists, Fatima, Shahida Begum and Laxmi Bai are the active female artisans in Bidri work now days.

CHAPTER 4:
MATERIALS AND PROCESS
BEHIND MAKING BIDRIWARE

4.1. RAW MATERIALS

Bidriware products have a diverse range of vases, jewellery, huqqa bases bowls, boxes, etc. the basic raw material used for this craft is an alloy made up of zinc and copper which is mixed in the proportion of 16:1 (MA Rauf, personal interview).

The metal is a composition of an alloy of copper, tin, zinc and lead. The term is taken from Bidar, the town which is still the chief centre to manufacture this metal ware. This art of carving and



Figure 11: Tools used in making Bidriware

inlaying on metals also known as Bidriware is exclusive to Bidar and is passed on to the generations.

It is a handicraft in which the artisans fix wires or sheets of silver, gold or mother of pearl into wood and metal. Bidri has changed from an inlay of gold or silver on a steel or copper base in the Persian times to an alloy of zinc and copper as the base metal in the Indian form (Rajkumar Nageshwar, Personal interview).

A sharp metal stylus is being used to sketch intricate geometric and floral designs on the matt black surface of the wares. Utensils, boxes, ash trays, paper cutters, cuff links, furniture and such other items are made by inlaying the wood or metal. The practice of using gold for inlaying has gradually stopped owing to its rising prices. The artisans in Hyderabad however, use brass along with silver for inlaying the Bidri articles to cut down on production cost.

Soil is a unique factor to ornament the Bidri craft due to its oxidizing agents. The lustrous black colour of the craft is due to the ingredients of the soil. The soil has an impressive nature of converting silver and zinc metals to black (Raj Kumar Nageshwar, Personal interview). The soil used in Bidriware is taken from forts or graveyards and tasted by the tip of the tongue and is supposed to be slightly pungent.

The soil used in the making of these wares is a unique aspect of this craft. The Bidriware gets a lustrous black colour due to the ingredients present in the soil. This soil is collected by the artisans from the inner areas of the fort and it is said to not have received sunlight or rain for centuries together. The Bidriware is solid and doesn't break or dent unless it is thrown or struck with great force unlike other wares (Laxmi Begum, Personal interview).

It has also achieved the Geographical Indication tag which certifies that the Bidriware cannot be made anywhere else than Bidar as the blackened mud that the artisans use to make the ware is used from the fort of Bidar and cannot be found elsewhere. Apart from being sold in India in cities like Hyderabad, Calcutta, Madras, Bangalore, Delhi, etc., it is also exported to 93 countries of the world like Burma, Germany, Greece, Netherland, Canada, Austria, etc. (Rasheed Quadri, Personal interview).

As Bidriware is a handicraft, machinery is avoided to maintain the precision. The only machine used in the making process is the buffing machine used to smooth the surface of the articles. Earlier it was done with leather and cloth but they have slowly adapted the modern-day technology.

4.2 PROCESS AND DESIGN

The process and design of Bidriware is one of the main highlight of Bidriware.

The alloy for making Bidriware is a composition of zinc and copper in the ratio of 16:1. As per the artisans in the Bidar colony, this is thought to be the ideal proportion to achieve the black patina. It was observed that the greater the amount of copper, the better was the quality of shine in these articles.

The stages in the making of Bidriware as recounted by the Artisans in Bidar and Hyderabad were like what we gathered in our secondary data. The various stages in the process of making Bidriware were *sand casting, filing, designing, engraving, inlaying* and *the process of oxidation (patination)*.

In sand casting, the resin is mixed with castor oil to prepare for the mould. This soil can be used for 203 days until they make a fresh one.

Then, the rough surface of the freshly cast piece is filed and smoothed with filers or sandpaper.

After this, the surface of the article is temporarily blackened with the help of solution of Copper Sulphate. This allows the artisans to draw freehand designs on them to proceed for engraving.

We observed that artisans used only a buffing machine in the entire process of making Bidriware however, the rest of the processes were carried out through handmade tools.

The designs drawn on the surface are engraved with the help of a chisel, which is then smoothed by using a buffing machine. We found out through artisans that earlier this used to be done with the help of surface filers, leather and sandpaper (Rasheed Quadri, Personal interview). The article is then mostly inlaid with silver and sometimes brass to add to the aesthetic beauty of the article. The process of designing which is done by free hand and is done in two types namely - wire work and sheet work.

The final step is the blackening where Bidar fort soil is used. The same soil which goes into blackening articles is less as the same solution can be used to blacken many articles at once (Gulistan, personal interview). For blackening, a paste of ammonium chloride and Bidar fort soil

is used. Small amounts of other chemicals are added such as Potassium nitrate and copper sulphate (Rajkumar Nageshwar, Personal interview).

After the mixture is heated for a while, the article is then dropped into the solution and after it is taken out, the article is oxidised and has achieved the required patina. This is then mixed with sal ammoniac in the proportion of 10:1 and the paste is applied on the article. At the end, the silver portion remains unaffected whereas the zinc and copper background turns black leaving a magical effect. Thus, the product is then polished with oil to maintain its lustre.

The designs used in engraving and inlaying have undergone an influence from the various dynasties that rule over it. The artisans (Bidar) said that there was however no major significant changes to the basic designs which have been in use even today. These various styles in design were Mughal, Persian, Deccan, Arabesques.

Thus, the significance of using only handmade tools in making Bidriware was attributed to the fact that it was a handicraft and to retain the status, it was mandatory to not use machinery for mass production. We also realised that although soil is the magic ingredient here, the copper used in making the alloy and its proportion plays a significant role in the shine and blackness of the product.

4.3 TECHNIQUES USED IN BIDRI CRAFT

There are various techniques related to designing a Bidriware product, the most widely used are *Fooljhari* and *Tarkashi*-work (if only wire is inlaid). Apart from these techniques *Aftabi* (if the design looks black against the overlaid metal sheet), *Koftgiri*, *Tehnishan* (if the inlay looks flush with the surface of the object), *Zarnishan* (if the inlaid pieces are low in relief) and *Zarbuland* work (if the inlaid pieces are high in relief) is also practiced by artisans. The mostly widely used technique in modern time is *Tarkashi* and *Fooljhari* work according to the artisans interviewed.

Tarkashi work is the engraving of silver wire into the Bidri product, after the product has been moulded and smoothened using a buffing machine, artisans use a hammer and chisel and engrave the silver wire in the grooves by hammering them down. The task takes a great amount of skill and patience yet is considered one of the simplest techniques and least time consuming. Designs made through this technique are generally geometric designs as it has market scope; originally designs were floral to cater to the needs of Mughal rulers. This is the most widely practiced technique by artisans of Bidar and engraving of copper and gold can also be done through this technique. *Fooljhari* work involves the inlaying of a sheet of silver on the Bidri product. Although designs are moving from floral design to geometric design this technique is still very popular with customers and hence is still practiced by artisans.

One of the most difficult techniques and executed only by a few highly skilled artisans is the *Aftabi* (sun-like) or the *Mahtabi* (moon-like) technique. In this the design on the Bidri product is left black and the rest of it is inlaid with the choice of the metal gold or silver. The artisan has a pattern on the Bidri product; this pattern will be in black, the surrounding area of the pattern is chiselled out to a uniform depth, with a help of the hammer. The chiselled-out area is then overlaid with the choice of a metal usually silver or gold by hammering down gently. This technique is time consuming and hence expensive, it is mainly used on important objects with Qur'anic inscription or objects of high value.

Koftgari technique is an old technique which is practiced by only handful of artisans; even the most senior artisans have only a faint idea of it generally coming from books they have read and this is agreed by many of the artisans interviewed. *Koftgiri* technique involves the decorating of a

metal object by inlaying it with another metal. In *Koftgiri* work an alloy of iron or steel is inlayed by silver or gold. This technique used to be practiced outside Bidar but as of now is almost extinct.

