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“Entrepreneurship Development of Cluster Industry in Assam” with special emphasis to Bell metal Industry of Sarthebari

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Abstract

The word Entrepreneur is derived from the French word, “*Entreprendre*” which means to “undertake” i.e., the person who undertakes the risk of new enterprise. The word entrepreneur, therefore, first appeared in the French language in the beginning of the sixteenth century. The concept of Entrepreneurship development in the North Eastern region of India ended around or in about 1973, North Eastern Council (NEC) seems to have played an important role in evolution of this movement over year. NEC was not along about other agencies like the Industrial Development Bank of India (IDBI) in 1985 along with Small Industries Development Bank of India (SIDBI) in 1990 have also joined or indulged themselves in this activity by sponsoring the EDP’s. The region is industrially backward and has been declared as category ‘A’ (Industrially Backward Region). Industrial backward of this region is reflected in the fact that the contribution of the manufacturing sectors to the state domestic product of region is much smaller than the contribution of this sector to the national product in the country. The bell metal of Sarthebari (Assam) cluster is also one of the oldest cluster of the country, it was running since the four father generation of present enterprise. The main reason for the development of bell metal is due to the skill sets of the artisans who had been working for ages. The Bell Metal Industry is presently facing acute problems in the procurement of raw materials, financial assistance from government and different intuitions, lack of training facilities, transportation, marketing etc. The artisans have been sufferings from basic facilities like drinking water and sanitation. As a result, health of the workers including their family members was not in good conditions as they are sufferings from various ailments. So if proper care and assistance is not given by the government, then the industry will perish in the future.

Key Words: North Eastern Council (NEC), Small Industries Development Bank of India (SIDBI), Industrial Development Bank of India (IDBI).Entrepreneurship Development Program(EDP)

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A cluster is a geographic concentration of interconnected businesses, suppliers, and associated institutions in a particular field. Clusters are considered to increase the productivity with which industries can compete, nationally and globally. In urban study, the term agglomeration is used. The main principal 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 sectorial and geographical concentration of enterprises in particular small and medium enterprises (SMEs) faced with common opportunities and threats.

This term industry cluster, also known as a business cluster, competitive cluster, or Porterian cluster, was introduced and the term cluster popularized by Michael Porter in *The Competitive Advantage of Nations* (1990). The importance of economic geography, or more correctly geographical economics, was also brought to attention by Paul Krugman in *Geography and Trade* (1991). Cluster development has since become a focus for many government programs. The underlying concept, which economists have referred to as agglomeration economies, dates back to 1890, and the work of Alfred Marshall

CLUSTER APPROACH OF INDIA

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. At present there are more than 300 units enterprises manufacturing brass utensils or similar work, most of the persons belong to KASERA & AGRAWAL caste and the total direct employment of the cluster is approx, 5000 persons and indirect employment is also 5000 persons. Urban and rural Industrialization is the most important thing in our country for development of our small scale Industries.

The bell metal of Sarthabari (Assam) cluster is also one of the oldest cluster of the country, it was run since the four father generation of present enterprise. The main reason for the development of bell metal is due to the skill sets of the artisans who had been working for ages .

INTRODUCTION OF ENTREPRENEUR

The word Entrepreneur is derived from the French word, “*Entreprendre*” which means to “undertake” i.e., the person who undertakes the risk of new enterprise. The word entrepreneur, therefore, first appeared in the French language in the beginning of the sixteenth century. The word was also applied to leaders of military expedition. But it was Richard Cantilon, an Irishman, living in French who first used the term entrepreneur to refer to economic activities. According to Cantilon: “An Entrepreneur is a person who buys factor services at certain prices with a view to selling its product at uncertain prices”. Thus, to Cantilon, an Entrepreneur is a bearer of risk, which is non – insurable. According to *A.H. Cole* has defined entrepreneurship as “the purposeful activity of an individual or group of associated individuals, undertaken to initiate, maintain, or earn profit by production and distribution of economic goods and services.” *Mc. Clelland*, like other specialist, identified too characteristics of entrepreneurship, i.e. first, doing thing in a new and better way, secondly, decision making under uncertainty. He more explicitly emphasized achievement motivation as the most critical factor for the growth of entrepreneurship. According to *Peter Druckur*: - Entrepreneurship is neither a science nor an art. It is a practice. It has a knowledge base. Knowledge in entrepreneurship is a means to an end. Indeed, the ends that are by the practice largely define what constitutes knowledge in practice. Entrepreneurship is not just about many. It is about imagination, flexibility, creativity, willingness to think conceptually, readiness to take risks, ability to mobilize agents of production and the capacity to see change as an opportunity. It is also about marrying passion and process with a good dose of perseverance.

$$\begin{array}{ccccc} \text{Entrepreneurship} & = & \text{Entrepreneur} & + & \text{Enterprise} \\ \downarrow & & \downarrow & & \downarrow \\ \text{(Process)} & & \text{(Person)} & & \text{(Object)} \end{array}$$

ENTREPRENEURSHIP IN INDIA:

The review of ancient literature proved that ancient Indians took up a variety of commercial vocations akin to present – day entrepreneurial activities. The first phase of entrepreneurship emerged when the Aryan conquerors settled down in this country by suppressing the non-Aryans. They appropriated the products of village communities to themselves leaving a little for the villagers or natives. Thus, the main conflict of ancient Indian society begun. The Arians were

faced with the problem of innovating new crafts occupation and also evolved some kind of division of labors for new handicrafts, breeding of cattle and cultivating land.

