CHAPTER 7

INVESTMENTS AND EXPORTS IN ASSAM: IT'S SCOPE IN A FEW SELECTED INDUSTRIES

7.1. INTRODUCTION

Assam is a house of natural and precious mineral resources. During the pre-independence period, the chapter of industrial history of Assam began and Assam finds its place in the industrially developed map of the world. The crude oil was explored and India's first commercially viable oil well was drilled, established first oil refinery, the first organized petroleum marketing was commenced and explored first coalfield. Introduction of tea cultivation during the period, beginning of export of finished tea to the global auction market as well, brought the economic boom to Assam. This continuous process of economic and industrial development of the State was almost stopped after attainment of Independence and at present Assam is amongst the industrially under-developed states of the country. Therefore, industrial scenario of the state is confined within the growth of employment-oriented SSI sector, which comprises of manufacturing and processing industries. Assam is still making efforts desperately for gearing up industrial activities by harnessing the untapped resources available in the state through various growth-inducing factors as well as by removing the infrastructure inadequacies in the power, communication and transport sector.

7.2. TRENDS IN THE RATE OF GROSS FIXED CAPITAL FORMATION IN ASSAM IN RELATION TO GSDP:

Despite various constraints impeding the growth of industries in the state, a favourable industrial climate is gradually being created in the state as discernible from the increasing interest shown by investors both from within the state as well as from outside. However, the manufacturing sector's contribution to the state economy maintains its downward trend in 2011-12 and pegged at 4.05 per cent at 2004-05 constant prices *(Economic Survey, Assam, 2012-13).*

The declaration of North-East Industrial Investment Promotion Policy has been another important feature for industrialization in the state. The central government has approved a package of fiscal incentives and other concession for the entire North-eastern region and Assam would be the leading state to exploit benefits from it.

YEAR	Assam (Rs. In Lakhs)		
	GSDP	**GFCF**	**P.C.**
2006-07	5778253	1379772	23.88
2007-08	6056750	1404044	23.18
2008-09	6469688	1614077	24.95
2009-10	6992365	1883027	26.93

Table 7.1: Percentage of GFCF to GSDP in Assam (at constant prices). **Source:** Directorate of Economics and Statistics, Assam

It could be seen from the figures above mentioned in table 7.1 that the Gross State Domestic Product (GSDP) has moderately increased over the years as a result of moderate increase in Gross Fixed Capital Formation (GFCF) for Assam. Also, it could be evidently proved that the GSDP of the state is highly dependent on the state's investment rate.

7.2.1. Correlation between GSDP AND GFCF: Formulation and Testing of Hypothesis

To further strongly prove the correlation between GSDP and GFCF and that GSDP growth is dependent on GFCF for any region, the following hypothesis has been formulated:

Null Hypothesis (H_o): There is no significant relationship between GSDP and GFCF of Assam.

Alternative Hypothesis (H_1): There is significant relationship between GSDP and GFCF of Assam.

To examine the significance of GFCF on growth, firstly Karl Pearson's correlation coefficient is computed considering the two variables. The results are analysed considering the growth rate and GFCF rate at constant market prices from a period of 2006-07 to 2009-10.

To further understand the dependency of the two variables, following model has been built based on Simple regression Analysis.

Model: The model is based on Simple regression Analysis to explain dependency of GSDP on GFCF.

$$GSDP_t = \alpha + \beta GFCF_t + e \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{(1)}$$

Where, $GSDP_t$ = Gross State Domestic Product

$GFCF_t$ = Gross Fixed Capital Formation

e = Error or Disturbance Term

Model Summary (GSDP at Constant Prices)

R	R Square	Adjusted R Square	Std. Error of the Estimate
.98	.97	.95	119300.73

ANOVA (GSDP at Constant Prices)

	Sum of Squares	df	Mean Square	F
Regression	808733508690.37	1	808733508690.37	56.82
Residual	28465329603.63	2	14232664801.81	
Total	837198838294.00	3		

