

Brassware Industry in Mirzapur District: U.P. Major Issues

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ABSTRACT

The submitted paper is descriptive in nature. The objective of this paper is to investigate the underlying problem of the Mirzapur utensils industry. The studies presented are based on field studies and secondary data. Mirzapur is one of the most important centres of the Brass Utensil Centre in Uttar Pradesh. Mirzapur Brassware industry, in Uttar Pradesh, is mainly based on domestic market. It produces utility items like "Handa, Parat, Gilas, Kalchul, Batua" etc. The manufacturing units of Brassware are linked with local dealers who place order with them and buy their products when offered for sale. Most of the goods produced at Mirzapur are transported through Railways and road. The soils of Mirzapur are also favourable for the production of Brassware as it is helpful to mould the utensil that is why Mirzapur is famous for the domestic brass article.

The Brass industry of Mirzapur stands on the brink of closure. There are several factors responsible for the closure of the Brassware industry of the Mirzapur Brassware industry. The products and techniques of the Mirzapur Utensil industry have become obsolete. The Centre and the state government are not paying attention to this important issue on which livelihood of a lot of people in the district is dependent and also giving revenue to the State. There are no such institutions that the Mirzapur industry should get adequate quantity of the raw material at reasonable rate. The traders and workers associated with this industry are adopting other economic activities in search of livelihood. Workers engaged with this industry are going to other places due to lack of adequate work and proper wages.

Keywords: Brassware, Nodal Agency, Utensil, Utility Items.

Introduction-

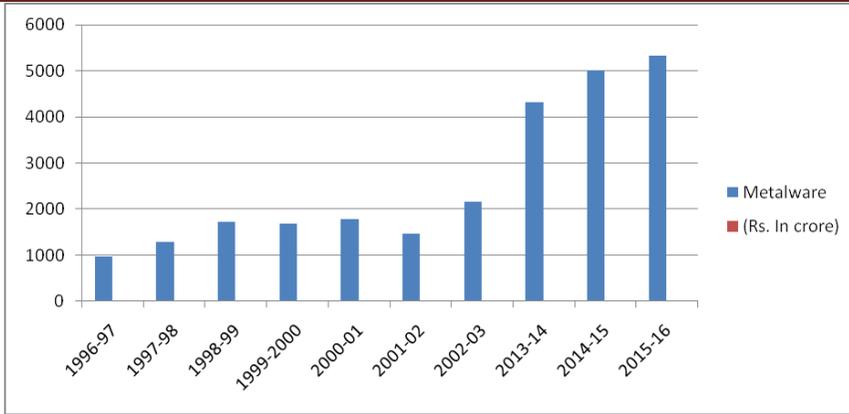
India has been a prominent centre of art and crafts. The Brassware industry is an old traditional industry of Uttar Pradesh renowned all over the world for elegance and exquisite beauty for its decorative as well as utility article (Sajid Mohamad, 1992). Being labour intensive in nature, The Brass industry has vast promises not only for absorbing thousands of Unemployed persons in a labour surplus economy of India but it has also enormous potentialities for fetching the much needed foreign exchange earnings for accelerated economic development of the country.

The Brassware Industry in Uttar Pradesh is mainly concentrated in Moradabad district. The other places famous for the Brassware industry in Uttar Pradesh are Varanasi, Mirzapur, Jalesar, Bahraich and Aligarh. Mirzapur is one of the most important centres of the brass Utensil industry in Uttar Pradesh. It supplies the needs of a large part of the state and even export articles of households use to other countries. The soil of Mirzapur is also suitable for Brassware Production. The quality of the soils is most favourable for the moulds, as its neither cracks nor melts. The work of metal refinement is called "Niyara" in local dialect. It means choosing a particle of non-ferrous from waste material of non-ferrous. Mirzapur brassware industry is located in the city and its workers come from the city and the surrounding villages. At present, the manufacturing units of Brassware by and large are linked with the local dealers who place order with them and buy their products when offered for sale. Its product is transported through road and railway. In the following table we see the importance the art metal ware industry.