Munavatkari technique is a technique mentioned by Rashid Quadri a national awardee, Munavatkari involves the embossing of silver into the Bidri product. This technique is not followed anymore as the finished product has a rough look to it and hence is not commercially viable.

CHAPTER FIVE:

WOMEN PARTICIPATION AND

EFFORTS OF THE GOVERNMENT

AND NGO

5.1 WOMEN PARTICIPATION

When we collected secondary data, we realized that there are fewer women artisans who practice this craft and their contributions are limited to a specific stage in the process of making Bidriware. Our aim was to find why this craft had such less number of women artisans practising it.

During our on-field research, we observed that the gap in male to female ratio was wide. There were only 6 women artisans out of the 144 artisans in Bidar whereas there was only 1 woman artisan in Hyderabad out of 14 artisans. Out of the 6 women artisans in Bidar, 5 of them were Muslims (Noora Begum and her 3 sisters, Shahida Begum) whereas 1 was a Hindu (Laxmi Bai). And the only woman artisan in Hyderabad (Rahima Begum) was a Muslim too. Thus, we observed that the craft was widely practiced by the Muslim community.



Figure 12: Noora Begum, State Awardee for Bidriware



Figure 13: Rahima Begum, National Awardee and the only woman artisan in Hyderabad



Figure 14: Laxmi Bai, National Awardee of Bidriware (Bidar Colony, Bidar)

We interviewed 3 woman artisans in Bidar: Noora Begum, Shahida Begum and Laxmi Bai. Noora Begum is a state awardee of Bidriware whereas Laxmi Bai and Shahida Begum have both received National award respectively for their skill in the Bidri craft. Noora Begum has 3 sisters who also practice this craft to support their family and hence constitute the 6 women artisans.

Upon interviewing Noora Begum, Shahida Begum and Laxmi Bai, we found that all 6 of them knew the entire process of making Bidriware. However, they prefer engraving and inlaying over the other processes because they told us that there are less health hazards in these processes than the other stages.

Although the women artisans in Bidar were given equal incentives (such as subsidised raw materials and so on), we observed that they were still not willing to practice this craft, as the income generated is still less given the time required to produce Bidriware (Shahida Begum, National Awardee of Bidriware; Noora Begum, State awardee of Bidriware; Laxmi Bai, National awardee of Bidriware).

The number of hours they spent on the process (Shahida Begum, National Awardee of Bidriware) determined the wages that they earn. If they started working from 8 in the morning till 6pm, they only earned Rs 200. If they began at 10-11am, then they earned around Rs 100 and if they started in the afternoon till 6 in the evening then they earned as little as Rs 50. Thus, many women artisans felt that they could earn more in other professions for the same or in fact, less amount of labour.

The other possible reasons according to Noora Begum, Laxmi Bai and Shahida Begum were that the women either got married or lost interest. According to them, the women who were married were either prohibited by in-laws to work and hence discontinued participation in the craft, or they were just burdened with responsibilities. Hence, they switched to other sources of livelihood to support their families.

Against this background, it was not surprising that there were fewer female artisans in the workshops conducted by the government compared to male artisans. We however observed that all three of them wished to continue practicing this craft as long as they live despite earning less because they either didn't know any other profession, as they dropped out early from school (Shahida Begum, National awardee of Bidriware) or they were passionate about it (Shahida Begum, National Awardee of Bidriware) unlike other women artisans.

All 6 women denied being under any pressure or restriction from their family/ in-laws or the society to practise this craft and were free to choose any profession to earn a living.

We thus inferred from above that women's participation in this craft had very little to do with their skill, knowledge or passion for Bidriware.



Figure 15: Government is conducting workshops to encourage woman participation

In conclusion, the socio-economic factors such as intensive labour and less wages, apart from handling their household were the primary reasons why there were fewer women artisans in the trade. Some of them also worked as artisans to support their families because their existing income was insufficient to meet their expenses. But the wages earned were still less, therefore they either left the craft or switched to other profitable professions. It was also found that Bidriware was commonly practiced by the Muslim community in Bidar as well as Hyderabad, with fewer artisans

belonging to other religious backgrounds. This could be attributed to the fact that the craft flourished under Islamic dynasties as mentioned in the secondary sources.

EFFORTS TAKEN BY THE NGO

Sahayog is a Non-Governmental Organization (NGO) located in Bidar, which aims at helping the rural sector with social programs such as rural development, women empowerment, watershed management, child rights and development and protection of various art and crafts. The NGO has been working with Bidri craft for the past 15 years and is responsible for various developments in this craft (Mohammed Shafiuddin, Personal interview).

The president of Sahayog, Mr. Shafiuddin has been actively working towards the development of Bidriware. He plays a key role in allocating and managing the actions taken by the Department of Handicraft of Karnataka Government. This section looks into the organizational work carried out by the NGO to overcome the difficulties faced by the artisans making Bidri and the challenges faced by the NGO itself.

Sahayog started its work of assisting the Bidri artisans 15 years ago in partnership with the National Program for Rural Industrialization (NPRI). This was a cluster program initiated by National Bank for Agriculture and Rural Development (NABARD) in 2002. In this program, NABARD was the organization providing funds and Sahayog was the implementing agency for the initiatives taken by the Karnataka government.

At first, Sahayog was created to build baseline surveys on Bidriware to find out the strengths of the craft along with its weaknesses and threats. They were then asked to find the emerging opportunities for the craft makers to survive in the market (Mohammad Shafiuddin, Personal interview).

From the surveys conducted, the major findings put forth by the NGO were that the artisans were going through tough financial and marketing problems. This was proving as a hindrance to the

growth of the craft further leading to loss in the profits made by the artisans. To tackle these problems, a five-year action program had been established which initiated various training workshops, exhibitions and different types of schemes for the benefit of the craftsmen of Bidriware.

Together, the NGO and NABARD also created a Cluster Development committee in Bidar which mainly concentrated on the development of Bidriware as a craft and the working conditions of the artisans (Mohammad Shafiuddin, Personal interview). This committee consisted of senior government officials such as the Deputy Commissioner of Bidar, Commissioner of Bidar Urban Development Authority as well as the officials from NABARD, Lead bank, other NGOs in Karnataka state and other community members related to Handicrafts development.

As a committee, their first action was focused on implementing Self Help Groups (SHGs). These groups provide artisans with accounts through which they now have an opportunity to create savings and take loans from the banks. SHGs are also supportive for building alternative sources of credit for the artisans (Mohammad Shafiuddin, Personal interview).

For example, if an artisan repays a previous loan, these SHGs support the artisans by providing them a good recommendation for the second loan. Through such financial assistance, artisans have developed a habit of saving and have started using their loans for acquiring the capability to produce more materials of Bidriware.

The Self-Help Groups have also been very helpful towards eradicating the financial problems of the artisans. According to Mr. Shafiuddin, the financial problems faced by the artisans are reduced by 70% of what they faced previously. However, they are doing their best to further improve the financial situation of the artisans by seeking help from various Government programs and Rural Corporate Companies through the provision of financial services and technical assistance.

In terms of their efforts towards the development of the craft, Sahayog has implemented various designer development workshops and skill up-gradation trainings. In these workshops, the newly joined artisans are taught how to use the Bidri tools and make new items with the unique process.

They are also taught to draw the new designs, initially on paper and then on the alloy followed by engraving and inlaying on the metal. Recently, Sahayog assisted in adding over 78 new products in the collection of Bidriware (Mohammad Shafiuddin, Personal interview). The products included were book holders, key chains, vases of different designs and other types of daily accessories. To test these products before making their entry in the market, Sahayog conducted several exhibitions of Bidri craft in cities like Mumbai, Bangalore and Hyderabad and they actively continue to do so. These exhibitions were well received among the people, although, more efforts are needed to be taken to familiarize this art to a larger audience (Mohammad Shafiuddin, Personal interview).