Coefficients (GSDP at Constant Prices)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	2833670.45	466888.75	.00	6.07	.01
GFCF at Constant Prices	2.22	.29	.98	7.54	.02

Figure 7.1: Results of the Analysis. **Source:** Author

7.2.2. Data Analysis

Since the coefficient of correlation between the two variables is 0.98, it indicates a high correlation between the two variables. Moreover, since Coefficient of Determination/Variation (R^2) is 0.97, it indicates that 97 per cent of variation in GSDP is explained by variation in GFCF. F-test/ANOVA at df =4 and t-test also confirms that the two variables are statistically significant at 95 per cent confidence interval.

Hence the null hypothesis is rejected and alternative hypothesis is accepted proving that there exists a strong relationship between GSDP and GFCF and that investments are an important driver for the growth of any region.

Therefore, it could be concluded from the analysis made above that investments have been playing a pivotal role in inhibiting the growth of the state of Assam. Therefore, it is highly

recommended that the government works on supplementing efforts to increase the flow of inward domestic investments into the state.

7.3. SCOPE OF INVESTMENTS AND EXPORTS IN ASSAM CONSIDERING A FEW HIGHLIGHTED SECTORS:

To understand and analyse the scope of further investments and exports in the state of Assam in the industrial sector, a primary study has been conducted considering four sectors/industries namely – Cement Industry, Plastic Industry, Handloom Industry, and Agro-processing/Food-processing industry. A total of 30 organizations have been studied considering all the sectors together. The prime objective of this study has been to identify the capital structure of the companies and their modes of investment they are relying on. Company-wise analysis has been done there from. The sample size that is considered for each sector ranges from 6 to 10 organizations depending upon the availability of information. Data has been collected on the production installed capacity of the organizations, their utilized capacity, their unutilized capacity, the markets they are exploring and information on their capital structure. For some of the big companies, financial statements are also analysed to get a clearer picture on their sources of investments.

The major setback that has been experienced during the course of the study is non-availability of sufficient information and reluctance on the part of the company officials to furnish the desired information. Therefore, the sample size had to be confined to 30 companies in all.

7.3.1. Overview of the Cement Industry:

The Cement Industry in India is the second largest cement producer in the world with an annual capacity of 360 million MT. The major raw materials of cement are limestone, coal and gypsum. Cement production takes place in India in clusters with manufacturing facilities primarily located close to limestone kiln. Recently, cement players have tweaked

their business model by carrying out clinkerization (stage 1 of cement manufacture) near the kiln and locating their cement units close to the consuming markets *(Star Cement, Annual Report, 2013-14)*.

In 2013-14, cement production remained subdued, contracting by 4 per cent compared to 2012-13. Delay in environmental clearances for industrial and infrastructural projects and inadequate availability of land in many states, contributed to the lacklustre performance of the cement sector. But on the flip side, the Indian cement sector it expected to witness attractive growth in coming years with demand set to increase at an 8 per cent CAGR between 2013-14 and 2015-16 *(Ministry of external Affairs, Government of India, June 2014).* The production capacity is expected to grow to 550 Million MT by FY2020.

India's infrastructural potential is huge and the country is expected to become the world's third largest construction market by FY2025, adding 11.5 million homes a year to become a US$ 1 trillion a year market, which will increase the demand for the cement industry in the coming years *(Global Construction Perspective).*

With the recorded volume growth of 8 per cent in FY 2013-14 and FY 2012-13 and projected to grow at 9 per cent in FY 2014-15 within the North-East, the total cement consumption is billed at an annual figure of 6.7 million tonnes for FY 2014-15 *(Dalmia Bharat Cement, Annual Report, 2013-14).*

The market size of North East cement demand is 5.8 million ton for FY 2012-13 (5.7 million ton for FY 2011- 12) of which 1.3 million ton (1.8 million ton for FY 2011-12) is supplied by players out of North East Region and the balance 4.5 million ton (3.9 million ton for FY12) is served by players located in North East Region. The supply from outside North East region is steadily reducing as observed in the last year's trend with better quality and service available from the local large players. The market is expected to grow at 7-8 per cent in the coming year.

