



Self-sustenance and Indigenous industries: A Case of Assam

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ABSTRACT

Each state of India has something unique to offer in itself. Uniqueness can be cultural, habitual or geographical. This uniqueness is evidently reflected in indigenous industries of that state. However these indigenous industries at times, despite having immense potential, fail to make it big or even grow into a structured, organized and recognized industry because of factors that restrict growth and presence of numerous success inhibiting elements. Keeping this in mind, we decided to study certain indigenous industries of Assam with a hypothesis that, *the indigenous Assamese Industries are self-sustaining and have a potential to grow into National Industries*. We primarily sought to study factors that impede the same.

What is Assam known for? Tea, Oil and Kaziranga are probably the most popular returned results of a Google search. But apart from these three, there are numerous other industries that can help the economy of the state and also make a unique name for themselves around the country. We decided to pick up three such industries to study and estimate their potential. We also sought to study the factors that set them apart from their competitors and the probable reasons that are currently hindering their growth and success. As expected, it is very hard to generalise and conclude the findings of the study of the three industries under such paucity of time and data but, even at a subterranean level the reality isn't much different from what seems to be on the surface. All three industries are afflicted from various issues some of which are peculiar to the business, and some very general. One 'general' factor which seemed missing in every industry we studied was of lack of an 'enterprise'. Thus, our hypothesis tested positive, as we gauged that the indigenous industries of Assam are self-sustaining, and if scaled up, can grow to be widely-popular industries. We also established the factors that prohibit the same. The Industries which we studied are: The Ferry Industry of Guwahati, The Firecracker Industry of Barpeta, Silk Industry of Sualkuchi.

Keywords: indigenous culture, silk, brass, ferry, firework, self-sufficiency, Gandhi.

INTRODUCTION

Today machinery merely helps a few to ride on the back of millions. The impetus behind it all is not the philanthropy to save labour, but greed. It is against this constitution of things that I am fighting with all my might ... the supreme consideration is man. The machine should not tend to atrophy the limbs of man.- MAHATAMA GANDHI

Assam in fact one might say is not just a land of multicultural and multi-ethnic diversity but also that of small scale industries. Let's have a look at both of these aspects. The Assamese community is not an a priori entity, but has developed over centuries through interaction among different ethnic groups and communities of people. The Ahoms, Bodos, Assamese Hindus and all other communities contributed to its organic and syncretic evolution. As such diversity is something that is very distinct in the Assamese culture. Residents of the state speak and number of languages and traditions changes places to places. Apart from indigenous Assamese tribes like Karbi, Dimas, Rabha, Koch Rajbansi, Bodo etc, there also exists migrant tribes like the tea tribes and Nepalis. This diversity hence gives rise to certain unique characteristics of the state is well reflected in its traditional industries.

Apart from the cultural factors, even geographical location also heavily contributes in the shaping up the indigenous cottage industry scenario of Assam. But when we mean small scale or cottage industries, what do we exactly mean? As per Sensagent dictionary definition, a cottage is a farmhouse usually in rural areas. A cottage industry is a small self-help industry that is carried out in the home, community centre, parish hall or some other convenient place. Such industries are evident in handicrafts, catering, tailoring, , retailing of dry goods, pottery and furniture making on a small scale. Cottage industries developed mainly out of the need for an additional source of income, because of the need to use one's spare time gainfully and because of the relative ease of acquiring the necessary raw materials to set up such industries.²

The statement holds very true for certain industries of Assam. For example, the world famous Muga silk industry of Assam actually started as a hobby. Even today, interviews with local residents of Suwalkuchi, Assam reveal that they are self satisfied with the industry, and for many it's still a hobby.

Also, cottage industries in Assam are very much self sustaining. They cater only to what is needed and nothing more than it. Very detailed analysis reveals that, most of those associated with small scale industries in Assam do not really have high marketing attitude or ambition. The belief that prevails is that, these industries are a part of the culture and there vests no commercial interest associated with it. THIS attitude is largely Gandhian in perspective. Thus these cottage industries which we studied were truly Gandhian and thereby attached to Indian culture.