The ancient literature like Manusmriti has provided a clear idea about entrepreneurial class of people during ancient period (pre-Vedic). According to Manusmriti, “people belonging to Vaisya cast were regarded as entrepreneurs who are specialized to maintain livestock, to give charity, perform sacrifices, study scriptures, under take business and banking.” Hence, Vaisya is the specialized class of people carrying entrepreneurial activities in these days. They carried on trade in agriculture, industry and banking sectors.

Agriculture, crafts and handicrafts were the basic sources of the occupation for the people in Gupta and post-Gupta period. The occupational development during this period comprised ownership of land pasture grounds, trees, forests, water reservoirs, mines, etc. There is clear evidence about the use of technical knowledge in water use namely, Persian water (Arahatta) in Northern India during the early medieval period.

In India, an emergence of manufacturing entrepreneurship is viewed by some social scientist as the consequence of arrival of East India Company followed by colonial British rule. It gave new stimulus to businessman by injecting various changes in economy and accelerating the export of raw materials and import of finished goods.

In 1905 Indian leaders adopted concept of Swadeshi and boycott to counter act the discriminatory policy by the British Government. The Swadeshi method was based on Atma Sakti (the principle of self-reliance), which mean manufacturing and using indigenous goods, by the Indians.

ENTREPRENEURSHIP DEVELOPMENT IN NORTH-EAST:

The concept of Entrepreneurship development in the North Eastern region of India ended around or in about 1973, North Eastern Council (NEC) seems to have played an important role in evolution of this movement over year. NEC was not along about other agencies like the Industrial Development Bank of India (IDBI) in 1985 along with Small Industries Development Bank of India (SIDBI) in 1990 have also joined or indulged themselves in this activity by sponsoring the EDP's.

The region is industrially backward and has been declared as category 'A' (Industrially Backward Region). Industrial backward of this region is reflected in the fact that the contribution

of the manufacturing sectors to the state domestic product of region is much smaller than the contribution of this sector to the national product in the country.

In the North East, the Government of Assam in early 1970 carried out a small experiment on Entrepreneurship development under the leadership of the Chief Minister of Assam, Mr. Sharat Chandra Sinha, for the past few years, the Government and various other different institutions exist to facilitate the development of entrepreneurs in the region. The setting up of Small and Medium enterprises which provide assistance in various ways like finance, technical, marketing, training. North East Council (NEC) set up in the year 1972 carried out the important role of entrepreneurship in this region. It made a study on the entrepreneurial and managerial needs of the region through SIET institute (it NISIET). Apart from NEC, now there exist other institutions and organizations which work or function for the promotion of Entrepreneurs like- IDBI, Industrial Financial Corporation of India (IFCI) and Industrial Credit and Investment Corporation of India are also playing an important and supporting role.

BELL METAL IN ASSAM

At first Bell Metal industry in Sarthebari was carried on under the patronage of rich traders (Mahajans). These rich traders under whom the workers were doing the jobs were not given 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 their 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. Mr Kohiram Das died on 27 July 2012 at an age of 77 years, he had three sons, he is the first artisan to receive artisan pension by the Assam government. During my research when I approached the workers most of the workers expressed that they were not given proper remuneration proportion to their work, even after the society was formed, However Mr Kohiram Das said that the society is providing other benefits like available raw materials, credit facility, distribution facility. However there are many other important needs like training, standardization of the product, capacity building etc. But there are also many people who are living very peacefully with the income generated in association with the cooperatives. There is another group called Mahajan which is also their in the procurement of raw materials from various suppliers, both the player, the Cooperative and the Mahajans are equally important for the procurement of raw materials, It is difficult to find out how many employees are working in which group i.e. the Cooperative and the Mahajans, as they fluctuate according to their needs and free will, so it is important for the government to organize the sector and set rules like the Tea Industry. To improve the quality of

standard, their should be design institution which should be located in Sarthebari, my comparative study says that like “Swalkuchi Institute of Fashion Technology” a same institute for bell metal should be established for bell metal by the government of Assam.

The Mahajans involve in this business, cannot have direct control over the artisans like before, the formation of the Co-Operative society . The Raw Material brought by the co-operative society or other Mahajan(rich traders) are given on credit to the various artisans . According to their requirement, on an average 30 grams extra is given in every 1 kg of raw material. The artisans has the liberty to give back their finished products according to their time, and in return they are given wage according to the already set price for various shapes and sizes of the products in market. Under this co-operative society about 1720 people working daily and running their livelihood.. According to the rules of the society audit, the balance of the artesian are checked and calculated after every 6 month and a lump sum of the total earning is given to the artesian for their daily needs and the rest remains with the Co-Operative. The artisans collects their raw materials from the society to give different shapes and sizes to meet the needs of the society. The artisans are giving remuneration according to the grades of the works, of their products. Their remuneration various from 300 to 400 rupees per kilogram . The average annual income of artesian is between 10,000 to 15,000 per month. .Most of the artisans has started working from the age of 13 or 15years. The product made from bell metal are distributed among the 11 co operative societies all over the Assam namely- GUWAHATI FANCY BAZAR, GANESHGURI CHARIALI, DISPUR, PALTAN BAZAR, JORHAT, NORTH LAKHIMPUR, SARTHEBARI NEW MARKET, SIBSAGAR, TEZPUR, GOLAGHAT,PATHSHALA .The products of bell metal are giving to the retailers by the co operative within their area of jurisdiction, at the same time the retails or individual consumer can purchase the product directly from the co operative society also. The turnover of the Assam Co-operative Bell Metal Utensil Manufacturing Society was around Rs 3.79 crores in fiscal year 2009-2010. There is no control of price of the products and the retails can sell the products according to the price fixed by themselves. The Assam Co-operative Bell Metal Utensils Manufacturing Society Ltd can avail bank loans but they don't get any subsidies. Under the initiative of NEDFI experts artisans of the industry are selected for training in different places of India, but training is not at all fruitful, because it does not suit the local requirements. The artesian were unable to meet the huge order given by NEDFI and other institution and also orders from state like Arunachal Pradesh because the products are made by hand, so the government should take up training centers to uplift the dyeing tradition.

