

## ABSTRACT

### Introduction

The north eastern part of India is very rich in cultural diversity, one among the rich biodiversity hotspot. The State of Assam is a constituent unit of the Eastern Himalayan Biodiversity Region; one of the two biodiversity “Hot Spots” in the country, out of the 17 Mega biodiversity country in the world. The climatic condition and wide variety in physical features witnessed in Assam have resulted in a diversity of ecological habitats such as forests, grasslands ,wetlands, which harbor and sustain wide ranging floral and faunal species, yet trouble torned emphasis on industrialization with NEIPP hasn’t made much difference in the past 30 odd years, more so since independence most people are dependent on agriculture and the economy is mostly dependent on service sector. India is one of the very few countries which skipped industrialization and jumped directly to services after agriculture baring the existence of mega industry in the OIL and Tea sector of the North East

However, the cottage industry front showcased richness in its originality and craftsmanship in **Cane, Bamboo, Textiles, Jewellery, Bell Metal** yet the same with the passage of time have beared the burnt of competition and now struggling to survive. Though major emphasis in the form of MSME Act 2006 did usher some hope of revival

With a view to understand the eco system of the small business in general, specific to the NE India and with a greater emphasis on the Bell metal industry of Assam the researcher had studied extensively the problems that is facing the Bell Metal industry of Assam specially in “Sarthebari” which is the major producer of Bell Metal products. The artisans use traditional methods which has been passed on from generations to generations by their ancestors to produce Bell Metal products but with the change in time there is stiff competition from the Bell Metal products which are produce in other parts of the country with modern machines.

- **About the Study Area – Assam.**

Assam is one of the medium-sized states of the country with an area of 78,500 sq km and a population of 3.92 crore. 'Assam' is the anglicized form of the word 'Asom' which means 'uneven' or 'unparalleled'. According to another interpretation, the word 'Assam' is derived from the word 'Ahom', the Tai Mongoloid race who ruled most of the Brahmaputra valley for over 600 years till the coming of the British in 1826. Assam's is essentially a river valley civilization. Going back into history, one finds Assam to be an ancient land that figured prominently in international trade even before the birth of Jesus Christ. Chang Kien, a Chinese explorer, had traced his country's trade with Assam as far back as in 100 BC.. The earliest footprints were those of Austric aborigines who were followed by the pre-Dravidians. When opened, the eastern migration routes witnessed the arrival in quick succession of several Mongoloid groups of people who came to populate the land almost totally by the time of the Vedas. Most of the present tribal groups of the North-Eastern region are off springs of those Mongoloids, whom the Vedas referred to as the Kiratas. The ancient name of Assam was Pragjyotisha, with present-day Guwahati being known as Pragjyotishpura, the city of Eastern Lights. Pragjyotisha, subsequently known as Kamrupa, had then covered a much larger territory, at times extending as far as the border of Nepal. Hiuen Tsang, the famous Chinese traveller, gives a detailed account of Assam of the seventh century, when King Bhaskaravarman enhanced the power and prestige of Kamrupa to an extent never achieved before. In the 16th century, the Koch kingdom attained great heights in western Assam and present day North Bengal. Naranarayan, who is believed to have reigned from 1533-1587 AD, was the greatest among the Koch kings. The Mughals made repeated attempts to conquer Assam but without success. The Ahoms were remarkably successful in resisting the Mughals. However, in 1661, Mirjumla was deputed by Aurangzeb to conquer Assam. Guwahati, which came under the Mughals after Mirjumla's success, was won back by Lachit Barphukan in 1667. The battle royal between the Mughal and the Ahoms were fought at Saraighat near Guwahati in 1671. Assam came under British domination after the treaty of Yandaboo between the Burmese and the British company in 1826. From about 1857 till 1947.