Trends in the Art Metal Ware Export

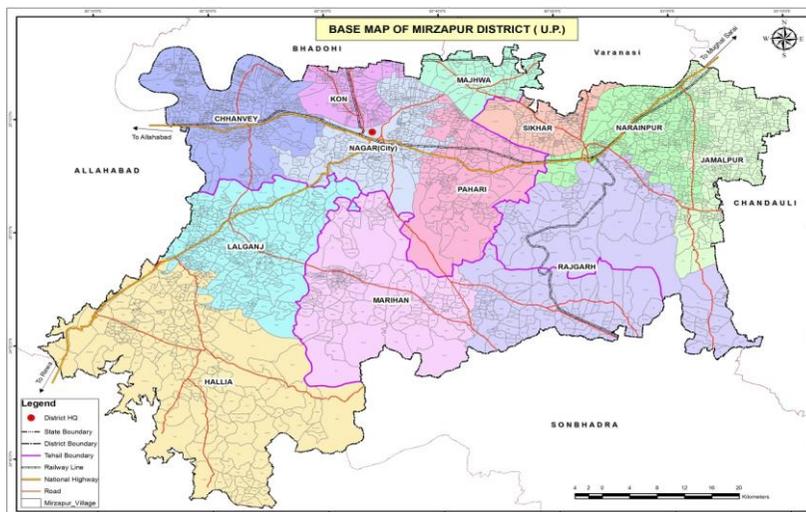
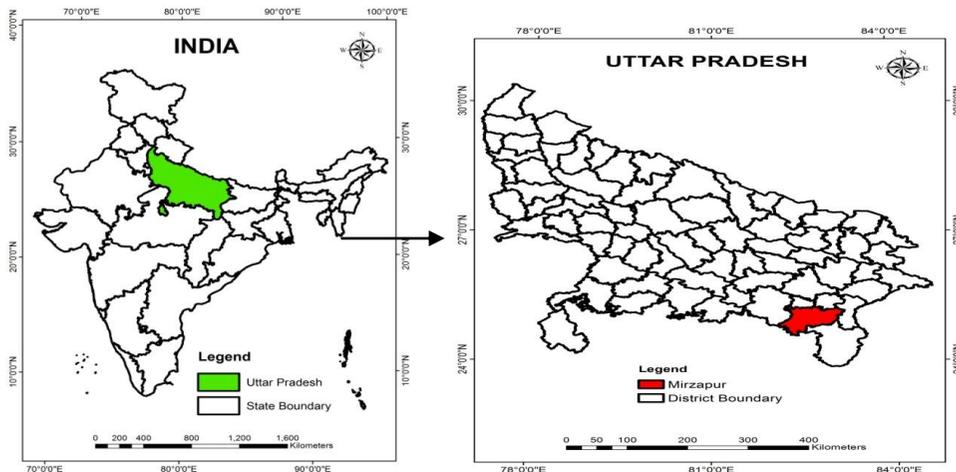
Table 1

Year	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2013-14	2014-15	2015-16
Metalware (Rs. In crore)	971.46	1291.88	1715.60	1687	1784	1460	2165.2	4317.21	5019	5333.81



Source – Export Promotion Council for Handicraft (EPCH) Ministry Of Textiles, Government of India

Mirzapur district is backward district of Uttar Pradesh (DIC, Mirzapur).The agriculture of Mirzapur is extremely backward; due to its physical characteristics.The district with varying topography and without perennial rivers expects the Ganga in the North, presents a unique challenge for providing irrigation facilities. Crop productivity is very low due to alkaline problem in the concerned region. Mirzapur facing drought like situation almost for three year in a period of five years (Gazetteer of India, Uttar Pradesh (1988)).In Mirzapur most of the units are small scale and few units belong to medium and large scale. There are following industrial unit:Brassware, Handloom, Pottery and idol making, Iron Factory, Beedi Making and Stone crusher. Most of the units are facing problem, Brassware industry is one of them.



Objective -

1. To know the existing Brassware Industry in Mirzapur district.
2. To know the problem/major issues related with Brassware Industry in Mirzapur district.

Conceptual Framework for Development of a Cluster-

A Cluster may be defined as a local agglomeration of enterprises (mainly SMEs, but often also including some large enterprises) which are producing and selling a range of related and complementary products and services. A localized Mirzapur industry which includes Brassware Manufacturing Units, Raw material Provider, Buyer, Exporter, Financer, Market, Niyara (Processing of a raw material). It must be, however noted that a Mirzapur cluster is not merely a manufacturer unit, located in particular area. Its success are related with linkages and relationships that get established over a span of time.