Sahayog sent the willing craftsmen to these cities to not only test these products but to also spread general awareness about what Bidriware is and what goes into its making. The customers initially assumed Bidri products to be made by painting on top of the metal surface and hence preferred buying other articles (Mohammad Shafiuddin, Personal interview). The sales of these articles were observed to increase once the actual process of making along with the raw materials used were explained to the people visiting these exhibition stalls. Mr. Shafiuddin is determined in spreading popularity of Bidriware across India. Such trips to the exhibition places are funded by the NGO but they do charge some commission on the sales that happen in these exhibitions.

The artisans of the Bidri craft complex are very pleased by these exhibitions because not only does it give them an opportunity to sell the products to a larger crowd but it also helps them in understanding the behaviour and preferences of the consumers (Mohammad Shafiuddin, Personal interview). This has helped them to customize a lot of their articles to match their consumer tastes. The artisans concur with the efforts initiated by Sahayog in improving their financial conditions as well as spreading the popularity of Bidriware across India.

Sahayog is also the first organization in Bidar to develop a catalogue for the artisans under the Ambedkar Hastshilp Vikas Yojna (AHVY) scheme. This catalogue contains a broad list of Bidri items that advertises different materials and designs used in making Bidriware. It has helped them improve the marketing capabilities of the artisans as it provides the consumers with comprehensive knowledge of the materials made by the artisans (Mohammad Shafiuddin, Personal interview).

These different types of catalogues made for the craft are shown to all the visitors keen to know about Bidriware and we were one of such lucky groups. It contains pictures of various types of articles along with their precise descriptions, prices and information about the amount of materials used in their making. The catalogue also provides information about the history of the craft and how different styles and techniques of Bidriware have evolved through time.

Sahayog also provides help to the artisans who need assistance with the process of digital marketing, but they do not take the responsibility to manage the websites of these artisans. This is because Mr. Shafiuddin believes that the artisans should be independent enough to maintain their own trade. However, the NGO helps the artisans in finding contacts of the customers who would prefer buying the articles from the artisans themselves. "Many people have been coming here for help in digital marketing, like some from Kerala, so what I do is, I give them contacts and then they deal with each other regarding the orders"(Mohammad Shafiuddin, Personal interview).

Such assistance has improved the artisans' knowledge of marketing, widened the reach of the artisans to the customers and has also assisted them in developing a whole new platform for selling their products.

Sahayog, with the help of the Development Commissioner of Handicrafts under the AHVY scheme has also conducted several design workshops of Bidriware. According to Mainak Mondal – the project manager of Bidri craft complex, one such workshop consisted of a four-month skill upgradation training for artisans who were not specialized in this craft. This step has encouraged the new artisans to produce Bidriware and is seen as an important scheme in maintaining the sustainability of this craft (Mohammad Shafiuddin, Personal interview).

In this workshop, the artisans are taught how to draw the different designs of Bidriware and are also encouraged to pursue new styles. All of this happens in the Bidri craft complex provided by the Government in Bidri colony of Bidar city.

For Bidriware to stand up in the competition of handicrafts, such schemes are seen to be very essential in maintaining the tradition and uniqueness of the craft and promote it by making total use of all the available opportunities (Mohammad Shafiuddin, Personal interview).

Other than their major workings with NABARD and AHVY, there have been other Government Committees that have implemented various schemes and programs along with Sahayog for the growth of this craft as well as the welfare of the artisans. One such committee is the Export Promotional Council of Handicraft (EPCH).

This committee has been conducting a five-month integrated workshop for the artisans every year (Mohammad Shafiuddin, Personal interview). Our group was quite fortunate to witness this program when on a trip to Bidar. This program was held in the Bidri craft complex for all the artisans staying in the Bidri colony. A designer from National Institute of Fashion Technology, Delhi was invited to train these artisans (Mohammad Shafiuddin, Personal interview). As a designer, she was not trained in Bidri, but she helped the artisans in modernizing the designs. These lessons were conducted in a cohesive manner with full cooperation by the artisans. They were taught various types of methods in the representation of Bidriware, which consisted of different illustrations, outlines and other styles of Bidriware. During the workshop, the trainer assessed the efficiency and working methods of the artisans and provided support wherever needed (Mohammad Shafiuddin, Personal interview).

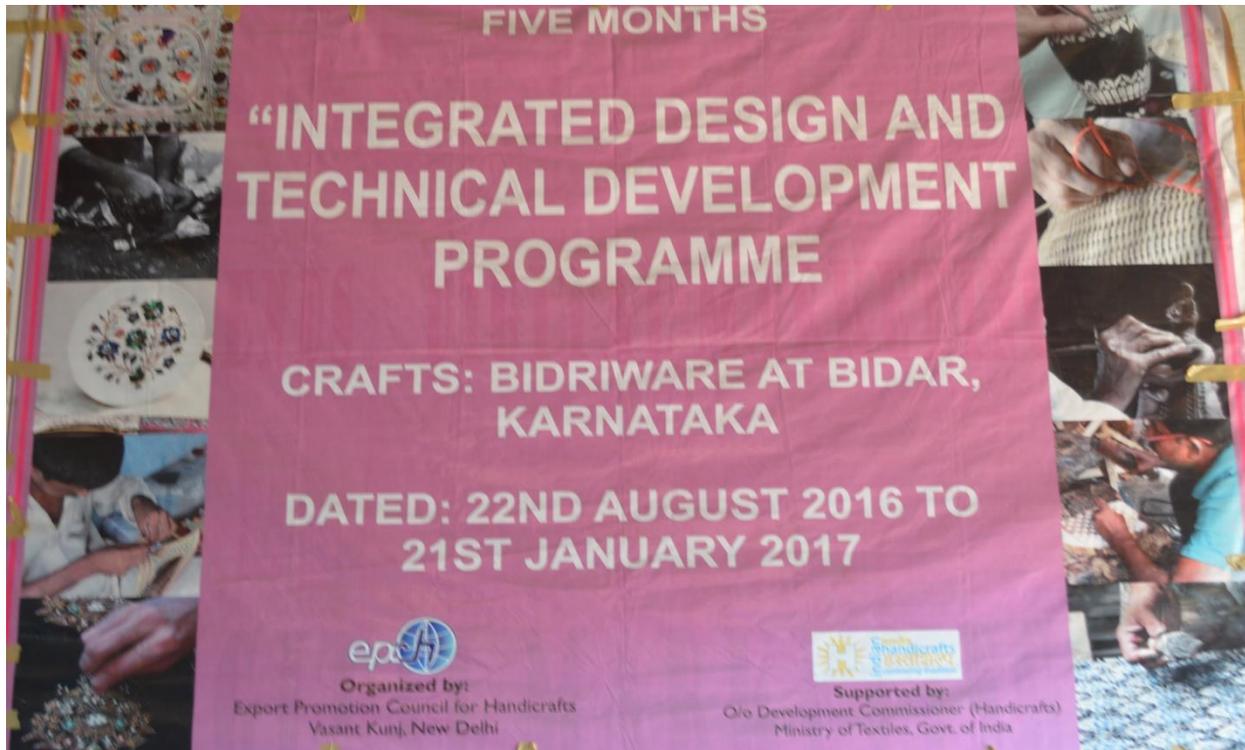


Figure 16: Training Program at Bidri Complex

Another program that is actively involved with enhancing Bidriware is a subsidy scheme called National Rural Livelihood Mission (NRLM). This scheme provides subsidies on the raw materials used by the artisans. We were told by Mr. Shafiuddin that the artisans acquire materials at a rationed value of half its price (Mohammad Shafiuddin, Personal interview). Through such lower rates, they gain advantages of low costs which improve their production capacity and profit margin. This also helps them produce more articles with lower production costs that further helps in sustainability of the craft. The NGO is also involved in a lot of awareness programs for the artisans.