- **The Socio Cultural –Economic Context of Assam**

The people of Assam have traditionally been craftsmen from time immemorial. Though Assam is mostly known for its exquisite silks and the bamboo and cane products, several other crafts are also made here. Different regions of Assam are known for their different forms of art and handicrafts, out of which Bell Metal, cane and bamboo, jewellery and pottery comes under small and cottage industry and the age old famous tea and oil comes under the large scale industry. The various crafts of Assam are as follows

- **Crafts of Assam**

The indigenous handicrafts that in other parts of the country are confined to professional casts, were practiced as household industries in the valley of the Brahmaputra. In Assam there is no dearth of raw materials, indigenous manufacturers consists of thread and fabrics, cotton textiles, brass and bell utensils, oil extracted from mustered “Til” seeds “Gur” or molasses, jewelries, articles of ivory and agriculture implements. Every family in Assam prepares handlooms to meet the requirement of the household. The loom were intact the center of domestic economy the only hope of salvation in the hour of distress or despair. Assam has maintained a rich tradition of various traditional crafts for more than two thousand years. Presently, Cane and bamboo craft, bell metal and brass craft, silk and cotton weaving, toy and mask making, pottery and terracotta work, wood craft, jewellery making, musical instruments making, etc. are remained as major traditions. Historically, Assam also excelled in making boats, traditional guns and gunpowder, colors and paints, traditional building materials, utilities from iron, etc.

- **About the Bell Metal Industry in Assam**

Metal bells entered into production in 2000 BC, in Ancient China bells were made from various metals who had many deficiencies (problems with oxidations, low elasticity, easy to be damaged by weather) and which were often unsuitable to produce resonating “attractive” sound that we know today. After centuries of practice, innovation and technical advancements, modern bells finally received their current form that enables them to remain in use up to 3000 years. The most crucial way they were able to do so is in discovering precise mix from witch their base component was made – 3000 year old bell metal.

Bell metal is a type of bronze that is used not only in manufacture of bells, but also for many other items such as eating utensils (especially in India), figurines, sculptures and production of

early European cannons. Bell metal that is intended to be used in creation of functional and nicely sounding bells is a precise mixture of copper and tin. They are mixed in the ratio of about 4:1 (78% copper, 22% tin) and even though they are soft and formable metals, their joining create sturdy, slightly elastic, nicely vibrating, hard, least ductile, and long wearing alloy that can resist oxidation and weathering, all properties that are perfect for bells. Verdigris that forms on their surface with the interaction to atmosphere creates a very useful protective patina that protects the bell against the further oxidation.

### ○ **Cultural History of Assam**

The culture of Assam is traditionally a hybrid one, developed due to cultural assimilation of different ethno-cultural groups under various politico-economic systems in different periods of history. The roots of the culture go back to almost two thousand years when the first cultural assimilation took place with Austro-Asiatic and Tibeto-Burman as the major components. With reference from the great epics Mahabharata and on the basis of the local folk lore it is also hypothesised that there was probably a strong kingdom of these mixed population (of Austro-Asiatic and Tibeto-Burman origin) in the era before Jesus Christ, which led to an early assimilation at a greater scale.

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to be damaged by weather) and which were often unsuitable to produce resonating “attractive” sound that we know today. After centuries of practice, innovation and technical advancements, modern bells finally received their current form that enables them to remain in use up to 3000 years. The most crucial way they were able to do so is in discovering precise mix from which their base component was made – 3000 year old bell metal. Bell metal is a hard alloy used for making bells. It is a form of bronze. Bell Metal alloys have been in use for workshop art in India from time immemorial perhaps as old as the temple building activity itself. Bell metals are used to produce variety of items both for utility and aesthetic purposes. Indian Bell metal work is distinguished by ornate and sophisticated designs, finesse and finish. Bell metal casting in Madhya Pradesh is essentially a tribal craft, practiced by non-tribals in Bastar, Prampur, Datia and Sagar, originally for the requirements of tribals alone. The Moria Community of Assam Brass and bell metal works were highly developed throughout Assam in the past. Brass metal work is the ancestral occupation of the Moria Community people. According to Assam history tells, these people were originally warriors; it was during the battle of Hatbor and DuiMuniSila of Silghat in 1532 AD, the Muslim invaders were repulsed by the Ahoms and their General Turbaq was killed. In that battle the Ahoms captured 900 Muslim soldiers. Later, these prisoners were settled in different parts of Assam, married local Assamese Hindu girls and became an integral part of the society.