The four major requirements for a cement plant to operate in any region is – limestone deposits in the nearby vicinity, coal deposits, power supply and market within a radius of 300 kms from the plant site. Since limestone and coal are deposited both in parts of Meghalaya and Assam, most of the cement companies operating in North-east are located either in the State of Assam or Meghalaya. Of late, limestone deposits have radically decreased in Assam, therefore, majority of the cement companies are operating from Meghalaya with only a few big players in Assam. Recently, a few cement players have pulled their clinkerization process in Meghalaya and have established their grinding units in Assam. Therefore, considering all these factors, nine cement companies have been considered to make this study.

List of Cement Companies considered	
SL. No.	**Name of the Companies**
1	Dalmia Cement Bharat / Calcom Cement India Ltd.
2	Topcem Cement
3	Star Cement
4	J.K. Avtar Cement Pvt. Ltd.
5	Barak Valley Cement Ltd.
6	Raksha Cement Pvt. Ltd.
7	Shivshakti Cement Pvt. Ltd.
8	Cement Corporation of India Ltd.
9	Jumbo Cement/River Valley Cement Pvt. Ltd.

7.3.1.1. Dalmia Cement Bharat Ltd. /Calcom Cement India Ltd.:

Dalmia Cement Bharat Ltd. (DCBL) has been into cement manufacturing since 1939. Their cement plants in India are growing in terms of capacity over the years through acquiring some new plants for growth in volume and expanding further.

Dalmia Cement Bharat Ltd. is a multi-spectrum cement player with double digit market share and a pioneer in super-specialty cements. Recently, Dalmia has acquired the brands Adhunik MSP Cement, Calcom Cement, Vinay Cement, RCL Cements Ltd., SCL Cements Ltd. in N.E., and the group with current capacity of 17 million tonnes is ranked fourth largest in the Indian Cement Industry. The group now controls an expandable capacity of 22 million tonnes post completion of its ongoing projects. With the cement plants located close to their source of raw materials, they have been able to keep their freight and transport costs relatively low compared to their competitors *(Source: Company).*

The Company launched the "Dalmia" brand of cement in the North Eastern markets in early January 2013 and the new brand has been well accepted in the market as a Premium Cement Brand within three months of its launch. Its clinkerization plant is located in Umrangshu, North Cachar Hills, Assam and its grinding unit is located in Lanka, Nagaon District, Assam.

The following information about Dalmia group was collected as a part of the study:

1. **Form of Organization**: Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
0.5 million metric ton	0.75 million metric ton	0.75 million metric ton	0.75 million metric ton	1.5 million metric ton

3. **Production Capacity Utilized**:

2010	2011	2012	2013	2014
0.25 million metric ton	0.375 million metric ton	0.45 million metric ton	0.45 million metric ton	0.6 million metric ton

4. Unutilized Capacity (2 – 3):

2010	2011	2012	2013	2014
0.25 million metric ton	0.375 million metric ton	0.30 million metric ton	0.30 million metric ton	0.9 million metric ton

5. Markets: Entire N.E. States

Exports (if any): Nil

6. Capital Employed: (in Rs.)

2010	2011	2012	2013	2014
Data not available	Data not available	4,69,92,08,470	6,23,31,98,607	7,61,00,82,288