For example, Mekhela-Sador is the traditional attire of Assamese females and most production of the silk industry out of Sulkuchi is dedicated to the production of Mekhela-Sador. Now, the demand of the traditional Assamese attire outside Assam is practically zero, hence marketing potential is not at all healthy. But very little is being done to accelerate the industry (will be explained later).¹ Another interesting aspect of the small scale industries of Assam is its indigenous nature. Assam has been blessed with ample from the nature, from flora and fauna to the river Brahmaputra; everything has an influence on the Assamese community. As such, even the industries have a deep influence of nature. Designs of the

handicrafts industries have nature's impression, in fact the tourism and the river ferry industry totally based on River Brahmaputra. ² Industries like the Brass Industry of Kaithalkuchi are very closely associated with Assamese culture as food traditionally is served in Brass utensils. Similarly Firecracker industry of Barpeta crater to the tradition of lighting firecracker during marriages and famous Dol Utsav of Barpeta.

The official website of the Government of Assam lists weaving in country looms, pottery, blacksmithy, bell-metal and brass-metal works, goldsmithy, village carpentry, bamboo and cane works, spinning of eri, muga and mulberry silk, vegetable, dyeing, wood carving, hand pounding of rice, manufacture of ivory products etc as small scale industries of Assam. It also states that, some of these industries are now in decaying stage due primarily to (a)lack of capital and technical know-how,(b)competition from machine made goods at cheaper rates,(c)lack of marketing facilities etc. We may mention the following old time industries that had been in vogue in the State of Assam.³

These industries have immense potential, particularly because of the fact that they are endemic to Assam. However unleashing the full potential of these industries and quantifying their potential still requires a lot to be done. We just aim put forward a simple step forward for the realization of the same.

Thus multiculturalism and cottage industries are endemic to both Assam and india in general.

OBJECTIVES

Each of the industries we studied is unique in itself and the individuals involved in these industries have their own unique set of skills. Each industry had its own issues and consequently the scope of each industry is different. However after intensive background study, we decided upon certain common objectives for the three listed industries. Through our study we planned:

- To study the small scale industries those are indigenous to Assamese culture.
- To explore the nature of evolution of these industries.
- To analyze the marketing issues pertaining to these industries.
- To estimate the scope of these industries and quantify their market competitiveness.
- To study the exploitation and marginalization of certain groups such as women, children and indigenous communities, if any.

The key and topics issues which we investigated though this study includes:

- Nature of evolution
 1. How did these industries originate and how did they change overtime?
 2. How has the market changed in the given time?
 3. Technological and cultural impact.
- The marketing issues
 1. Difference of the Cost Price and the Selling Price
 2. Role of middle man and exploitation
 3. Government role in promotion and paving of platform for the growth of these industries
 4. Transportation problems and language issues
 5. Competitiveness with similar products and brand positioning.
- Scope
 1. Analyze their brand value

2. Gauging the market position and share
 3. Competitiveness with similar products
 4. What market exposure can they be given?
- Exploitation and Marginalization of Certain groups, if any.
 1. Intra and Inter Industrial study of gender-based division of labour.
 2. The effect of their job profile, long-term health, education, long-expectancy. Initiatives taken in the same area.
 3. Stereotyping these groups, from the lens of occupational and non-occupational roles.
 4. Impact of two way migration.

METHODOLOGY

Research required people working at the grass-root level. Usually during field research sources are a certain opinionated section of people, generally opinion-leaders like heads, owners, etc. who might or might not give us a true insight to the scenario. Hence for collecting primary data, we decided to approach random population with a set of questions.

Simple random sampling was used for the sample population of each industry and the subjects were approached with opened ended and subjective questions in local language (Assamese). It must here be mentioned that very local dialect was used to conduct interviews, all of which has been videotaped and immediately translated into English on screen. This made it possible for us to understand the very basic of problems and issues in the most effective manner. The transcripts of the interviews shortlisted can be found in the appendix.