Their handicraft department has been providing the people with short term awareness schemes by the programs provided from the Deputy Commissioner and the officials of the Zila Panchayat. These schemes provide knowledge of various types of developmental projects to the rural population. Rural developmental training centres, Agricultural schools, Farmers training and Education Centres are some of the programs that the NGO has been promoting to the rural sector (Mohammad Shafiuddin, Personal interview).

Mr. Shafiuddin believes that there are still many problems that need to be worked on in improving the condition of artisans engaging in Bidriware. In the past 2-3 years, the cost of silver has increased. Products have become more expensive to produce and due to such high costs, artisans face problems of low sales and bad debts (Mohammad Shafiuddin, Personal interview). High costs have forced artisans to raise the prices of their items but this has negatively affected their sales, as consumers intend to shift their preferences to other crafts with such changes in prices.

With low sales and high costs, artisans are finding it tough to maintain their earlier profit margins. Even though the Cauvery showroom (It is a showroom for Karnataka Handicrafts) continues to provide subsidies for the materials, the subsidies are not enough to cut down their costs of production because of the rise in price of silver (Mohammad Shafiuddin, Personal interview). However, Mr. Shafiuddin suggests that a lot more can be done to reduce the effects of high cost, as the government officials can start providing more amounts of silver at same rates or reduce the rate at which the subsidies are given.

PROBLEMS FACED IN PROCESS OF IMPLEMENTATION

With all the assistance provided, there are also a few problems faced by the NGO and the Government themselves in the process of implementation of various programs. Some of them are as stated below-

Over 70% of the artisans had become defaulters in the eyes of their banks or SHGs because they failed to repay the loans taken from them. Such inefficiencies never used to happen but has become a severe issue for the Self-Help Groups in the past 2-3 years. "The artisans have played politics with the banks, because they are convinced that the government would financially help them as the government has been lenient towards bad debts of low-income groups and it is just an excuse for not wanting to repay the banks" (Mohammad Shafiuddin, Personal interview).

This being said, there might be other reasons for these bad debts such as low demands, higher prices and small market reach for selling the products. However, the Government of Karnataka was helpful to the artisans in recovering their bad debts. Shafiuddin hopes to never experience

such a situation again, and strives to work with an efficient system of a 100% savings and a 100% recovery.

But unfortunately, the artisans still continue to suffer towards meeting their financial requirements despite of the efforts put in by Sahayog Organization as well the Government programs towards meeting their needs. Such problems arise mainly due to high costs and low sales (Mohammad Shafiuddin, Personal interview).

Apart from the severe financial problems faced by the artisans of Bidriware, there are many slumps in the working ethics and organizational functions that have been causing problems in the regulation of various policies in this craft. Firstly, a large group of artisans are becoming completely dependent on Cauvery. They are not willing to go to exhibitions, even though the trips are free. They are happy doing work for Cauvery by supplying them with articles and do not take the proposal of establishing personal contacts into serious consideration. This mindset has to change to improve their current condition as Cauvery alone cannot work for the development of 150 artisans at a single time (Mohammad Shafiuddin, Personal interview). Even though Cauvery provides them with subsidies for the benefit of their production, the artisans should be independent and responsible to go beyond the means to build their market and increase their sales.

Cauvery is filled with a lot of stock of Bidriware pieces due to the problem of fewer sales from the showroom. The artisans having knowledge of this happening need to explore new markets to increase the sales or else the craft will not reach to a wider population (Mohammad Shafiuddin, Personal interview).

The second problem faced in the process is that most of the design workshops are not managed in an efficient manner. Workshops are sometimes not conducted with strict procedures and the right guidance. Due to such mismanagement artisans are not able to meet the goals set by the program under the expected time. They fail to provide the number of products that are needed to be produced (Mohammad Shafiuddin, Personal interview). This not only reduces their profits but also reduces their enthusiasm towards these programs. These programs are conducted in the afternoon hours which are the most crucial for them when it comes to making products because they normally

work during these hours. If they see this time does not prove to be of use to them, they prefer to not attend the workshops. The payment that they are assured of as a part of the cost of the time they invest in attending the workshops is not provided to the artisans on time (Laxmi Bai, personal interview). This makes their will of not being present in the workshops much stronger as they prefer finishing their own personal work instead or just finishing the orders of Bidri articles on hand.

The third problem faced by Sahayog to increase the efficiency of the artisans is their place of work. The artisans work in small Common Facility Centres, where a maximum of only three people can work at a time. About 5-6 artisans fit themselves in these rooms due to unavailability of the space to make Bidriware (Mohammad Shafiuddin, Personal interview). Such working conditions are problematic as it reduces the efficiency and increases the time required in the production of materials. Small working centres also cause health problems because small rooms get dusty and dirty very quickly.

Due to all the reasons mentioned above, Mr. Shafiuddin strongly recommends that the government should provide the artisans with a big separate training centre where all of them can work collectively in a space which will be especially allocated to them. This would help them improve their production capabilities as larger amounts of artisans could work together with provision of such facility.

Implementation of the programs also stands as a big challenge in front of the representatives of the Government related to Handicraft development. While the government must make a decision of sanctioning programs to various committees, they have to be more careful in choosing the partners they work with because many committees are not motivated enough to maintain their programs in an efficient manner (Mohammad Shafiuddin, Personal interview).

For example, during the on-field visit by the researchers, it was observed that the EPCH was not able to start their workshop on time because none of the artisans in Bidar had arrived for the workshop. Due to this situation, Sahayog had to leave everything to manage the coordination of this program.

That is why the government should only work with committees that have a history of implementing programs effectively, such as Sahayog. "If the district administration supports us side by side then I will willingly take the lead role and do the work to my fullest potential with the artisans" (Mohammad Shafiuddin, Personal interview).

However, in the field of handicrafts, coordination is a necessary factor for all the committees regardless of the kind and amount of work they do for the welfare of the artisans. Mr. Shafiuddin, the Secretary of Sahayog proposes that all the departments like the Zila Panchayat, DC's office, the Handicrafts office and the local administration should coordinate and work together for the next three to four years (Mohammad Shafiuddin, Personal interview).

They should focus on creating programs like mega cluster programs, exhibitions, subsidy schemes, etc. to uplift the craft from its present condition. If these programs are given serious attention, only then will there be improvements in the life of Bidriware and its artisans (Mohammad Shafiuddin, Personal interview).

EFFORTS TAKEN BY THE GOVERNMENT

Bidriware is a national heritage of Bidar (Anurag Tewari, personal interview). It is one of the most valuable craft traditions practiced in Bidar. Looking at Bidriware from that perspective, it is very important for the Government to improve its condition and things affiliated with it because we're not only helping a lot of poor people who are dependent on Bidriware but at the same time we're also improving the culture of Bidar which gives sustenance to the remaining people who are living there. The Government of India is the largest organization that contributes to the growth of the craft and the welfare of the artisans. Most of the government projects towards the development of Bidriware are under the jurisdiction of Mr. Anurag Tewari, Deputy Commissioner (DC) of Handicraft, Bidar.

The main focus of the Government towards this craft is to provide artisans with welfare opportunities and a sustained livelihood. The people who are involved in Bidriware are given an assured source of livelihood and are provided with beneficiary welfare schemes that reach the artisans in a proper manner (Anurag Tewari, personal interview). The Government has also been helping the artisans by guarding them against various market forces or other forces that hinder their development such as the middlemen in the marketing process. This makes the life of the artisans easier and speeds the growth of their efficacy.