AIMS AND OBJECTIVE:

- 1) To find out the customer perception about the Bell Metal products

- 2) To find out the problems faced by the artisans and cooperative.
- 3) To study the prospect of Bell metal industry in Sarthebari.

DATA BASE AND 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.

Sample Size is 300 samples

- a) Artisans -100
- b) Customer-100
- c) Co operative-100.

Trends in Production:

The trends in the production of bell-metal statistics from 1994-95 to 2011-2012 have been considered for analysis. During the last 18 years period show that the industry has shown some progress in terms of value and variety of production. The relative progress of production trend can be gauged from the following table

Table No 1

Production Trends of Bell-metal utensils in Sarthebari under co-operative society (1994-95 to 2011-2012)

Sl. No	Year	Finished Products in kgs.
1	1994-1995	20,665,000
2	1995-1996	22,186,000
3	1996-1997	22,278,000
4	1997-1998	24,314,000
5	1998-1999	25,866,000
6	1999-2000	22,580,000
7	2000-2001	28,888,000
8	2001-2002	35,018,000
9	2002-2003	35,183,000
10	2003-2004	35,237,000
11	2004-2005	35,120,000
12	2005-2006	33,154,000
13	2006-2007	34,838,280
14	2007-2008	24,807,580
15	2008-2009	31,441,580
16	2009-2010	32,005,590
17	2010-2011	36,923,300
18	2011-2012	41,638,820

Source: The Assam Co-operative Bell-Metal Utensils Manufacturing society Ltd, Sarthebari.

The above table indicates that during the last 18 years the industry as a whole has made a steady progress. The only exception took place in the year 1999-2000 where it shows little decline of 22,580,000 kgs. as against 25,866,000 kgs. in the preceding year indicating a fall 2,286,000 kgs. The production of bell-metal in Sarthebari however, does not show any fall in during the year 2001- to 2007, but shows a fall in 2008. The figure shows an increase trend from 1994 to 2001, except in 1999 which was down to 22,580,000 a net fall of 2,286,000 kgs. From 2001 onwards the rise is from 28,888,000 to 35,018,000 kgs. From 2001 to 2005 the production shows stagnation. In the current year 2005-2006 the production shows a decline of 35,120,000 kgs to 33,154,000 kgs. But it is insignificant. There has been a gradual increase in production from the year 2009 to 2012 .

Figure 1, Production trends of Bell Metal Utensils in Sarthebari under Co-operative Society