Questions were framed depending on the industry and concerned subject. Additionally every question was framed keeping in mind the objectives listed above.

Later our findings were cross-checked with secondary data and the hypothesis was tested. Furthermore suggestions and interpretations of the team were also added.

THE CASE OF THREE SMALL SCALE INDUSTRIES

Firecracker Industry (Barpeta)

The small scale industry of firework at Barpeta, roughly 65 kms away from Guwahati, is a classic example of untapped potential and exhibits the factors that discourage exponential expansion, growth and scaling up.

The 'Asom Fireworks Industry', is known for its quality and product throughout the region, but is also known to not be an extremely thriving industry. Generally the compounds where fireworks are made are mindlessly filled with paraphernalia related to the making of the same. Hence, the distinct chemical odour of the explosive mix is paramount, and disaster prevention and aversion techniques are marginal if, at all. If it's one thing that the people of this Industry are proud of, is their labour and effort that goes into making each and every piece of product. Hence, they assume full responsibility of the quality of the fireworks. The workers maintain that the chances of a fire-work failing are next to none. Even the largest and the most-well known firework maker in country, Sivakasi, worth over Rs. 1000 crores, and growing at 10% per annum,⁴ where the production scale is manifold and so is the human

resources involved, cannot promise that. Compared to that, the Assamese Fireworks Industry employs just five individual manufacturers², and generates a fraction in revenues every year. Mr Deep Pathak, who works in the industry, when asked about the lack of markets outside of the state explained that marketing is the biggest issue, and the demand is almost always local. The festive times, in addition to weddings and celebrations account for a lot of orders that the Industry receives. As a result, Diwali, and Holi (Dol Utsav) are the busiest times of the year, as the Industry sustains the demand of every city in the state, and fireworks are sold in bulk and retail. He also however added that the local media has been raising the issue, and garnering attention, probably as a result of which the Central Government recently sanctioned 7 crore rupees to the Industry.

Another impeding factor that does not allow the industry to flourish is the shortage of raw materials. As opposed to the city of Sivakasi, where the chemical factories and industries readily fulfil the ever-increasing demand of the explosive materials used inside a firework, the industries of Assam source its sulphur, potash, gunpowder etc. from West Bengal, Gujarat and Tamil Nadu. As a result, this adds to the cost of the final product. This problem is exemplified by the climatic condition of Assam, which unlike the city of Sivakasi, is not conducive for replicating the model. Sivakasi, where Low rain fall and a dry climate contribute to unabated production³, is the opposite of a rainy and humid Barpeta. Fireworks, by nature, require dry and moisture-free atmosphere in the final leg of their production. Thus the interplay of these factors prevents the Assamese industries from multiplying their production, and pricing their product competitively in the market. As a direct outcome, the industry lags, and faces stiff competition.⁴

Lack of investment in capital goods is also one of the reasons for stunted growth of Assam firecracker industry. As noticed, fireworks here are manufactured mainly from hands, unlike Sivakasi, it's understood that these industries are not able to mass produce, and whatever they make is just about enough for local consumption. But the number of people employed in the two industries varies by a huge margin. Five individual makers of Barpeta cannot match the inflow of products that flood the markets in the entire country, which the 450 makers of Sivakasi do annually. By their own confession Sivakasi, "What could have been consumed in three hours of the Diwali Day came to be produced in 300 days, almost with overtime jobs throughout the year." Hence, the scale of production of the two industries is unmatched.

The Firework industry of Barpeta, though is an initiation when the British government gifted the land the forefathers of the current owners, lacks the attention it deserves today. It has the qualities and potential of becoming a dominant player in the market beyond the state of Assam, provided it is backed by the government, and invested in. This investment need not necessarily be monetary in nature, as what the Industry needs to scale up is motivation, and more human capital. The latter can only come in by incentivising the process, and hence, must not be neglected. Unless the operations are increased strategically, to ensure maximum benefits of the people employed, while ensuring their safety and living standards, the Industry will remain what it is today, a remnant of an art, a piece of heritage and a struggling industry trying to ride the uncertainties of these economically turbulent times. Immediate interventions, by the government, and from the locals are needed if the Firework Industry is made to be a name to reckon with. This requires a nexus of the existing players, along with enthusiastic participation of the government, and new entrants.