**Bell Metal In Assam.** At first Bell Metal industry in Sarthebari was carried on under the patronize rich traders (Mahajans)’. This rich traders under whom the workers were doing the jobs were not giving their proper portion of their share. In the year 1933 a farsighted gentleman named Kohiram Das started a Co-Operative society among the brass and bell metal workers because the workers were deprived of the proper share and the benefits. The artisans were not giving proper remuneration proportion to their work. They were always deprived of proper wages. This co-operative was known as Assam Co-operative Bell Metal Utensils Manufacturing Society Ltd. He was the first secretary in this establishment. ”. The society was registered under co-operative act 1939. The main principal of cluster is that collaborating while competing in a similar product and opportunities in particular area with the same flexible specialization. Clusters are considered to increase the productivity with which industry can compete, nationally and globally. A sectoral and geographical concentration of enterprises in particular small and medium enterprises (SMEs) faced with common opportunities and threats. The brass & bronze metal utensils cluster of Mirzapur city is one of the oldest

clusters in the country. The cluster actors are reporting that the cluster is running 150-200 year back or more than four generation of present enterprises. We observed that the main reason of development of brass industry is due to availability of raw material, sand traditional skill and need. The brass and bell metal of Hajo and Sarthebari (Assam) cluster is also one of the oldest cluster of the country, it was run since the four-father generation of present enterprise. We had observed that main reason for the development of brass metal is due to the people out here are in born skill and easily available of raw material.

- **MSME Act 2006**

The conceptual and legal framework for small scale and ancillary industrial undertakings is derived from the Industries Development and Regulation Act, 1951. The Act provided the necessary powers to the Central Government to amend the provisions of this act from time to time so as to encourage small scale and ancillary undertakings. The Small and Medium Enterprises Development Bill 2005 which was enacted in June 2006 was renamed as “Micro, Small & Medium Enterprises Development Act, 2006” aims at facilitating the promotion and development of small and medium enterprises. Various notifications issued by the Central Government from time to time relating to increase in slap rate of investments in plant & Machinery for manufacturing enterprises and equipments in service enterprises provides a clear cut proof that the economy of our country is striving towards achieving the economies of scale by increasing the volume of production of goods. The Micro, Small and Medium Enterprise Development Act, 2006 (MSMEDA) extends the scope to accomplishes many long -standing goals of the government and stakeholders in the MSME sector including the service sector.

- **Statement of the Problem**

The bell metal industry in India employees a large number of artisans and workers and produce variety of goods ranging from low value household goods to high value decorative products. The entire industry is very unorganized where the artisans work from their home. The working condition is very poor, long working hours and the earning is meager. The artisans are exposed to the exploitation of the middleman in absence of a well established marketing link and very little or no access to credit from any bank or financial institutions. Most of the artisans being either uneducated or semi literate and not

aware of the different development schemes of the government and also about the modern tools and technological up gradation productivity improvement and cost reduction. The artisans have no exposure to the market condition and demand pattern that is prevalent in other parts of the country. They do not have strong and active association to represent the pitiable condition to the authorities. They are also deprived of credit facilities by various financial institutions which is affecting the production process adversely. The people of Assam are emotionally and culturally attached with the utensils of the bell metal industry .But in recent years industry has faced some serious problems threatening its existence .The present condition of the industry is very critical. Most of the artisans are faced to leave the industry. The socio economic conditions of the artisans are deplorable.

○ **Objectives of the Study :-**

- 1) To study the social status of the artisans engaged in the bell metal units of Barpeta district.
- 2) To study the Need- gap analysis of the industry
- 3) To study the level of performance of small and medium enterprise engaged in manufacturing of bell metal products.
- 4) To prepare a innovative marketing strategy for bell metal industry in Assam

○ **Research Methodology: -**

The bell metal industry in Sarthebari generally runs on a small scale. There are about 280 units constitute the entire industry: most of them are active at the time of field survey. Most of the units are not registered with the Directorate of Industries, nor Govt. of Assam, The information was collected through questionnaire and on the spot personal interview with artisans, government officials, officials of Assam Co-operative Bell Metal Utensils Manufacturing Society. Field survey as well as empirical studies were used for collecting various types of data and information. The two sources of data collected are i)Secondary ii) Primary. The secondary data were collected from Directorate of Industries, Directorate of Assam Small Scale Development Corporation, Assam Co- operative Bell Metal Utensils Manufacturing