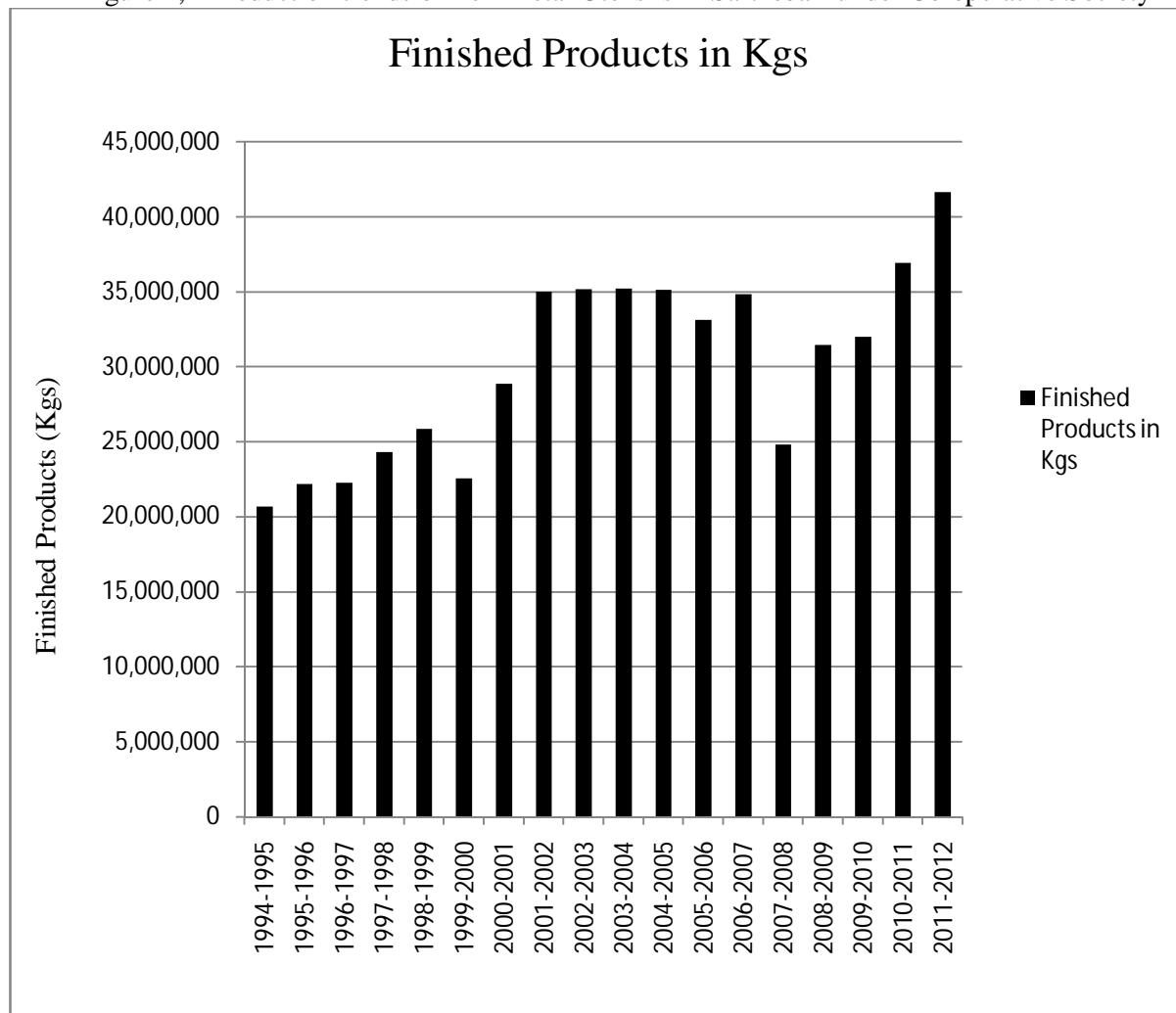
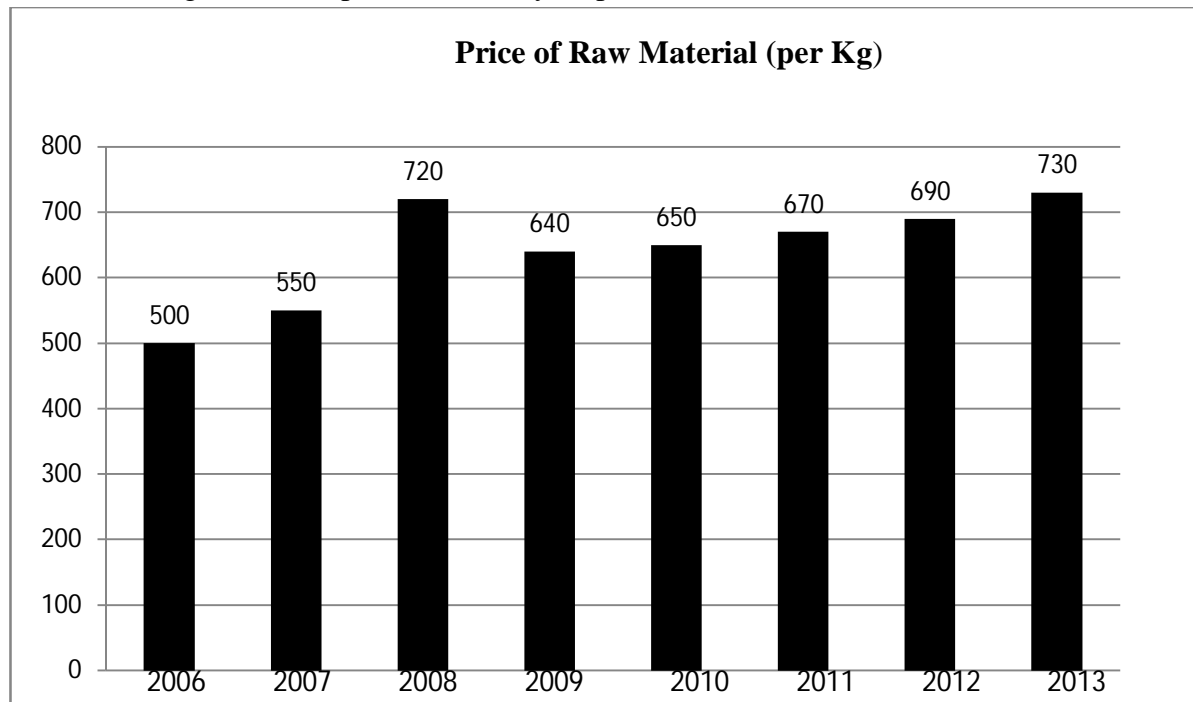


Table-2

Price of Bell metal Raw Materials (per Kg) in different years.