ASSAM SILK INDUSTRY

The Assamese silk has been long revered as a cultural artefact and has a long existence. There has also been mention of 'Dukala' a fabric variety in Kautilya's account. It can be traced back to the Ahom regime (1228-1828) especially Ahom Queens who wore royal robes made of Muga Silk and were patrons of this art⁵ It is said that young girls were judged for their marriage worthiness by their ability to weave silk. Also the gears of traditional soldiers placed as much importance on weapons as on their silk tunics. There were administrative measures including land grants and exemption of taxes for the weavers. Though specialized classes called Katoni or Jogi practiced the artform, there was no restriction on which group within the Hindu four-fold system would practice it including Muslim weavers⁶.

There remain some inconsistencies about the origin of the industry with some scholars accounting the Chinese discovery of silk as a watershed for the Indo-Sino region while other say the origin is indigenous to the region. Many sources other ascribe it to the 17th century, and while it is also hard to distinguish which communities are involved in the process the Industry remained dominated by weavers of Tanti Community up-to the 1930. Local weavers today agree that the profession has been in sustenance before the British reign in India. They identify with the prestige of the trade and local weavers we interviewed hoped that future generations would uphold the tradition in an era of modernity and multiple professional choices available to them. Silk weaving at Sualkuchi thus sustains itself as a surviving Industry.

Assamese Sericulture, a cottage industry has produced three kinds of silk – the Muga, Pat and Eri. The Muga is valued for its golden colour and its myth of not being able to be dyed or bleached. There are 9173 sericulture villages in Assam, one of them being Sualkuchi. It is located 32 km from Guwahati. The Assamese Silk Industry is mainly centred on this region that covers a region of 12sq km. It is popular as a 'crafts village' and was home to several extant crafts like oil processing and pottery⁷. Due to decline of many professions including those of traditional fishing families, new sections have taken up weaving⁸. It is now diverse and decentralized and the production and marketing take place traditionally. Out of about 50000 people in Sualkuchi about 20000 are weavers or helpers which go not to show how important the crafts are to the economic and cultural well being of the area.

Marketing of the products is distributed among towns along the Brahmaputra valley and the market remains confined to this area though products are also bought by non-Assamese segments.⁹ In the production centre, Sualkuchi most shops we surveyed had both dress materials for everyday wear and highly specialized materials worn only on occasions. Traditional weavers generally used to weave the Mekhala Chador, Riha and plain clothes to meet domestic demand. Today there is less dependence on traditional dresses and now readymade garments are on demand and thus the nature of work has changed from weaving to tailoring and embroidery. Many activities like dyeing, reeling and spinning are no longer performed by the weavers¹⁰. We saw craftsmen, some of them well into their sixties drawing intricate designs onto paper that would be archived and later reproduced onto the loom.

The harvesting of silk is a complicated process. The total area under silkworm food plants has been recorded at 21229 hectare in 2009-10¹¹. Most silk worms are of wild variety and thus the indigenous silk of the region are named 'Vanya Silk'¹². It is a tedious process and due to rearing outside cocoons are subject to pests and have to be protected. Most of these pest control methods are biological and intensive. After collection of cocoons, rearers store them inside bamboo cages and take care to maintain the humidity¹³. Next the worms are wiped

which is said to be a collective effort as family members and neighbours aid in the process. Later the silkworm is killed using alkaline chemicals and the yarn is collected. Two people are needed in the reeling process and can handle about 500 cocoons producing near to 100-130 gm of silk yarn per day¹⁴. The process is very laborious and younger generations are said to lack patience needed to complete the task.