Mirzapur Brassware cluster is characterized by units which process the raw material to produce and subsequently market the finished product themselves. So Mirzapur cluster is **Horizontal cluster**. Mirzapur Brassware cluster is unable to cope with or due to change in the technology, life style, and a product is no longer in demand, and the cluster may go to face extinction. However the same industry may find itself viable in a different centre (Moradabad) where favourable conditions exist for the survival and development of the cluster.

In earlier time (Around Twenty Year back) trader came from different surrounding near to Mirzapur Centre to Purchase / order by the product. But in recent time Mirzapur unit owner went to trader with the product. It is sign of decline. The Worker of the industry shift to other centre because of limited work available, where they help to establish a brass unit. At last Mirzapur product is very heavy and old fashioned.

Table 2

Cluster Detail	Cluster Activities
Cluster Name	Brassware Making Cluster
Association Name	PeetalBartanNirmataSangh
Cluster Actors	Artisian/ Entrepreneurs
Turnover	500 Crore
Products Manufactured	Brass Utensil

Source – Through Survey by Researcher.

Background of Mirzapur Brassware Industry-

Mirzapur is district of Uttar Pradesh. Mirzapur is located between latitude 23°52' to 23°32' North and longitude 82° 72' to 83°33' East. It is spread over an area of 4405 square km under forest which make 24% of the total geographic area of the region. It is surrounded by Varanasi and Santravidas Nagar in the north, Allahabad in the west and towards southeast. Its boundaries are contiguous with Varanasi district, Sonbhadra and the state of Madhya Pradesh. The district has four tehsils namely Sadar (Mirzapur), Lalganj, Marihan, Chunar. The district is divided into 12 development blocks.

Brass is a metal composed primarily of copper and zinc. Copper is the main component, and copper is usually classified as a copper alloy. This is mainly home based Brassware industry. The Technology used in this industry is very simple and traditional. Almost all enterprises in the home-based brassware industry can be said to be operating at three levels (Sharma and Bhagwat, 2007). At the bottom level are the household units that work for small manufacture (Unit owner is locally called "Gadhiya") who in turn obtain orders from exporter. Therefore these households units are subcontracted by big trader. Big traders are at the second level and at the top level are exporters. "Gadhiya" normally have their own units that undertake operation like scraping, welding and polishing in house whereas they subcontract the work of casting to household units that undertake the melting and casting operation. In many cases, "Gadhiya" also subcontract the work of scraping, welding and polishing to household units that exist for the purpose.

In addition to the above links, there are contractor for undertaking jobs like polishing, plating and packaging. They supply workers mainly to trader to undertake these works on contract. There are two categories of exporter's namely merchant trader (who undertake only packaging and export operations) and manufacturer trader (who undertake operations like welding, polishing, packaging in addition to export activity). A significant proportion of traders also depend on outside units for completing these operations in case the requirements for such activity exceed their in house capacity.

In placing orders for specific operation with "Gadhiya", in most cases traders give instruction through telephone or orally or sometime give sample. There are two systems prevailing in the industry as to who makes investment in the main raw material. In some cases, traders while placing an order with Gadhiya

provide raw materials in the form of brass(ingot) or provide part cash advance to buy brass ingots. In a most number of cases, arranging raw material is the responsibility of Gadhiya and they invest their own fund for the purpose.

Manufacturing Process of Brass Utensil

The Process of manufacturing of Brass Utensil is technical processes. There is separation of Labour and each specialises in a particular process only. The following chart illustrates the processes through which Brassware pass:

Process of Manufacture

The initial stage of the manufacturing process is to make shape according to Brass Utensil. This process is different for utensil made of Brass Sheet and utensil made by Moulding.

Moulding

In this process, before making moulds, wooden pattern are made out of the sample available, on the basis of which final moulds are prepared. Moulding may be classified as:

Para casting

In the para casting method, the pattern of the Utensil to be manufactured is made up of wood and these form a few model pieces are cast which are to be used in making moulds on a large scale.