Sl. No	year	Price
1	2006	500
2	2007	550
3	2008	720
4	2009	640
5	2010	650
6	2011	670
7	2012	690
8	2013	730

Figure 2:- Graph of different year price of Bell metal Raw Materials



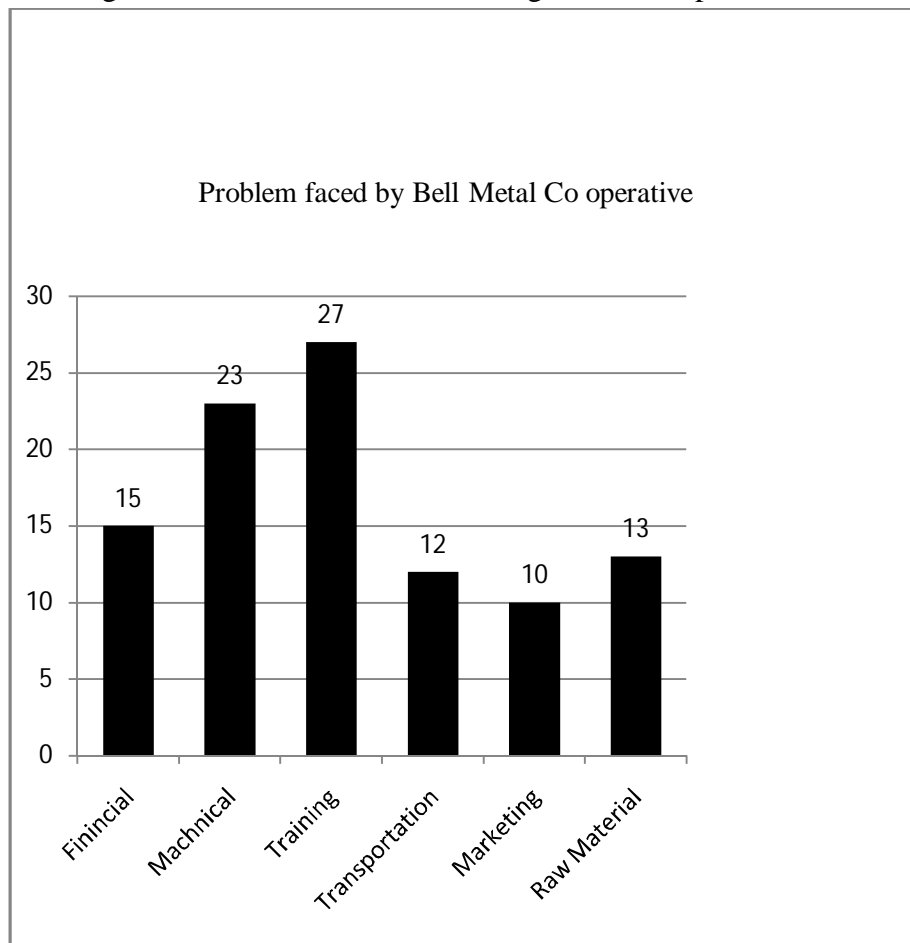
In the Figure2, it can be depicted that the price of the raw material(per Kg) is increasing day by day and it was maximum at 2008ie Rs 720 because of unavailability then it has come down to the lowest of Rs 640 in 2009 and now it become Rs 730 in the year 2013.

The above diagram represent the scenario of raw material of price according to the year:-

- 2006 - Rs 500
- 2007 - Rs 550
- 2008 -Rs 720
- 2009 -Rs 640
- 2010-Rs 650
- 2011 -Rs670
- 2012-Rs 690
- 2103- Rs730

As the price of the Raw materials are rising at a faster rate, which makes hard to check the price of the product and thus is losing the market. when the price of the raw material rises or in the absence of bell metal sheets, the bell metal scrapes are being collected through hawkers and are being recycled for production. Thus for how long still process will carry on.

Figure 3: Problem in manufacturing Bell Metal product

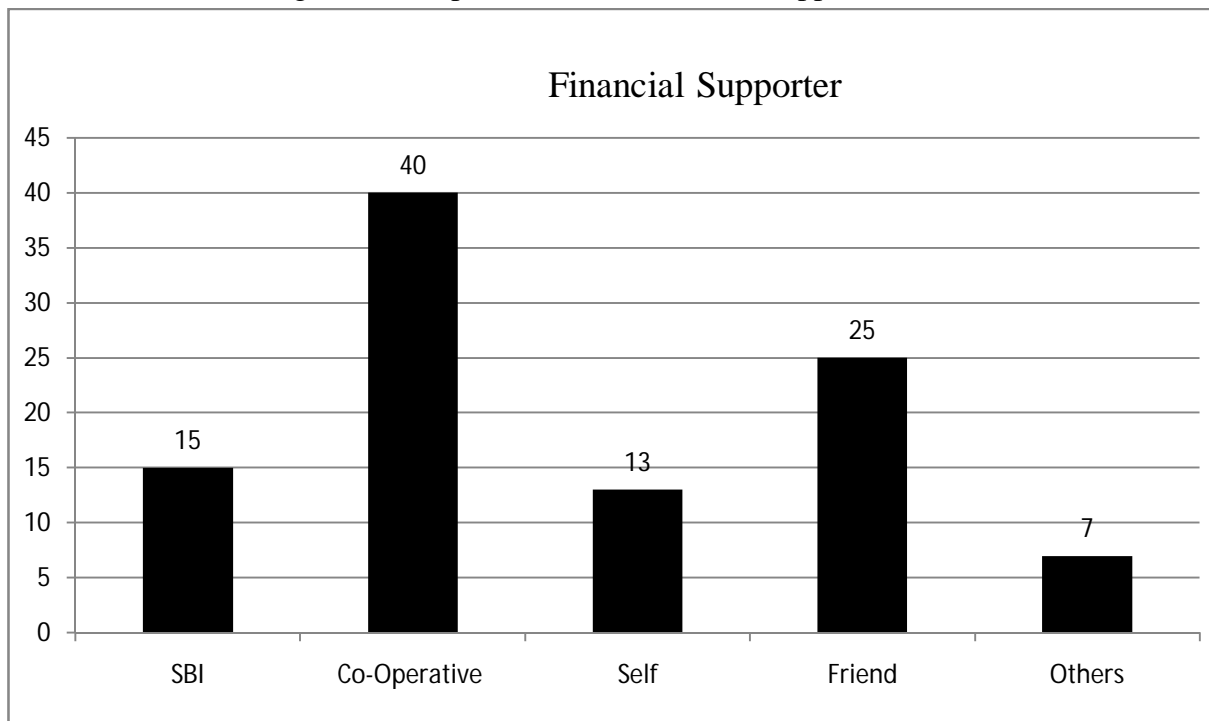


In Figure 3, shows different types of problem faced by the Association as well as the Artisan.