As mentioned by historical sources, there is bent towards more female participation in the process as compared to males. Most women are literate and education is one of the motivations for these women to make independent decisions including taking weaving as a profession¹⁵. We observed several women in looms with their children playing around the premises. Thus the factory has become more than just workplace but a socio-cultural environment of interaction between peers and as much as the loom has become an icon of empowerment. About 60 % of the total workforce consists of women. A 2011 survey puts it at 10496 female weavers against 8672 male weavers. We however found few women shopkeepers in and around the area, though on our visit to a workshop located above the shop quarters we found women weaving yarn.

Women are involved in all stages of production starting from the plucking of cocoons. We interviewed a male weaver who said there was no natural division of labour based on gender and that women used to weave, now In terms of gender employment both male and women are equally engaged. The major chunk of activities is carried out by migrant women from the Bodo community who work as wage labourers. Most of them come from Nalbari, Nagaon and North Lakhimpur¹⁶ 60% of the women weavers in Sualauchi lived outside of the district. The Census of Hand-looms in Sualkuchi conducted in 2002 reveals that Sualkuchi has 13752 active commercial hand-looms, of which 54.75% are performed by the woman weavers, who are basically hired from the outside of Sualkuchi.

Today while many the succeeding generations of families are opting out of the family business, data from Department of Sericulture (2009) claims that number of families associated with sericulture in the state increased from 1.85 lakhs in 2006 to 2.39 lakhs in September, 2008. The youth of Sualkuchi have entered into Entrepreneurship mainly due to reasons of continuing the family business¹⁷. Most of the businesses are generations old and the businesses are considered hierarchical. Also many of them are motivated by profit-making among other causes and success stories of other entrepreneurs. Higher education levels attribute to increased knowledge about the market environment. Though, it must be mentioned, that a lot of them also enter into the profession as a last resort, as a means of livelihood.

Though there have been many factors which have and could lead to decline in this trend. Family size of the reelers is said to negatively influence chances of joining the business as with larger families expenses continue to grow in the backdrop of a slow growing handloom sector¹⁸. Availability of modern technology has given rise to the propagation of this venture. Many of them have employed modern weaving machines, though in our survey we found most looms traditionally operated without sophisticated machinery. It has also been suggested that technological know-how has also been responsible for the transition from weavers to entrepreneurs¹⁹. A decrease in number of labourers has risen from the number of weavers becoming entrepreneurs. Thus non-availability of labour along with shortage of capital has been among the prime concerns of the trade.

Considering other problems, Sualkuchi is a thickly populated region and most of the factories are built into residential areas due to lack of spaces²⁰. There is immense problem of

expanding the business or allocating resources in a limited area. There is also a rising cost involving raw yarns as more than 50% accounts for the charges involved in production and the selling price is low. A weaver we interviewed said that if on an average a sari is sold elsewhere for 6000 or 7000, he earns only around 1000. About 54.50% of weavers earn up to Rs. 12000/ while 42.50 up to 15000 a year. Many weavers say they do not need Government aid but many local producers have objected to initiatives such as importing fabrics. To resolve such Assam govt has promised grievance assurance but later initiatives such as Catalytic Development Programme have provided financial assistance to only the stakeholders of silk industry.

Other problems include prospects of E-Commerce have not met with significant results. Traditional system of selling wares that could be distinguished by touch and examination are not available in online purchases. Salesmen groom themselves over years to cater to customers while E-Commerce does not focus on such nuances²¹. On the infrastructural level there are a few nationalized banks in the village to cater to the credit requirements of the entrepreneurs²². It is an imperative for concerned governments to provide facilities for easy loans. Also there is said to be sporadic episodes of power shortages in the area. While we experienced no such episodes it is said to be severe enough to hamper work.

Silk production fetched annual export earnings of more than US \$ 628.57 million in 2010-11.²³ It is an important asset to the economy in the time of Globalisation. In recent times there is a high demand supply gap in the trade as of now, both in domestic and international markets. Even though 85% of domestic production goes to national markets while the remaining go for exports, the domestic demand is too high as indicated by exports of silks including cheaper varieties that have entered the market and resulted in the price of Silk has going down. Among them include Chinese Tassar – a competitor to the Indian Market. Owing to various other Liberalisation reforms by the WTO, Indian Silk varieties are at loss against foreign ones. Adding other covert and illegal measures such as smuggling of silk across borders Indian varieties are at recurring losses.