7. Source(s) of Capital:

2010	2011	2012	2013	2014
Not available	Not available	• Shareholder's funds • Long-term borrowings ✓ Axis Bank ✓ Oriental bank of Commerce ✓ Indian Overseas bank ✓ UCO bank ✓ Dena Bank ✓ LIC	• Shareholder's funds • Long-term borrowings ✓ Axis Bank ✓ Oriental bank of Commerce ✓ Indian Overseas bank ✓ UCO bank ✓ Dena Bank ✓ LIC	• Shareholder's funds • Long-term borrowings ✓ Axis Bank ✓ Oriental bank of Commerce ✓ Indian Overseas bank ✓ UCO bank ✓ Dena Bank ✓ LIC

		✓ Guarant Co. ltd., Mauritius ✓ EXIM bank	✓ Guarant Co. ltd., Mauritius ✓ EXIM bank	✓ Guarant Co. ltd., Mauritius ✓ EXIM bank

7.3.1.1.1. Data Analysis

- From above, it is clear that production installed capacity for Dalmia group is increasing from the period 2010-14 as well as production utilized capacity is increasing from the period 2010-14, which is a good sign.
- But the production capacity is not fully utilized in the same period of study. There can be three main reasons for it – first being low marketization in the state, second being cost inefficiency of the company and third being lack of investments for the company.
- The various sources of capital for them is mainly shareholder's funds and long-term borrowings from banks around the country and Foreign Direct Investment (FDI) from Mauritius. This is the only cement group in the state getting FDI as of now.
- For 2012, if we look at the utilized capacity, it is 0.45 million metric ton and capital employed for utilizing this much capacity is Rs. 4,69,92,08,470. Further, 0.30 million metric ton capacity remain unutilized. To utilize another 0.30 million metric tonnes of capacity, additional investments worth Rs. 3,13,28,05,647 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- Similarly, for 2013, if we look at the utilized capacity, it is 0.45 million metric ton and capital employed for utilizing this much capacity is Rs. 6,23,31,98,607. Further, 0.30 million metric ton capacity remain unutilized. To utilize another 0.30 million metric tonnes of capacity, additional investments worth Rs. 4,15,54,65,738 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.

- And similarly for 2014, if we look at the utilized capacity, it is 0.60 million metric ton and capital employed for utilizing this much capacity is Rs. 7,61,00,82,288. Further, 0.90 million metric ton capacity remain unutilized. To utilize another 0.90 million metric tonnes of capacity, additional investments worth Rs. 11,41,51,23,432 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- The second reason for unutilized capacity could be low marketization. As has been mentioned above that the market size of North East cement demand is 5.8 million metric ton which indicates that the market size within the state is quite limited. From the above data, it is also seen that Dalmia group is catering to only markets of N.E. states.
- Low marketization results in low levels of investment. Low investments results in low production and high product costs since fixed costs remain same even after fall in variable costs. This leads to a fall in the profit margins of the company forcing them to increase the prices of their goods. As a result, they lose their market share to those suppliers who are operating outside the state and selling their commodities at very low price within the state. This would further aggravate the problem and lead to fall in further production rates resulting in unemployment within the economy as well as further dip in the unutilized capacity. This is nothing but acts as a vicious circle which would continue with further fall in the unutilized capacity. This cycle can be summarized below:

Vicious Circle of Unutilized Capacity

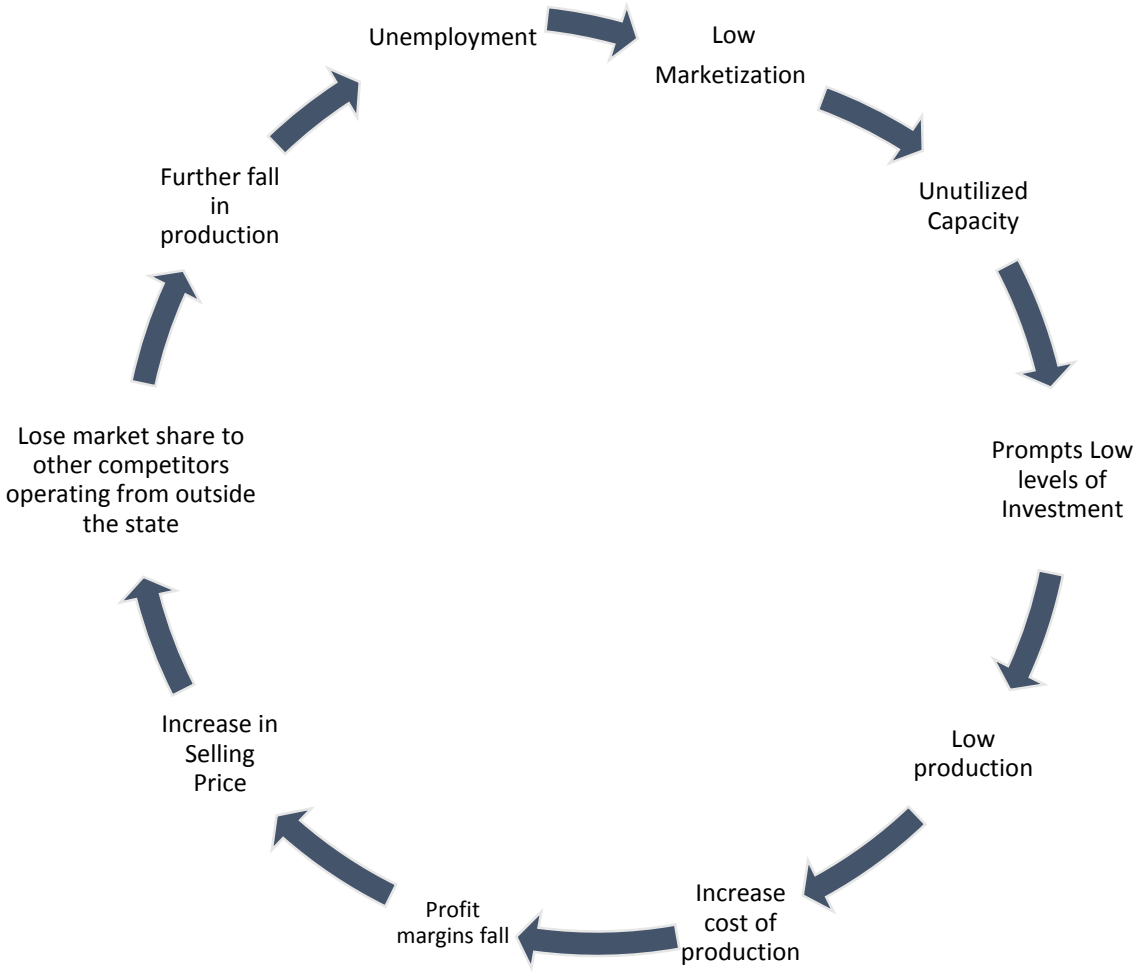

Figure 7.2: Vicious Circle of Unutilized production Capacity. **Source:** Author

- This process indicates that if Dalmia group would cater to only the states of N.E., it would never be able to reach its full production capacity and investments would also not increase at all which is not a good sign for the state of Assam as it would keep lacking the much needed investments for it to grow in future.

Solution to come out of this vicious circle

- The only solution that could be provided from the researcher's end is to increase production and enjoy economies of scale. This would not only lead to fall in

production costs but would also help the company fight its competitors in the home state by quoting lower prices than them. To further enjoy excess profits and reach profit maximization stage, marketization also can be increased through exports and exploring outside nations. Since a large proportion of Assam's boundaries are surrounded by neighboring allies, the outside markets is a viable option to increase the market size of the company. This would also help the company enjoy comparative advantage over its outside competitors. Exports would also boost the opportunity of getting investments from external sources.

- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments, thereby breaking itself free from the vicious circle of unutilized capacity of production. FDI would further help them to enjoy economies of scale and increasing returns to scale which can further boost exports. These options still remain unexplored by the company.