“As Maslow’s hierarchy states, when the basics are taken care of and you have security, only then can any individual rise to that level where he can give his creative best” (Anurag Tewari, personal interview). Such potential comes out from the Bidar artisans in the form of Bidriware which is appreciated and purchased across the world today.

As a lot of tourists visit Bidar, it is very important for developing initiatives towards promoting the tourism in Bidar. Tourist activities could improve the outreach of Bidriware, as Bidriware is one of the most vital tourist attractions of Bidar (Mainak Mondal, Personal interview). The government has started with various types of projects that would assist in attracting a greater population of tourists (Anurag Tewari, personal interview). Heritage monuments are improved, they are beautified, light up, and several types of events are displayed in these monuments, so that more tourists visit and understand the culture of Bidar. When the tourists visit, artisans would get the opportunity to display their articles in these events. "We will be linking the events with the local artisans, for whom the work has been proposed and will start very soon" claimed Mr. Tewari.

Under the city implementation programme, the government has decided to decorate city junctions as monuments with various sorts of designs of Bidriware (Anurag Tewari, personal interview). They are trying to change the look and feel of the city. City structures or important city junctions are being decorated with Bidri structures. This gives the artisans an opportunity to portray their beautiful designs to any person who comes and goes in and out of Bidar. Mr. Tewari believes that there must be developments in market access in order to improve the knowledge of Bidriware.

The government has been taking a special interest towards the poor and hardworking artisans of Bidri. They have been assuring the artisans with basic housing needs such as, cheap food, shelter, clothing and safety. All these facilities are provided through the public distribution system (Mainak Mondal, Personal interview).

In the same context, one such initiative focuses on building houses for all the artists in this district. "As per the Government of India scheme, we are trying to integrate the funds from various Municipal Corporations so that affordable houses can be provided to each and everybody" (Anurag Tewari, personal interview). These schemes have significantly contributed to the betterment of the welfare of the artisans.

The Government has been implementing different types of schemes for the benefit of the artisans of Bidriware. One such initiative focuses on building houses for all the artists in this district. "As per the Government of India scheme, we are trying to integrate the funds from various Municipal Corporations so that affordable houses can be provided to each and everybody" (Anurag Tewari, personal interview). In the same context, the government has been taking a special interest towards the poor and hardworking artisans of Bidri. They have been assuring the artisans with basic housing needs. They provide cheap food, shelter, clothing and safety through the public distribution system (Anurag Tewari, personal interview).

Apart from the necessities, the government has also been implementing schemes for the benefit of Bidriware. They connect artisans to designer institutes, NIFT, Srishti Art School, to train them with advancements in designs, patterns, and use of technologies. They are also working on building a Bidri art and craft centre (Mainak Mondal, Personal interview). In this hall, artisans will be given another chance to exhibit their work to a wider audience. This was recently proposed by Mr. Tewari in the government, and the government has agreed to release an amount of 1 crore in order to construct a huge art and craft gallery. A lot of free venues are also being opened by the government so that they can visit marts, cultural shows or exhibits in various parts of India or foreign countries. In these exhibitions, there will be other art forms also represented by like Chidri art Santpur chappals. "Out of all these creative skills, Bidri is the most prominent of all of them" (Anurag Tewari, personal interview). This reveals the importance for maintaining and improving this craft to ensure its sustainability.

In today's world, market access is an important element needed for enhancing sales. Although Bidriware is famous, people do not have much market access. The government provides market access to the people through linking artisans with companies like Amazon. Online websites reach out to the people who cannot travel to Bidar (Anurag Tewari, personal interview). These online platforms advertise the items manufactured by the artisans, who further help in building their reach of a larger consumer base and increases their chances of earning higher revenues. If the customers purchase the products online, the economy will benefit leading to more initiative by the artisans in developing the craft. "We are building skills of these people; we are trying to send these people out of here for exposure" (Anurag Tewari, personal interview).

There are only six women employed in the manufacture of Bidriware. The government needs to encourage women as this number is very less. But, they have not implemented any such programme that focuses particularly on women. This craft is passed down from generation to generation and if there is more influx of education in this craft and only if there was ability to earn more money through persuading Bidri, the families of this society would encourage young children to pursue this craft (Anurag Tewari, personal interview).

Once the boys and girls start learning this craft, the participation of women will also increase. The Deputy Commissioner firmly says that "Once we get the technology and craft and can achieve more profit, then more laborers will start getting employed."

Bidri is a safe occupation for women as it is a simple occupation where one can sit at home and work towards creating something which has the potential of earning money. Mr. Tewari presumes that a lot can be done about empowering women and their participation in this craft, and had ended his answer with a promise to do so.

For example, under the industrial promotion policy of the government of Karnataka, women entrepreneurs of SC, ST, minor class, backward class or people from non-privileged groups are given better terms of interest rates as far as the banks are concerned. That is one way of promoting women artisans, claimed Mr. Tewari.

As stated above, the government does a lot to provide the artisans with safety within the market. Artisans could still face problems such as exploitation from Middlemen and government officials in the market. To prevent such undesirable situations, the government has followed many measures to maintain the protection of the artisans

A. BANK LINKAGES

Linkages with the banks have helped the artisans getting loans wherein they are not charged interest rates so that they get financial security.

B. MARKET ACCESS

Markets that are out of reach from the place of manufacture can be covered by going on Amazon, Flipkart and other online shopping sites will prevent the artisans from being ill-treated by the middle men.

C. MARKET ACCESS GIVEN UNDER GOVERNMENT PROTECTION

The Government is trying to build schemes so that the best crafts producers get stalls to exhibit their products in the government exhibition. Finally, making sure all the payments are digital, the money flows directly to their accounts and would also be taxed properly so that they are not harassed by any authority. The government has been earning steady revenues through the taxes charged on the items of Bidriware.

D. PROPER LICENSING TO THE ARTISANS

The Government ensures that the artists get proper licenses for production because even small scale industrial activities may face problems from exploitation. So in case of this situation, they are legally protected from authorities so that they feel comfortable with daily transactions.

According to secondary research materials and the data available with the Government, most of the artisans making Bidriware come from an unorganized sector. The unorganized sector is said to face the maximum trouble. In order to encourage artists to legally form enterprises, the government is trying to link the artisans through the Rashtriya Swasth Bima Yojna (RSBY). (Mainak Mondal, Personal interview).

From this step, the government focuses on grouping the artisans (in the unorganized sector) within a society where the artisans can avail of the RSBY. For example, once they are protected, their health is taken care and other such advantages are given. Apart from such benefits, it is advised by the government that the foremost priority is to maintain law and order. This prevents artisans from all types of exploitation which is directly protected from the law of the Indian constitution (Mainak Mondal, Personal interview).

The government has been emphasizing on efforts towards preventing the artisans from economic exploitation. They do so by assembling the artisans into groups and associations. In these groups, the government aims at training and educating the artisans regarding the knowledge of their market and soft skill requirements. However, Mr. Tewari has noticed that sometimes the artists do not understand and are not willing to cooperate with these groups.

Regarding this opinion, he talks about the absence of a co-operative society. Co-operative societies are a powerful business model in promoting the fullest possible participation in the economic and social development of all the people. Even after trying to educate the artisans about the advantages of a co-operative association, the artisans disagree to form one. “They don’t have any bargaining power and are not educated about the market demand of their products; at least they should fight for their own needs.

For e.g. there is something called Leathkar in Bidar, which was an institution formed so that people working in leather industry could come together and form an association. When some of them got good support, adopted technology and capital, they became the biggest producers” (Anurag Tewari, personal interview). The government puts in a lot of direct efforts towards maintaining the security of the artisans. The artisans need to appreciate and work on these efforts and try to make the craft more widely known by marketing it well and increasing its reach to the customers.