Darza Casting

In this process two flat dishes are used. The dishes when put together leave a whole on the side which is meant for pouring metal.

Sheet Work

In this process the round billets are heated in a furnace and pressed in a rolling mill. An outline of the flat articles to be manufactured is marked on the sheet and flat pieces are cut from these outline.The Sheet items are manufactured by the following methods:

Beating Method

In this method brass sheet first cut according to size and shape, then these sheet are heated in furnace and then beaten by hammer.

Pressing Method

This method is used to make the items having hollow space in their shapes such as cups,Katora etc. First of all brass billets are cut in a suitable size and then pressed by either by electric power or hammer.

Spinning Lathe Method

This method is used to make Thalís, Trays etc. In this process a die either of iron or wood is prepared and put on the thick iron roller which is usually driven by power.

Soldering and Scraping

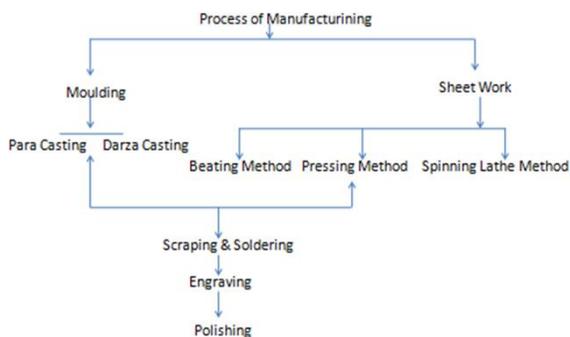
Soldering is the process of joining part of metal, Scraping is a cleaning operation.

Engraving

Engraving is the cutting of design into the surface of the metal.

Polishing

Polishing is the last step of brass utensil manufacture.



Important Data of Brass Industry (Approximate)

Table - 3

	1974	1998	2004	2008	2010
Registered Unit	425	225	100	70	70
Non Registered Unit	450	150	70	60	60

Rolling Mill	30	20	12	10	10
Direct Worker	20000	10000	2000	1500	1400
Indirect Worker	30000	10000	1000	800	750

Source- District Industrial Centre, Mirzapur

Number of Unit of Mirzapur Non Ferrous Metal Refining Industry (Locally Called “Niyara”) Table 4

Detail	1985	1998	2006	2008
No. of Medium & Small Unit	180	120	85	70

Source – Krishna Gopal Gupta (2011)

Supply of Raw Material from different Sources to the Brassware Manufacture Table 5

Source	Percentage of material supplied
Purchase from Exporter & Dealers	55
Purchase from Traders	35
Purchase through Government Agencies	10

Source – Krishna Gopal Gupta (2011)

Methodology and Conceptual Base-

The study is an empirical research based on survey method. The study is mainly based on the field survey and as well as on the secondary data. The entire empirical phase research is designed in three phases. The first phase involves preliminary visits in the various units in the year 2017 to survey and held initial discussion with different actors. This phase was very crucial to understand the background and have preliminary experience of the Industry before embarking upon the study. In this phase main source of data, such as industry associations, government official and trade related associations and group were identified. This was of great help in getting familiarizing with the characteristics of the Industry. Subsequently a few more visits were made to the Industrial unit for greater insight in the morphological aspects of unit, structure of industry, identifying the end product and raw material used. It helped in the formation of overall view about the type of social and economic network present in the Industry.

The second phase will comprised of visits to a few units, for a pilot survey and interview with few key persons in the Industry. This served the purpose of gaining greater understanding with respect to detailed outline for the field work. These visits will helpful in refining questionnaire and making it more comprehensive. Third phase of field work will include visits to sample firms for the formal and informal interviews and for direct observations. The research design in the present study is Descriptive research Design. There are about 350 household units, out of which 184 number of unit is taken for study. The margin of error and confidence level for present sample is 5%, 95% respectively.

Result and Discussion

When surveyed, we found that the data we received from the District Industry Center and the secondary source are quite different from the actual points. Brassware Industry faces problem relating to raw material, infrastructure, credit, design, and child labour. In this field survey we find that most of the unit registered in District industries centre but they do not actually working. The data of the industry is not reliable. We found the following data of the industry (Approximate).