- Since there exist many financial institutions, but the illiterate Artisans cannot grab the opportunity, only those few educated people taking all the opportunity.

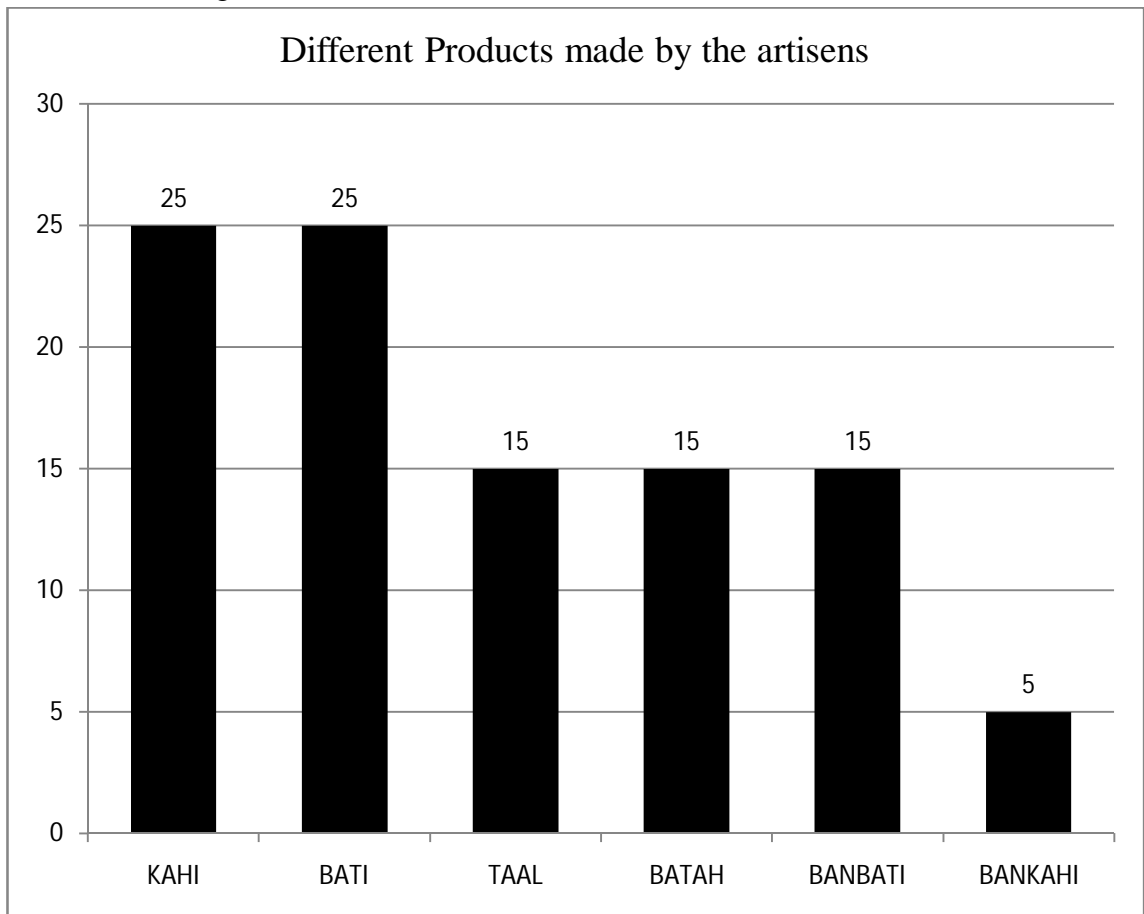
- The product is facing competition from those made of machineries and high equipment since their price is less as compared to those of manually. So the implementation of technology or machine is needed or should not be ignored in order to cope with the price of the market. Hence the cost of finished products is still higher side in comparison to the products of Moradabad where machineries are use for processing.
- Problem in training is that the training achieved by the Artisan is not that much effective due to the constraint of time and other limitation (like get the theoretical but not the practical knowledge).
- Since Sarthebari is well known in Assam as well as in India for its Bell Metal product but the distance from the heart of the Assam is near about 92 km, so here the problem of transportation adds a big amount to the selling cost.
- Since there are already 11 unit of shop of bell metal of the Association “Assam co-operative bell metal utensil manufacturing society ltd” in different places of Assam, so it required more unit of shop in Assam as well as outside the Assam for the better exposure of the product.
- And lastly, as the price of the Raw materials are rising at a faster rate, which makes hard to check the price of the product and thus is losing the market