CHAPTER 6:

SUSTAINABILITY

The idea of sustainability comes from the concept of sustainable development that was discussed at the World's first Earth Summit in Rio de Janeiro in 1992 ("Sustainability"). The UN Bruntland Commission quoted it as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' ("What Is Sustainability? | UCLA Sustainability") The natural resources on Earth are assumed to be finite and hence we should conserve them by using them wisely by taking into consideration the needs of our children and grandchildren in the future for the same resources.

This whole idea of sustainability when looked at from the perspective of a craft emphasizes that the goods should be produced without damaging the environment or using the resources that cannot be replaced ("Sustainability"). Sustainability is an important factor that helps in understanding the future of the craft and finding pragmatic ways to make it better by pushing the boundaries of our perceptions and looking at it from new perspectives.

From the research, we consider that Bidri craft of Bidar is dependent on the following major elements for its survival in the future-

1. The soil extracted from the Bidar fort
2. The incentives given to the artisans of Bidar and Hyderabad
3. Conditions of artisans of Bidriware
4. The Geographical Indication (GI) tag granted to Bidar
5. The weight of the articles produced
6. Utility of the articles
7. Marketing of Bidriware

1. Soil

Looking at the first and utmost important aspect on which the sustainability of the craft depends on is the soil used in making the craft. This soil is said to be mainly gathered from the fort of Bidar (Laxmi Bai, personal interview; Rashid Quadri, personal interview). However, a few artisans like Rajkumar Nageshwar, Noora Begum and M.A. Rauf claim that it can also be found inside other monuments that are equally old but the shelf life of the articles cannot be guaranteed then. Artisans say that that the soil has to be away from the sunlight and rain for centuries together to be able to be used in making Bidriware (Shaheeda Begum, personal interview).

Artisans have tried taking soil from other places but the results are not the same. The quality has been compromised if soil from other places is taken to make the articles. Either the patina achieved after using the substitute soil is less shiny or the shelf lives of the articles reduce if it is not the soil of Bidar fort (Rasheed Quadri, personal interview). This reason makes its availability a problem as the artisans cannot take the soil from any open areas due to its exposure to sunlight and rain. The soil also has to be away from being stepped by the visitors of the fort to achieve the best patina.

There are thus very few areas even in the Bidar fort which have such soil that can be used by the artisans. Taking into consideration the importance of this soil as a natural resource, even these areas have been sealed by bars and kept out of reach of the artisans. Not just the bars, but these areas are also guarded by security in order to ensure maximum protection (Anurag Tewari, personal interview).



Figure 17: Soil from the restricted area of Bidar fort

The artisans working under the government of Bidar claim that the future of this craft depends on the soil and its unavailability will lead them to discontinue making the craft as it is irreplaceable. However, the independent artisans in Bidar believe the soil of the fort to be never ending and are confident that the craft will keep continuing with God's grace. On the other hand, the artisans of Hyderabad come to Bidar and take the soil from the Bidar fort to make the craft. Their trials of using different soils from Golconda fort and other historical monuments around have also been a failure and hence they also emphasize on using the soil from the fort of Bidar (Laxmi Bai, personal interview).

As of now, there are very few people in the town of Bidar who risk their lives and visit the fort at midnight to obtain the soil and sell it to the artisans of Bidar as well as Hyderabad. A sack of about 5 kgs is sold for Rs. 100 to the artisans with the help of which they continue making the Bidri articles (Rajkumar Nageshwar, personal interview). It has become a usual practice now and this give and take has been continuing for a long time. Artisan Shahida Begum working under the government stated in her interview that the people getting them the soil never ask them about its further utility and the artisans, too, do not bother to ask or know how the soil is being brought from the fort with such strict security around. As long as the exchange of soil and money is taking place and their livelihood is being secured, none of them are bothered to interfere in each other's business and claim to continue working in similar fashion (Shaheeda Begum, personal interview).

The Deputy Commissioner, other officials in the town as well as people residing in Bidar know of this happening but refrain from taking any actions as they know that this is the only means of livelihood for Bidri artisans (Mainak Mondal, personal interview). However, soil is an important resource and it cannot be just taken away by people who have nothing to do with Bidriware as they might start selling it to people other than those working in Bidriware for other purposes which cannot be approved.

To call a halt to this practice, a systematic process is being thought of and is to be implemented soon to avoid the difficulty these artisans are facing to get the soil. This would also withhold other people from getting the hands on to the soil and selling it further. In this process, the artisans will be registered with the government and given particular ID cards to get entry to those restricted areas of the fort to obtain the soil. The quantity of soil taken by them will also be monitored to ensure the protection of the natural resource as well as proper utilization of the soil by the artisans

as per their needs (Anurag Tewari, personal interview). This step to be taken by the Government of Karnataka in the near future sounds promising to increase the sustainability of Bidriware as well as protect the foundation of the fort that is depleting due to excess use of the soil.

2. Incentives to the artisans

For any kind of work to be continued, incentives play a vital role as they act as stimuli and keep the person motivated to go on further. All the independent and government supported artisans claim that the incentives given to them by the Cauvery emporium of Karnataka are not enough to suffice their needs. Only 50 artisans out 150 receive 100 grams of silver along with 6 Kilograms of Zinc every 3 months as per their turn (M.A. Rauf, personal interview). This happens because the Government supplies the raw materials to about 50 out 150 artisans each month. These raw materials are provided to them at a subsidized rate of 50%. In addition, the Cauvery emporium also buys articles worth Rs. 6000 from the artisans in every 2 ½- 3 months (Mainak Mondal, personal interview).

The artisans have complaints about not receiving all the material at one time which obstructs their work due to which they find it difficult to meet the deadline of supply of the articles. The material provided is also not sufficient to make the articles in larger amount which stops them from producing Bidri ware after the raw materials like zinc and silver are over. This is mostly the case with the artisans dependent on the Government as the independent artisans prefer buying these raw materials at market rates once the zinc and silver provided by the Cauvery Emporium are utilized. Artisans like National Awardee Rajkumar Nageshwar and Shilpguru Awardees M.A. Rauf and Rashid Quadri not only make the articles for supplying the Cauvery Emporium but also work on personal orders by customers which enables them to make a profit. Artisans in Bidri colony (Government dependent), however, refrain from doing so as they gain a profit of only about Rs. 2500- Rs. 3000 per 3 months which has to be used in managing the household and so they cannot invest in buying the raw materials for making articles to supply to the customers. Mr. Mainak Mondal, the manager of Cauvery Emporium as well as Project manager of Bidri Art and Craft complex asserted that the raw materials have to be divided between 150 artisans and Cauvery can supply raw materials to only 50 artisans per month because of which the artisans get their raw materials every 3 months as per their chance. Regarding the late payment, the items bought from the artisans have been stocked up in Cauvery showroom as they haven't been sold because

customers prefer objects with lighter weight over Bidriware. This makes it difficult for them to pay the artisans as the showroom itself does not get the money from the sales.

Thus, it can be established that there is a serious need for the artisans, especially the ones working under the government to ensure the awareness and marketing of Bidriware so that the customers buy Bidri articles that would generate sales and thus allow them to receive payment for their goods.

3. Conditions of Artisans of Bidriware

The Bidriware artisans registered under the Government have been provided a colony to live in. It was revealed through interview as well as observation that the two room houses provided are the only reason for the artisans to stay there. There is also no record of this colony in the corporation due to some political issues as stated by the artisans. The artisans cohesively agree in that the payment by Cauvery is not done on time which adds on to their difficulties of livelihood (M.A. Rauf, personal interview). The making of the craft demands long hours of work sitting at one place that leads to joint pain and back problems. The artisans have to constantly indulge in designing, engraving and inlaying in the small dark places available to them which causes eyesight problems. Mr. Mainak Mondal referred to health camps being organized once in every 6 months but the artisans complain of them not being useful enough.