Table 6

Total Unit (Registered and Non registered)	300-400
Niyara Unit	10
Worker (Direct and Indirect worker)	25000-30000
Rolling Mill	10
Investment	500 crore
Supply of Raw material	100% purchase through traders

Source – Through Survey by Researcher.

Problems related with Brassware Cluster in Mirzapur District -

Brassware industry has been facing tough competition from other centre situated in neighbouring district (Allahabad) and adjacent state (Bihar). The Artisan of Mirzapur Centre went there and train to worker there. So the craze of Mirzapur industry diminishes day by day. The industry does not have work throughout

the year and the functioning of various units depends on the orders procured by traders for that particular year. On an average, there is work for only six months and the workers at that time migrate to other places searching for alternate employment opportunities. In this industry there are multiple informal units and needs to integrate them. Following are the various problems faced by the Brass Industry in Mirzapur District.

Raw Material -

Brassware industry faces a major problem of non-availability of quality raw material at reasonable rates. Small households unit owner with limited financial resources have to purchase at very high prices. The wealthy traders, who invest their funds in purchasing and storing the raw material for retail selling. They dominate the market and exploit small unit owner. Copper and Zinc are the main items of raw material which are imported. The prices of these raw materials have considerably fluctuated in the global market. In order to enable the small unit owner to procure the raw materials at reasonable rates, it is desirable that the government organization should import it in bulk and make it available to the small units at reasonable rates.

Marketing Strategies

Brassware industry of Mirzapur district is totally scattered, unorganised and confined to a very great extent in the hands of artisans, the problems of Marketing is comparatively more severe than in any other industry. Artisans and unit owner do not find themselves in a position to market their products with reasonable profits. Generally they have to depend upon local dealers, exporters and middleman for this purpose. The manufacturers of Unit Owner are mostly poorly uneducated. So there is need of marketing strategies. First strategies are that our product is very heavy and outdated so the price of our product is not reasonable. We should change our product according to customer. There is also need of training programme and workshop for unit owner and artisans to aware about their problem.

Infrastructure /Power Problem -

Mirzapur Brass City lacks required infrastructural facilities, mainly power. Erratic power supply has badly affected this industry. In order to improve productivity regular power supply is a must which increase the production. This industry needs power at reasonable rate in order to be competitive in the regional market. This industry needs power with adequate voltage and minimum fluctuation. We need separate grid for this industry. The condition of road is very poor. The linking road with Mirzapur to other city is not very good.

Limited Availability of Credit -

The Brass industry in Mirzapur has now acquired the shape of a traditional industry catering to the demands of domestic buyers. Household unit owners depend on orders from traders. When the workers do not get work they migrate to other places in search of employment opportunities. When the orders come, the cycles of production starts. Usually unit owners take credit from the local traders for initiating the work including purchase of raw material from the market. The economic condition of Worker is very bad so they depend completely on unit owner. Sometimes unit owner exploits the situation. There is lot of scheme for credit but in ground zero there is lot of barrier, so government takes attention.

Design/Technology/Attitude -

Conservative attitude of the people in the industry leads to lack of mechanization. Conservatism hindered the artisans and traders in adapting over from earlier techniques of production to latest technology. Buyers today have specific choice for weight, quality, design and price. Artisan also lacks knowledge about the various marketing techniques and use of technology. The product of Mirzapur industry is much heavier than other centre.

Child Labour -

The structure of industry facilitates the demand of unskilled cheap labour. This could be attributed to several factors. Unit owner think if they cut cost they make some profit, so far as the cost factor is concerned, child labour at the household front is definitely the reason for its continuance. Children are often employed not because of cheap labour, but rather by the relative abundance of child labour. This industry is not very safe for children. Dangerous machinery, Sharp tools and toxic substances in the surrounding environments of children affects them adversely. Children worker doing lowest skill jobs in this industry. Government should take attention in that matter.

Environmental Concern -

Mirzapur is famous for brassware industries about 300 non-ferrous metal utensils manufacturing tiny units are operating in the dense populated residential areas and as such they are causing air/noise pollution in the vicinity. The siting is required of these units from residential area to Industrial Estate/Suitable site. There is no any industrial notified area.