FERRY INDUSTRY

After having travelled on asphalt and iron rails, the two most common surfaces to exert our weight upon, it was time for us to glide over the sprawling chest of mighty Brahmaputra, a sacred river for Indians, and the only male among its peers. It originates from Angsi Glaciar in northern Himalayas, and makes its headway towards south-west Assam, to fall in Bay of Bengal. The river is mostly navigable throughout its course which makes it amenable for city transport system. As a result it, we have a small scale ferry industry of Assam which carries hundreds of human lives, and cargo, from one port to another everyday. This particular mode of transport is very crucial to many Assamese, for example those in Guwahati who travel from main city to North Guwahati everyday. The extremely low fare and economy of time also makes it a much sought after carrier. To conduct our study we boarded one of those ferries from Fancy Bazaar port. The pair of ferries which were anchored at the ghat at the time of our boarding there, bore same Assam Oil logo with a rhino as its mascot. In no time both the ferries were packed to their capacity, which gave us an instant proof of the vitality of this mode's existence. The traffic of ferries and other small boats on the ghats is overseen and regulated by Department of Inland Water Transport, Government of Assam. The Department announces auction every year for the leasing of these ghats, which the ferry owners then bid for, and then, get their leases for a year. Some of the ferry owners allow smaller boats, the wooden ones, known as Bhotis, to ply from their leased property against a sum. In other words, they sublet some of the space of the ghat to small boat owners.

Specifically speaking about Guwahati-North Guwahati stretch, there are 400 small Bhot-bhotis, apart from regular ferries which are operational on its banks. The drivers are trained by the Department itself, and on the completion of the training are given their licenses.

The ferry industry of Guwahati falls on National Waterway-2, which is 891 km long and runs from Sadiya-- Dhubri stretch of the Brahmaputra river.

There's strong desire to capture the seams of this vast puddle as you make an incision through its, somewhat, pale blue pectus, but its what's 'beheld' which envelops you, not the other way round. The Cruise like quality of the journey to Umananda temple, situated on the smallest river island of the world, can easily be credited to the magnanimity of the river, not to the ferries which can be called ordinary at best. In the name of safety there were only one lifebuoy and two life-jackets. The safety iron grills at the edge of the ferry had gaps, at places they were completely missing. The capsizing of the overloaded ferry, with no lifebuoys or life-jackets in May, 2012, which killed more than 100 people, is one such instance which cries out for the need of competent safety measures to be put in place. There were reports last year, that Inland Water Department of Assam was pondering with idea of installing ferries with GPS tracking devices, but the ferry which we travelled in, which was as good as it gets, didn't have no such device.

The ferry industry of Assam is afflicted with many problems, which can be attributed to its underdevelopment and its status of remaining a marginalised industry despite having the potential of becoming an indispensable cogwheel in the overall transportation apparatus of the state. According to IWT one of the primary shortcomings of this industry is the lack of private and public fleet owners. The operators just own one or two ferries at max, hence there's no emergence of an organised, established fleet system, impeding it from attaining the required economy of scale which can make it the envy of many states which have nothing like this to boast of. The participation from major industries of Assam like tea, cement, and oil is also desired for the capital investment. A public sector subsidiary like Food Corporation of India (FCI) can also contribute to the same cause. An induction of vessels of several sizes, catering to different demands, is also a strategic step which the IWT can take to diversify its role.

Tourism is also one industry which can be seen as a crowd puller. A side-show, which can bring revenue to the Department and increase its earnings multifold, marginally making it a self-sustaining body. But on our only visit to the ghat, we didn't see any such activity being undertaken, except a lone ferry, which festooned as a cruise, but seemed deserted for year.