The buffing machine, which is the only machine used in the whole production process can only be availed by with only 7-8 artisans. The rest of them have to be dependent on the 2 machines provided by the government in the Bidri craft complex. Moreover, an amount of 1% is deducted from the profits they earn after selling the products to Cauvery for usage of these machines that further reduces the amount of money entering their homes. They also have to register and wait for their turns to use these machines to smoothen the article which further halts their process in the later stages of production.

Since the craftsmen working under government see no scope of betterment in making Bidri ware and know that other businesses would earn them more profits, they have started shifting to other occupations like fruit selling, flower selling, vegetable vendors, driving auto- rickshaws or working as helpers in the factory. The women artisans also prefer working as helpers and care-

takers in the primary schools as that fetches them more money in terms of the labor they put in daily (Laxmi Bai, personal interview). The present generation children of the artisans take no interest in the craft. The craftsmen have complaints about the government conducting workshops for children in various schools and colleges for recreational purposes but the same does not happen to teach the craft to their children who might actually continue in this profession (Rajkumar Nageshwar, personal interview). Now, the artisans themselves don't want their kids to pursue this profession in the future and so they are taking steps to keep them away from learning and practicing this craft.

This clearly indicates that majority of the artisans will start shifting to other occupations if their condition does not improve. The upcoming generations from their families are kept away from the craft which suggests that there would be no artisans making Bidriware once the present artisans withdraw themselves from the work. The condition of the artisans thus is an important factor that can affect the sustainability of the craft to a great extent.

4. Geographical Indication Tag

The Geographical Indication (GI) Tag is provided by the GI Registry to ensure the protection of the craft in India. Bidar is the main place of origin of Bidri craft but later on the craft migrated to places like Hyderabad and Aurangabad as the craft did not develop much in Bidar. The marketing in Hyderabad however started hampering the recognition of artisans of Bidar as people thought of Bidriware to be from Hyderabad and hence, also preferred purchasing it from there. This thus demanded a need for GI Tag for Bidriware of Bidar to help regain its identity. On being given one, only the artisans in Bidar now have the right to make the craft.

This, however, is not followed and the artisans, who shifted from Bidar to Hyderabad, are still engaged in making the craft. This does not make a great difference in the sales of Bidriware at both the places as people have now started relating Bidri to Bidar and not Hyderabad. Initially, the people in Hyderabad sold Bidri under the name of *Hyderabadi Bidri* which has stopped to quite an extent after Bidar has been granted the GI tag. No other place is supposed to sell Bidri under their name except for Bidar which has attracted a lot of customers to Bidar. The independent artisans claim that Bidar getting GI tag for Bidriware has proved to be a boon for us. The artisans

working under government do not really know what GI tag is but they know and proudly keep saying that '*Bidri Bidar ki hai, kahi aur ki nahi*'.

This has thus ensured to a certain extent that the artisans would continue making Bidriware for times to come thus expanding the sustainability of the craft.

5. Weight of the articles

According to Jagdish Mittal, as stated in the interview, the soil or the incentives given to the artisans are not the only criterion to judge the sustainability of the craft. The weight of the articles is a big issue when it comes to taking the articles to faraway places in India or to other countries. The composition of the alloy of zinc and copper makes it quite heavier and bulky and thus difficult to carry to long distances. This is one of the reasons why the consumers hesitate in buying Bidriware and prefer opting for articles of comparatively lighter weight.

Taking an example of a small object such as a fountain pen, it needs to be light in weight in order for one to write with it. The one made with Bidri work will be heavy as well as fragile and so hardly a few individuals will choose to use it in spite of its good design. An object having a functional value is very important along with its beauty otherwise its design becomes a failure as stated by Jagdish Mittal in his interview. It is certain that the object needs a redesigning when its utility value is very less which in this case is due to the weight of the articles.

Finding a lighter alloy to make Bidriware or changing the proportion of zinc and copper in the articles are two things that can be done. However, such trials have been taken place as reported by the artisans and Bidri does not remain the same after such changes. They cannot afford to lose on the quality and the unique identity of what Bidriware is in itself at the cost of its utility value.

Thus, the issue of weight of the articles still stands as a real challenge in front of the artisans further questioning the sustainability of Bidriware.

6. Utility of the articles

In the times of Bahamani Sultanate, utility objects like hookah bases, dishes, bowls, wash basins, trays, spittoons, ewers, spice boxes, betel boxes, etc were produced by the Bidri artisans

(Rajkumar, Nageshwar). These were used by the Bahamani Sultans and other rich families in the kingdom. Coming to the contemporary times, a lot of emphasis was initially given on show pieces but the artisans as well as officials related to Bidri ware realized that the objects needed to have a functional value in order for it to be in more demand by the public. Working upon this, workshops were conducted and the artisans were taught to make modern day articles one could use in day-to-day activities. This includes jewel boxes, bangles, earrings, pendants, necklaces, paper cutters, key chains, cuff links, chairs, tables, tiles, paper weights, etc. The customers also customize these articles by deciding the type of design they want, use of gold, silver or both together as well as the amount of inlay work they want on these articles. This has contributed to a better sustainability of the craft as fewer raw materials (which include the soil) are being used in making these utility items due to comparatively small sizes as compared to earlier products. The market demand is also increasing leading to more and more consumption of Bidri articles which in turn is also protecting the livelihood of the makers of Bidri ware.

Thus, this change from just making show pieces to utility articles has got a great transition in the market of Bidriware as people have started demanding these articles to use in their houses, offices or for personal purposes.

7. Marketing of Bidriware

Bidri craft being so famous doesn't have market access in today's day and age. Ideas of expanding the marketing of Bidriware have included linking it with companies like Amazon or other online platforms where a lot of revenues are available. This will help people who cannot travel to Bidar or Hyderabad still purchase the products which will help the economy will be benefitted. The artisans of Bidriware, themselves also need exposure. Hence, the government has been taking initiative to send the artisans to visit various marts, cultural shows, exhibitions in various parts of the India as well as in foreign countries. Not just the marketing of the articles, but promotion of tourist activities at the place where these articles are made is equally important. The money that comes to improve the basic infrastructure of the city is utilized in improving and beautifying the heritage monuments of Bidar. Showing the tourists what you have and explaining to them how you get it and what goes into its making is the way of linking the market with the artisans. For the same, the articles of Bidriware are built in cement concrete on the inter-junctions under the city

implementation programme to change the look and the feel of the city (The Hindu). This will be the main highlight for people entering Bidar as they would be curious to know about these structures which will help in promotion of Bidriware.

CONCLUSION

As far as the understanding of artisans and academic scholar, Rehaman Patel is concerned; Bidri craft was born in Bidar and is a 500 years old craft that originated in the year 1422. The craft nourished during the reign of Bahamani rulers and then gradually migrated to other parts of India. The other places included Patna, Lucknow and Murshidabad; still the craft belongs to Bidar itself.

They believe that the artisans who had come to build the Rangin Mahal of Bidar fort were trained to make the Bidri craft. The greatest contribution was made by craftsman Abdullah bin Kaiser in the process of developing this craft. Between 1422 and 1436 Ahmed Shah Bahmani and his son Allauddin Bahmani II played a major role in introducing the Bidri art to people. The craft is made in seven stages with 1-17 workers. The important stages include moulding, filing, designing, and engraving, inlaying and oxidizing. The different processes are performed by the moulder, the engraver and the inlayer.