Taxation of Brass metal utensil Industry–

There were many types of taxation by the government in the brassware industry. In earlier times, from raw materials to manufactured goods, various types of tax charges were collected by the government (Centre, State) from the manufacturers here. VAT (Value Added Tax) has been implemented from April 1, 2005 in Uttar Pradesh. From 1st July 2017, the GST (Goods and Service Tax) was applied to the entire country. Brassware industry is levied in high tax slab of GST (12% Finished Product, 18% Raw Material). It is not rational for overall industrial development. Government should think about it.

Conclusion

Brassware industry is labour intensive in nature so it is very important for the state. The manufacturing process usually carried out in residential premises. The manufacture activity of Brassware carried throughout the year except the rainy season. The labour force comprises hired workers and family workers who are paid wages on weight basis. The manufacturing techniques adopted by the industry are very old and time consuming. Regular and adequate supplies of raw material continue to be a main problem for the industry. The socio economic conditions of the labour are unsatisfactory. Most of the artisans' family members are illiterate. Health and medical facilities available to the artisans also appear to be very disappointing. The incidence of T.B., Asthma is high among the artisans.

The current recession is a very sensitive problem for Brassware industry which can only be tackled by proper strategies. Both the industry and the government should be planning to combat this. The government may provide the financial, educational and medical facilities to artisans. The government also arranges workshops and seminars for the artisans to learn how to survive during recession. Goods and Service Tax and Demonetization also badly affected the Brass industry.

Reference–

1. Das, Keshabanada (1998) Collective dynamism and firm Strategy: Study of an Indian Industrial Cluster, Entrepreneurship & Regional Development, 10:1, 33-49, DOI:10.1080/08985629800000003
2. Das, K (2005), "Industrial Clustering in India: Local Dynamics and the Global Debate", in Indian Clusters, ed. Das, K., Ashgate, Hants, pp.1-20s
3. District Census Handbook. Mirzapur (2011). Published by Directorate of Census Operations Uttar Pradesh.
4. Gazetteer of India Uttar Pradesh District Mirzapur. (1988). Published by the Government of Uttar Pradesh.
5. Kayastha, S.L. and Singh, M.B. (1979): A Spatial analysis of Manufacturing Industry in U.P., Geographical Review of India, Vol.41.
6. Government of India. Brief industrial profile of Mirzapur district. Published by Ministry of MSME, Govt. of India.
7. Government of India (1997), Report of the Expert committee on Small Enterprises (Chairman: Abid Hussain), Ministry of Industry, New Delhi.
8. Gulrajan, M. (2007). "Technological change, innovation and development: a case study of two Indian industrial clusters", Ph.D. Thesis JNU, New Delhi.
9. Gupta, Krishna Gopal. (2011) "Critical study of declining conditions of brass metal utensil industry in Vindhya Mandal" (with special reference to Mirzapur district), Ph.D. Thesis Veer Bahadur Singh Purvanchal University, Jaunpur.
10. Mehta, G.S. (2012). "Agro processing industry in Uttar Pradesh" (Emerging structure and Development Potentials) Planning Commission, Government of India, Giri Institute of Development Studies, Lucknow.
11. Pathak, C.R. (1984): Industrial Geography, in a survey of Research in Geography, (ed. Alam, S.M.), Concept Publishing Company, New Delhi: 29-39.
12. Report of Infrastructure and Industrial investment (2012). Government of Uttar Pradesh.
13. Report of the expert committee on small enterprises, Ministry of Industry (1992). Department of SSI, & R.I. (Nayak Committee), Government of India, New Delhi.
14. Report of the Industry Department (2013-2014). Uttar Pradesh (Planning section, Kanpur), (2013-2014).
15. Sekar, R. Helen. (2007). "Impact of technological change on the demand for child labour in brassware industry of Moradabad". V.V. Giri National Labour Institute, Noida.
16. Sharma V.N. and Tiwari A.K. (2014). "A survey of research in Industrial Geography in India" Transactions Vol.36, No.2.
17. Singh, M.B. (1979) Industrial Development Pattern and Potentials in Eastern Uttar Pradesh, Ph.D. Thesis BHU, Varanasi.
18. Mohammad, Sajid (1992). "Export Potentialities of Brassware Industry of U.P.", Ph.D. Thesis Aligarh Muslim University, Aligarh.