Assam has an enviable natural resource in the form of Brahmaputra, but it's pity that this treasure remains grossly underused, and its role remains largely epiphenomenal to being an incidental sightseeing spot. The lack of enterprise, a cohesive policy system, and a lazy attitude of the state departments are the major factors which hinders the growth of an industry, which lies neglected so far.

Assamese Culture and similarity with Gandhian perspective on Indigenous industry

Gandhi in Hind Swaraj pointed out that modern society is called a mechanical society but it does not mean that machines were not there in the pre-modern era. A cursory glance at the history of human civilisation shows that in every era, human beings had been using certain types of machines. But, of course, the nature of pre-modern machines was totally different

from that of the modern machines. Previously machines were indigenous in nature. They were invented just to fulfil requirements of the communities. Production took place exactly according to the requirements. Those indigenous machines were self-sufficient in nature. Therefore, there was no scope for competition and subsequent corruption. Machines were discovered to fulfil society's need rather than to satisfy an individual's greed. This is true of the Assamese cottage industries too. The ferry industry, silk or fire cracker industry are meant for a communities need but not for capitalist greed.²³

But, after the industrial and technological revolution of eighteenth century, these machines were coming up in a more sophisticated manner. Modern machines are designed to fulfil global needs. We have the universal nature of machines in the modern era. I mean these modern machines are devised in such a way that they can function anywhere throughout the globe. Irrespective of the limited local natural resources they can produce anything upto any amount. They are invented to serve the globe rather than a specific community. Consequently they are producing at the mass level. And while distributing these products the producers are getting enough chance for deception. Mass production is responsible for hegemony and subsequent domination. Enriched economies are producing commodities at enormous scale and using the Third World countries as their market, which often results in the reduction of the indigenous economy of the developing countries. Not only this, the nature of these machines is highly individual-oriented. Modern men can use these technologies for their own personal pleasure and luxury. Therefore these machines are enhancing hedonistic life-styles. The whole scenario of human life gets changed or becomes mechanised in modernity. For Gandhi, the mechanisation or fetishism of technology was closely tied up with the phenomenon of industrialism, another apparently self-propelling and endless process of creating larger and larger industries with no other purpose than to produce cheap consumer goods and maximise profit. He argued that since modern economic life followed an inexorable momentum of its own, it reduced men to its helpless and passive victim and represented a new form of slavery, more comfortable and invidious and hence more dangerous than the earlier ones. The capitalist hunt for profits led to mechanisation and industrialism. For Gandhi, machines relieved drudgery, created leisure, increased efficiency. Their use must therefore be guided by a well-considered moral theory indicating how the new men should live, spend their free time and relate to one another. Since modern economy lacked such a theory and was only propelled by the search for profit, it mechanised production without any regard for its wider moral and cultural consequences. Hence, in the modern era the increasing use of machinery and technology led to unemployment in very large measure.

Men are replaced by machines and thus there is a great scarcity of work. And consequently we are facing the problem of corruption and immorality in economy. Gandhi intended to provide the minimum basic needs to each and every one. If the machine can do so than it is to be accepted; otherwise it should be regarded as a curse for the society. Unemployment is rampant in India and Assam, thus the need to encourage these traditional industries so that unemployment can be discouraged. Thus if we follow Gandhian vision in India and Assam in particular would be free of vicious cycle of unemployment and poverty which has been the result of modern machinery. Small sector industry in Assam has its own culture and needs to be preserved for its own sake.