Figure 4:- Graph of different Financial supporter



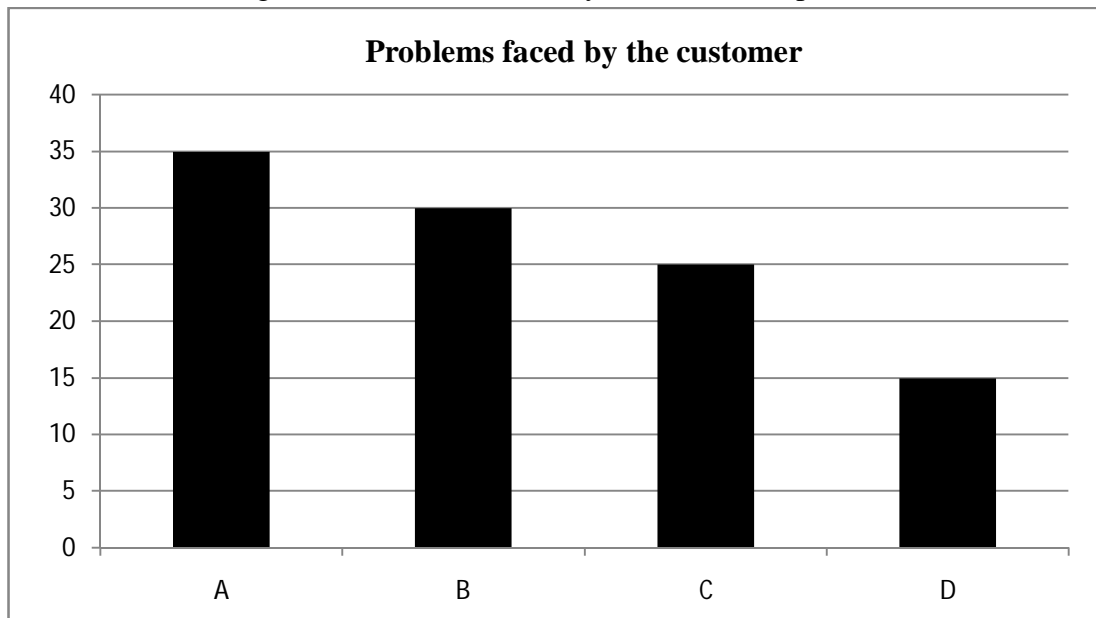
From the Figure 4, it can be depicted that the manufacturer of bell metal of Sarthabari takes financial support from different sources available nearby. Most of the fund is given by the unorganized sector at a higher rate of interest, so if government can provide fund at lower interest rate to the sector it will be helpful to them.

Figure 5:- Products that are made of Bell Metal in Sarthebari



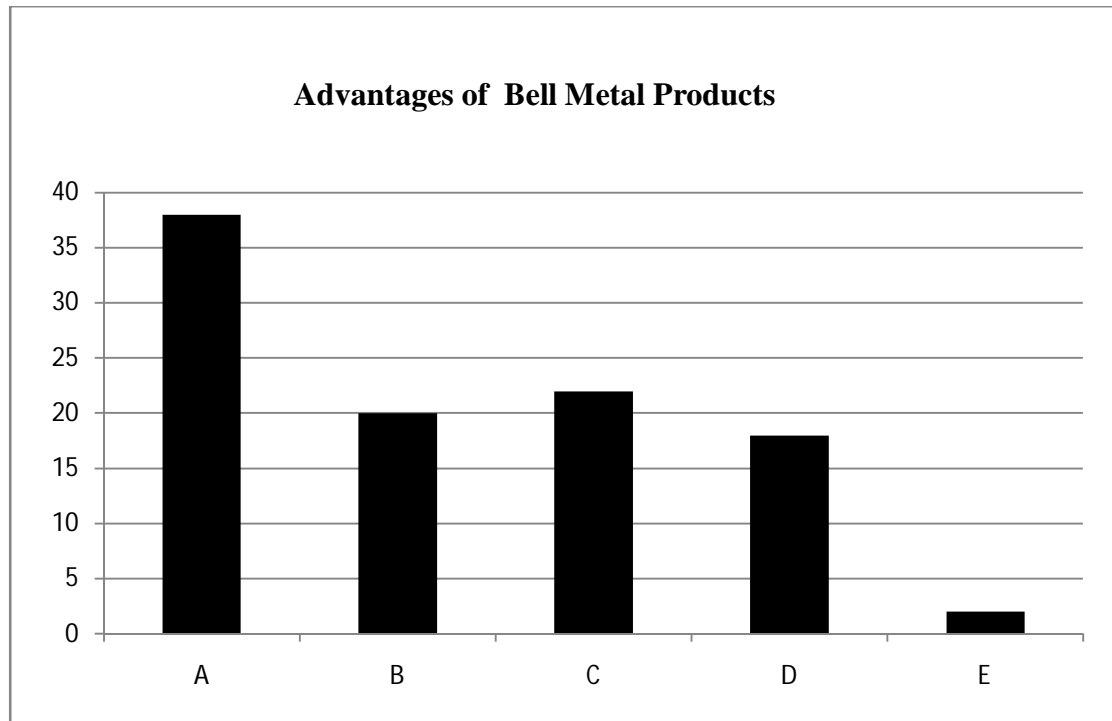
From the Figure 5, we can see that 25% of the units are into manufacturing of Kahi & Bati, next followed by Batah & Taal ie 15%, then followed by Ban Bati which is also 15% and the rest is followed by Bankahi which is either 5%.

Figure: 6, Problems faced by the Bell metal products.