Society, and District Industrial center, Barpeta . Relevant books, journals, souvenirs, papers and various reports from different agencies, like khadi and village Industries Board, Assam khadi and village Industries Commission, Hand loom and Handicraft Industries. The primary data were collected from direct field observation and survey of bell metal units. For this purpose questionnaire were prepared, The questionnaire include question on Socio-economic, annual income, wage, recreation, raw material, tools, business, capital, marketing system, production and process etc. The questionnaire comprised of personal data, recruitment of labour, size of family, standard of living, welfare and trade unionism etc. In the 280 units the total number of artisans engaged is 1720 persons. The researcher have taken the confidence level of 95% and confidence interval of 5% and inserting these figures in the Sample Size Calculator , the researcher have got 314 as the sample size, and to make it a whole figure the researcher have rounded it to 320 samples. According to Director of Industries, MSME there are total eight different clusters in Assam which are taken for development since 2003, out of which two clusters belong to Bell Metal ie.i) Brass and Bell Metal Industry Cluster, Hajo located in Kamrup ii) Bell Metal Industry Cluster located in Sarthebari, Berpata, Assam. Among these clusters there are 276 registered units and 4 non registered units where total of 1720 artisans work the researcher have surveyed the registered units and found that there is no government help that are provided to the registered units and non registered units are also far from receiving any government help, so there is not much of difference between registered and nonregistered units. . The Assam Co- operative Bell Metal Utensils Manufacturing Society ( Asom Samabai Kahar Sangha), Assam Samobai Kahar Silpi Santha, District Industrial center, Barpeta District were also visited for essential data, during the course of investigation the Bell metal artisens heisted in giving the information regarding the various aspects of their units. The researcher however got over the difficulties by personal persuasion and assurance of confidentiality and for academic use only. The collection of the detail information from the bell metal units posed a more serious problem since most of the enterprise were run by proprietary or partnership concern and hence they have no obligation to disclose on a regular basis their financial statements. The data supplied by the artisan were generally based on

the approximation of their memories. They have neither maintained proper books of accounts nor they have prepared their profit and loss statements to evaluate their operational efficiency. The data collected from the secondary and primary source are calculated, analyzed and interpreted using various statistical and cartographic techniques. Bar diagram, pie diagram, Co-relation coefficient (Pearson's) method also used to show the relationship of supply of raw materials and production of finished products of the units in the study area. Cartographic technique was used to study the socio-economic condition and standard of living of the workers. Survey was conducted taking the household dealing with bell metal artisans in Sarthebari Town and its adjoining villages. During the time of survey of household, the bell metal industry had been mostly found in Sarthebari town committee area and other villages namely Namsala, Karakuchi, Gomura, and Lachima. The household survey was done in the month of November, the organization related to marketing, supply and store of bell metal products were also considered. For the purpose of the analysis of the data obtained, annual income size wise classification of these 280 units had been done so as to examine the comparative performance of the small units (annual income less than 15,000/-) medium units ( annual income less 15,000/- to 20,000/-) and large units (annual income above 20,000/-). The sets of questionnaire were divided for the study and the information were sought for from the Director of Industries, Managing Director of Assam Small Scale Industries, The Assam Co- operative Bell Metal Utensils Manufacturing Society ltd., Sarthebari, including the branches of Sarthebari Natun Bazar and Director of Industries, Barpeta. Detailed questionnaire at the level of artisans was prepared and collected information from the units. With the help of field survey various information were collected on the related crafts through personal interview with the artisans. For preparation of this study various reports and studied carried out by a number of organizations, agencies and scholars on this fields. Moreover, at the time of field survey learned and experienced people associated with this craft and their views were taken while preparing the reports and making suggestions

The main findings of the study can be summed up as follows:-

- Most artisans do agricultural activities besides their engagement in the industry. A family members help in this respect.
- Most of the units do not provide proper shades to the artisan where they used to work.
- The bell-metal industry is not growing but it is declining slowly due to mainly scanty supply of raw materials, non availability of credit facility and competition from substitute products.
- All the 280 units in Sarthebari area are unable to procure scrap bell metal from their own resources. The units are dependent on the wholesale suppliers and partly on co-operative societies.
- The Assam co-operative bell-metal utensils manufacturing society ltd. ,Sarthebari was started in 1939-40 with a view to promote the economic and craftsmanship of the artisans of the state. Also to facilitate with raw materials, equipment and other facilities required for the industries. But the society could supply only 20% of the raw materials to the units. Thus society could not achieve its objectives and goals. Ultimately most artisans depend on the '*mahajans*'(Money lender)to run their units.
- . The artisan's average working days in the industry are not more then 15-17 days in a month.
- There is no improvement of tools that are being used in the units. The artisans fail to adopt new designs to suit the taste of modern customers.
- Most of the artisans never maintain expenditure accounts. Artisans are poor and there is no surplus amount to invest in the industry.
- The major share of the profit of the bell metal industry goes to the traders and the middle man.
- Cottage industry in Barpeta district is providing employment to more than 5000 indigenous people.
- Assam government Marketing Corporation and its branches in Assam are not making any arrangement to purchase scrap bell metal and sale the stock to meet the requirements of the artisan of the state.
- There is substantial increase in wages with the current rate of inflation; therefore artisans are not getting their proper wage.