However, Jagdish Mittal, writer of the book Bidriware and its Damascene the origin of the Bidriware suggests that the origin of Bidri should be around 1610-1615 because the work during this period was more refined as well as polished. So Bidriware in Hyderabad started between 1600 and 1634. The second evidence is that the huqqa smoking was not known by the Mughal court when Assad bay came to Bijapur. This indicates huqqa bases were started being made at the time of 16th century, so did Bidriware.

There have been no specific changes made in since recent times and it is assumed to remain the same in the near future. The main components i.e. zinc and copper that makes the alloy for making Bidriware were used in the proportion of 16:1 in the earlier times; however, the usage of copper has increased over years as it was found that its quantity played a significant role in lending the black shine (lustre) to Bidri articles.

The practice of using gold for inlaying has gradually stopped owing to its rising prices. The artisans in Hyderabad however, use brass along with silver for inlaying the Bidri articles to cut down on production cost. As Bidriware is a handicraft, machinery is avoided to maintain the precision.

The only machine used in the making process is the buffing machine used to make the surface of the articles smoother. Earlier it was done with leather and cloth but they have slowly adapted the modern-day technology.

Soil is a unique factor to ornament the Bidri craft due to its oxidizing agents. The lustrous black colour of the craft is due to the ingredients of the soil. The soil has an impressive nature of converting silver and zinc metals to black. This soil is collected by the artisans from the inner areas of the fort and it is said to not have received sunlight or rain for centuries together.

A lot of the techniques have been developed recently but Tarkashi and Fooljhari work are the most widely used technique as these are relatively easier techniques and are less time consuming. These techniques are suitable for bulk orders hence are used for corporate and commercial use. The designs that can be made using Tarkashi technique is wide and this technique can be implemented on various products, many of the products that were observed on field were Tarkashi work and most of the artist predominantly practice this technique. The designs that are used have moved from floral designs to geometric designs to suit the taste of the current market. Bidriware is becoming lighter and smaller in size to make it easier to transport and this leading to it becoming more attractive commercially.

Sahyog has been the backbone of many activities that focus on the growth of Bidriware. Their contribution to this art has proven to provide incredible results in terms of the evolution in various sections of this craft. From our journey, we not only understood the developments in this craft but also learnt about the different ways the NGO and other programs can contribute for the benefit of the society of Bidriware. We as students were encouraged by Mr. Shafiuddin drive towards improving this craft as he spoke to us with a lot of conviction and motivation. Sahyog can do a lot more for this culture and artisans of this craft. It's just a matter of adequate financial support and responsible management towards initiatives that speeds the growth of Bidriware.

The socio-economic factors such as intensive labour and fewer wages, apart from handling their household were the primary reasons why there were fewer women artisans in the trade. Some of them also worked as artisans to support their families because their existing income was insufficient to meet their expenses. But the wages earned were still less, therefore they either left the craft or switched to other profitable professions. It was also found that Bidriware was

commonly practiced by the Muslim community in Bidar as well as Hyderabad, with fewer artisans belonging to other religious backgrounds. This could be attributed to the fact that the craft flourished under Islamic dynasties as mentioned in the secondary sources.

In this report, we have presented information about the various programs adopted by the government towards the growth of Bidriware. The key features of their efforts focused on building a stronger market, developing the economy of this craft and improving the livelihood of the artisans. The government programs are suitable for all the artisans throughout Bidar. These assistance schemes successfully eliminate the difficulty of operating in Bidriware.

The government has been providing solutions which are economically and socially viable, due to its meaningful implications and responsible efforts. It was found that all these developments are being carried out successfully. Each program features improvements in the standards of Bidriware in terms of its performance and safety.

Mr. Tewari has recommended changes which have proven to be more economical in terms of both manufacturing and running costs. However, there are still many areas where the government could improve the situation of Bidriware. The most important is financial planning. While some may argue for better facilities or more financial programs, stronger financial planning would establish these means of supporting the artisans. Mr. Tewari has elaborated on the measures taken to improve the financial conditions of this craft. He is determined towards spreading the knowledge and improving the revenues generated by this craft.

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Appendices:

Artisans

1. What do you know about the Bidri?
2. How was the craft brought from Rajasthan to Bidar?
3. Why has it migrated to Hyderabad?
4. What is the difference between the design then and now?
5. How is Persian influence seen on the craft?
6. Who brought it to India and why?
7. Which are the most frequently used techniques in making Bidriware?
8. Under which techniques do the artisans see most profits?
9. How are the various techniques different from each other?
10. Do the prices of the materials used in the preparation of goods affect the craft in anyway?
How ? What are the effects?
11. Which techniques are used today and which of them are rarely used?
12. What quality does that soil possess which makes it unique and irreplaceable?
13. Are there any alternatives to the soil to sustain the craft?
14. Has the soil and its properties changed over time?
15. How sustainable do you think the craft is?
16. Will it manage to exist after the soil is over?
17. If there are other factors, how are they similar/different in Bidar/Hyderabad?
18. Are you provided private funds by private supported organizations or independent artisans?
19. Are you provided with incentives by the government bodies?

NGOs

1. How do you think you can contribute to encourage artisans to pursue this craft?
2. What are the strategies used to make the masses aware of Bidri?
3. What changes has it made to the current scenario of Bidri?
4. Can artisans procure a sustainable livelihood by means of their craft skill?

5. Do the families encourage women to master the art by teaching them the use of tools and techniques or are they far away from this learning?

Curators

1. Can you give us a brief about Bidri ?

Senior and Govt Officials (DC, etc)

1. What do you know about the Bidri?
2. Are you funded enough by government and Ngo's ? If yes, how? If no, why and what help do you need? (*needs rephrasing*)
3. Are there any alternatives to the soil to sustain the craft?
4. How sustainable do you think the craft is? [Does the art exist only till the soil lasts?]
5. Will Bidriware manage to replace the soil with other material?
6. What are the other factors which affect the sustainability apart from the soil? Globalization/Commercialization?
7. If there are other factors, how are they similar/different in Bidar/Hyderabad?
8. Has the GI tag confined the craft to Bidar or has it helped? [e.g. does the unique tag prevent BIDRI from flourishing in terms of artisans and sale]
9. Is there some metal which can replace gold or silver to keep the art sustaining with respect to increased costs?
10. Will shifting to the land sanctioned by government for the traders to set up trade affect sales anyhow?
11. How do you think you can contribute to encourage artisans to pursue this craft?
12. What are the measures being taken for the revival of the craft?
13. What is the existing number of artisans according to current survey?
14. Are the artisans provided with incentives by the government bodies?
15. Are the artisans provided private funds by private supported organizations or independent artisans?
16. What are the strategies used to make the masses aware of Bidri?
17. What changes has it made to the current scenario of Bidri?
18. Can artisans procure a sustainable livelihood by means of their craft skill?

19. What are the growth opportunities that govt. is providing women in terms of employment
20. Have they contributed significantly in the history and brought about noticeable changes in the art form?
21. Are women given equal incentives as men for their contribution in the art form?

Women

1. How much has been the contribution of women in the field of Bidri?
2. Do you get to work in your field of interest areas or do you have to work where your family asks you to?
3. Do the families encourage you to master the art by teaching you the use of tools and techniques or are you far away from this learning?
4. Are women given equal incentives as men for their contribution in the art form?

Rehaman Patel: Academic Scholar

1. Has the soil and its properties changed over time? Environmental factors? Urbanization?
2. How do you think you can contribute to encourage artisans to pursue this craft?
3. What are the other factors which affect the sustainability apart from the soil? Globalization/Commercialization?
4. Is there some metal which can replace gold or silver to keep the art sustaining with respect to increased costs?
5. What are the strategies used to make the masses aware of Bidri?
6. Has the GI tag confined the craft to Bidar or has it helped?