In Figure 6, states that 35% of the customer thinks that Handling/cleaning is a big problem for bell metal products, then 30% the weight of the bell metal products are also very heavy as compare to other products, then 20% also believe that the design/shapes/size are also a problem for regular use in day to day life ,then 15 % believe to be high price and availability of genuine products

Figure 7 The various advantage that customer feels about Bell Metal Products.



In Figure 7, it can be seen that the maximum i.e., 38% of the customers believe that it kills germs and improves digestion. Then a considerable 20% of customers believe that it preserves food and 22% think it has medicinal properties which is good for health. Followed by 18% who believe that it is a sign of Aristocracy and a small i.e., 2% of people believe that it has got a high resale value.

FINDINGS:

- 1) The major problem faced by the industry is raw material, Training, and funds from state government, there are also no financial help from the Financial Institutions like NEC, SBI, SIDBI etc and no further steps have been taken by government to improve the situation.
- 2) The cooperative supply products made of bell metal to the eleven branches of cooperative, retailers and customers can also buy directly from the cooperative. Mr Nakul Talukdar, president of Assam Metal Guild Association said that most of the middle man has decided to fix the bell metal product of their own and there are a lot of duplicate products that are now flourishing in the market so government should take up supply of Raw material from the middle man.
- 3) Most of the artisans are working for more than ten years with the bell metal industry.
- 4) There are almost three to four members of the artisans family engaged in bell metal industry.

- 5) The product like Bati & Taal are highest manufacturing products in the bell metal industry
- 6) Most of the artisans earn about Rs 10,000-Rs15,000 per month. The artisans faced problems in manpower and timely payment of dues by cooperatives . The artisan doesn't want their children to follow the same profession because it is very laborious, either working hours from 5 am to 5pm daily and they think they are not paid accordingly. They also think that just passing H.S.L.C. or H.S. their children can earn as much as they are earning.
- 7) Most of the earning of the artisan has slightly improved after joining the cooperative but it is not enough and they want artisan pension and life insurance from the government
- 8) Most of the customer occasionally used the Bell Metal products in their day to day life
- 9) The consumers find handling / cleaning is a major problem followed by price and weight
- 10) Most of the consumers know the advantage of using Bell Metal products as most of them think that it improves digestion, Kills germs.
- 11) Most consumers are not aware of maintenance as most of them use Detergent and traditional herbs.
- 12) The customers want change in the design, shapes, size to suit the modern life style and small kitchen.

RECOMMENDATIONS :

Raw material is the major concern in this sector because due to the lack of raw materials the price of the product is high and thus ultimately the consumers finds it hard to purchase it. Thus if an organization can be developed or a source of easy way of getting materials should be provided so that the product can be produced or manufactured in an less expensive which will ultimately compete the market as those made of machines.

Through there exist some financial institution in Sarthabari or in around it but the Association not getting help from it because the institution not willing to give loan to them easily and so they are much dependent upon the private cooperative society which give loan at a higher rate of interest.

There is still need of some technical up gradation. The entire process is done manually thus it consumes time and hard labour. No doubt manual work is required but still some process like melting cannot be done at all.

Training which was provided to the Artisan by the various training institution is not sufficient, for them because of the very short duration of the course. So the training should be provided in efficient way so that they can manufacture new type of innovative product.

Since the place is already famous for its product and traditional antique Pieces and more over it already has an outside market approaches the area can be a good spot for attracting the tourist. Thus it can be Developed also in to an eco-tourism site where people can get the real Taste of the place and at the same time they can also see the entire village Unit engaged in the manufacturing of the product. Thus it can provide an exposure to the people of this sector and at the same time can create a platform of markets where the tourist can at same time may purchase the product in a bulk.

CONCLUSION :

It seems that the condition or the situation of the bell metal sector are not in a good stage since there is lack of raw materials which is very scarce and is being imported from outside the country. The present scenario is that cost of the raw material is the major problem and it is also seen that a unit require approximately 15 kg to produce finished goods (300 units x15 kg =4500kg) but they are unable to produce the finish good due to the scarcity of the raw material. The people use manually to produce the finished goods, which take time to bring the final touch product. Because this is due to the lack of the new technology they are unable to produce finish goods in bulk. It is evident from the above discussion that bell metal industries of Sarthebari block, Barpeta district have been sufferings from various problems related to backward and forward linkages. It is no longer lucrative as a sequel for which the educated youth of the region are not interested in carrying out the activity. In future with its gloomy situation, it may be continued with the few handful persons who have little traditional knowledge only. The artisans have been sufferings from basic facilities like drinking water and sanitation. As a result, health of the workers including their family members was not in good conditions as they are sufferings from various ailments.

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Appendix-

Bati	cup
Ban - bati	cup with a foot
Bari	kitchen garden
Bata	tray with a foot for betel – nut
Bhortall	large cymbal
Charia	wash bowl
Char	small river island
Doba	large metal drum
Dug – Dugi	Vessel with a long neck
Dapani	mirror on bell metal
Endi	silkworm
Ghanta	bell
Ghati	metal pot
Kahi	metal plate
Kalah	pitcher
Khutia tall	cymbal
Kirtanghar	Prayer hall
Lota	vessel
Manjira	small cymbal
Muga	Silk worm
Nam – ghar	prayer hall
Oja – pali	chorus singer
Pan bata	small tray with foot
Pati – tall	small cymbal
Raijmel	village council meeting