## Suggestions for Marketing of Bell Metal Products.

1. Window display of bell-metal product in all possible manner, all the promotional and marketing organization, must display local items in various airports, railway stations, bus stands, commercial centers etc. which will help the local artisans to get more orders from foreign tourist, traders, marketing organization etc.
2. Social media networks allow thousands of people to network with each other, Networking with different people through these sites is an excellent way to create new contacts, and potentially create new customers for the Bell Metal products.
3. The most valuable part of marketing using social media networks is that, it allows people to market their services to a large market at no cost. Thousands of people enter these sites daily. The popular network Facebook offers a free classifieds section where people are able to post things such as, items for sale, or services available. Bell Metal units can place advertisements for their products or services and able to reach mass market free of charge.
4. Social media makes feel "real" to consumers. The information regarding the products can be provided and the opinion, requirement, and suggestions about the consumers regarding the Bell Metal products can be shared.
5. Bell Metal units can use social media to promote their own identity. They can create relationships using social media with people who might not otherwise know about their products the units are manufacturing and the genuine prices of the items.
6. To identify high growth rates, new product categories like small souvenir made of bell-metal which can be promoted by various state government departments like tourism, cultural and industrial department on a continuous basis. Small decorative bell-metal items like key chain engraved with the various important monuments of Assam can be made for the national and international tourist.
7. Placing paid advertisements, such as banners, on social media sites can also benefit a Bell Metal industries greatly based on the amount of hits the sites receive each day. Thousands of members view these pages daily which means ads placed on these sites will reach a mass audience.
8. The artisans can reduce their cost of production by the use of coal instead of wood charcoal in their furnace, as wood charcoal is becoming scarce and is very expensive.

9. Marketers of Bell Metal units can monitor social networking sites, to read up on how people are viewing their brands. These sites allow them to see what their competitors are doing, and how customers view the competition. Receiving this feedback from customers allows marketers to understand what the target market is looking for, what people like about their products or services, and what needs to be improved.
10. Establishment of superior quality and traditional belief in customers mind, generating loyalty through long-term customer relationship and high quality services to increase the sales volume of Bell-Metal products
11. To bring superior quality in bell-metal product by setting up small furnace where the fire can be control and the furnace can be used by the bell-metal artisans in their work place. And to make intensive use of electric polishing machine by the artisans, to achieve the shine and luster to the finished products which is needed to compete in the market.
12. To maximize the productivity and quality of the artisans, they should be given incentives for their skills and effort they put in. Incentive motive for worker who gives their best. Traders should change their attitude towards artisans and markets. They should not become obstacles between market and artisans. They should maintain conducive relationship with artisans in promoting their product and they should help in establishing proper market information channel.
13. Government should give protection of Sarthebari Bell Metal industry under trademark and registration of its geographical indication. Facebook, twitter, linked-in and a number of other social media sites offered enhanced advertising options. The government should have a page on Bell Metal products in the websites, as it is one of the fastest growing marketing channel in modern times. It should also tie – up with various online website like Amazon, e bay etc for the sale of its products.
14. Advertising of Bell Metal products through mobile devices as 51% of the time of a internet user spends on mobile and 38% of the mobile user opens face book every day . Encouraging most of the retailers to get them self registered under MSME as MSME buy back 15% of the products made from Bell Metals for the government consumption.
15. Product should be diversified into small decorative items in close consultation with the artisans , products like key chimes, coaster, small wall hanging xorai, wind chimes

mementoes of different monuments of Assam etc to keep pace with the changing taste of the customers. Training from government recognised institutes like Metal Handicraft Service at Moradabad, NEDFI, SISI etc should be provided to the artisans at regular interval to keep themselves upgraded with new technologies of production.

Opening up of more online stores like Kahi Bati com., Assam Silk com. will open up new avenues in increasing demand and providing genuine product in the market and setting up of Common Facility Centers(CFC) and raw material banks with the help of government agencies for the steady supply of raw materials at a reasonable rates throughout