CONCLUSION

Each of the industries Fire cracker, silk industry and ferry industry studied is distinctive in itself and the individuals involved in these industries have their own unique set of skills. Each industry had its own specific issues and consequently the scope of each industry is different. However after intensive background study, we decided upon certain common objectives for the three listed industries. As expected, it is very hard to generalise and conclude the findings of the study of the three industries under such paucity of time and data but, even at a subterranean level the reality isn't much different from what seems to be on the surface. All three industries are afflicted from various issues some of which are peculiar to the business, and some very general. One 'general' factor which seemed missing in every industry we studied was of lack of an 'enterprise'. There is some zeal to earn some extra bucks within the ferry industry, shown by lessees of those ferries by allowing few wooden boats to ply on the same banks, which cater to the spill-over traffic from ferries. But the fact that they could use the same banks for other commercial activities hasn't occurred to them yet, or so it seems. Fireworks industry too, more or less, shows the same lack of fervour to compete with the market forces. Barpeta firecracker, as said earlier, is handmade, and there's just only so many of them you can make in a given period of time. This mediation between quality and quantity makes Barpeta firecracker industry, a very niche enterprise. And it's this nature which restricts it from becoming a nationwide or even region wide dominant player. Although, we sensed an eager market for the consumption of these fireworks, which means it has the variables required for this industry's exponential growth but, a reluctance towards investment in capital goods makes it nothing but a local player. Though substantially big, the Silk Industry too is in need of dire intervention as the workers of the Industry do not seem too happy with the share of the pie that they are presently getting. In order to make Sualkuchi a force to be reckoned with, in the face of Banaras, substantial governmental intervention that organizes and streamlines the entire process of production, weaving and selling is required, failing which, the Industry will remain in the shackles of oblivion, inefficiency and incumbency. Thus, our hypothesis tested positive, as we gauged that the indigenous industries of Assam are self-sustaining, and if scaled up, can grow to be widely-popular industries. We also established the factors that prohibit the same. As far as these industries are concerned the state should step in and resolve the problem which these industries are facing. And this goes for all the three industries.

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REFERENCES

1. <http://www.sivakasonline.com/>
2. Design Clinic Workshop Manual 2-6 August 2014, Page 2
3. Raju Phukan ,Dr, Muga (2012)Silk Industry of Assam in Historical Perspectives, *Global Journal of Human Social Science History & Anthropology*: Global Journals Inc.
4. Ibid

5. Akhtar Nazneen(2013), “Socio-economic and structural analysis of cottage industry workers : a case study from a remote area of Assam, India”, *The Clarion International Multidisciplinary Journal* .
6. Kalita Nihar Ranjan,(2009) *Entrepreneurial Motivation in Cottage Industry - A Case study in the Silk Industry of Assam*, Proceeding of International Entrepreneurship Congress ,, Izmir University of Economics, ISBN : 978-975-8789-37-0
7. Roy Mithun Chandra,(2009) E-Commerce in silk industry of Assam: A critical study, *The Echo, An Online Journal of Humanities & Social Science*, Karimganj College, Karimganj, Assam, India.
8. Nazneen Akhtar, art.cit.
9. Mithun Chandra Roy, art.cit.
10. Savithri G. and P. Sujathamma(2011), “Pros and Cons of Globalisation on Indian Sericulture Industry”, *International Journal of Physical and Social Sciences* ISSN: 2249-5894.
11. Phukan R and S N Chowdhury(2006), Traditional Knowledge and Practices involved in Muga Culture in Assam, *Indian Journal of Traditional Knowledge*, PP 450-453.
12. Ibid.
13. Dr Kishore Goswami(2012), Impact of Globalisation of Silk Industry in North India: An assessment from Gender Perspectives, Factors Influencing Wage Structure of the Handloom Workers in Assam: An Assessment from Gender Perspective ,*Journal of Rural Development*, 31 (2)
14. Nazneen Akhtar, art.cit.
15. Nihar Ranjan Kalita, art.cit
16. Alin Borah Bortamuly, Kishor Goswami and Bhabesh Hazarika,(2013) Determinants of occupational choice of workers in the handloom industry in Assam, *International Journal of Social Economics* ISSN: 0306-8293.
17. Alin Borah Bortamuly, Kishor Goswami and Bhabesh Hazarika, art.cit.
18. Nihar Ranjan Kalita, art.cit.
19. Mithun Chandra Roy, art.cit.
20. Nihar Ranjan Kalita. art.cit.
21. G. Savithri and P. Sujathamma, art.cit
22. Pandey,Upasana , (2010)“ Mahatma Gandhi and Modern Civilisation”,*MAINSTREAM*, VOL XLVIII, NO 41.