7.3.1.2. Topcem Cement/Meghalaya Cements Ltd.

The company started its production in the year 2006 with its plant at Lumshnong in Jaintia Hills, district of Meghalaya. As of today, Topcem Cement, the brand name of Meghalaya Cements Ltd., is one of the leading brands in the entire N.E. India. The company produces, more than one lakh metric ton cement per month. The dealer base has increased spreading through the entire North East and North Bengal counting to more than 480.

It incorporates totally automated process which ensures efficiency of utilization and process monitoring. Its clinkerization plant is based at Meghalaya and its grinding unit is based at Changsari, North Guwahati, Assam *(Source: Company)*. Topcem is known as Green Cement as it is propagating environment friendly cement.
The following information was collected about Topcem cement for the study:

1. **Form of Organization:** Company

2. **Total Production Installed Capacity**:

2010	2011	2012	2013	2014
1million ton	1 million ton	1 million ton	1 million ton	1 million ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
0.75 million ton	0.75 million ton	0.75 million ton	0.75 million ton	0.8 million ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
0.25 million ton	0.25 million ton	0.25 million ton	0.25 million ton	0.2 million ton

5. **Markets:** N.E. States, West Bengal, Bihar

   Exports (if any): Clinkers which are produced in Meghalaya are exported to Nepal.

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
Data not available	Data not available	1,72,03,01,995	2,02,74,64,826	2,03,61,79,201

7. **Source of Capital:**

2010	2011	2012	2013	2014
Not available	Not available	• Partner' capital fund • Loan fund ✓ HDFC bank ✓ Tata capital Ltd.	• Partner' capital fund • Loan fund ✓ HDFC bank ✓ Tata capital Ltd.	• Partner' capital fund • Loan fund ✓ HDFC bank ✓ Tata capital Ltd.

		✓ State Bank of India	✓ State Bank of India	✓ State Bank of India

7.3.1.2.1. Data Analysis

- If we see above, it could be very clear that the production installed capacity for Topcem cement has remained to be same from a period of 2010-14. Moreover, the utilized capacity also seems to be same in the same time period with a nominal increase in 2014, which is not satisfactory from growth point of view.
- The production capacity remains to be unutilized for all the all years under study but is relatively low compared to the previous company under study. There could be three main reasons for it – first being low marketization in the state, second being cost inefficiency of the company and third being lack of investments for the company.
- The various sources of capital for them is mainly shareholder's funds and long-term borrowings from banks around the country.
- For 2012, if we look at the utilized capacity, it is 0.75 million metric ton and capital employed for utilizing this much capacity is Rs. 1,72,03,01,995. Further, 0.25 million metric ton capacity remain unutilized. To utilize another 0.25 million metric tonnes of capacity, additional investments worth Rs. 57,34,33,998 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- Similarly, for 2013, if we look at the utilized capacity, it is 0.75 million metric ton and capital employed for utilizing this much capacity is Rs. 2,02,74,64,826. Further, 0.25 million metric ton capacity remain unutilized. To utilize another 0.25 million metric tonnes of capacity, additional investments worth Rs. 67,58,21,609 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.

- And similarly for 2014, if we look at the utilized capacity, it is 0.80 million metric ton and capital employed for utilizing this much capacity is Rs. 2,03,61,79,201. Further, 0.20 million metric ton capacity remain unutilized. To utilize another 0.20 million metric tonnes of capacity, additional investments worth Rs. 50,90,44,800 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- The second reason for unutilized capacity could be low marketization. As has been mentioned above that the market size of North East cement demand is 5.8 million metric ton which indicates that the market size within the state is quite limited. From the above data, it is also seen that Topcem cement is catering to not only markets of N.E. states but also Bihar and West Bengal. This could be one of the reasons as to why there isn't a wide gap between installed production capacity and production capacity utilized. But still there is a big scope for increasing their scale of production.
- Low marketization results in low levels of investment. Low investments results in low production and high product costs since fixed costs remain same even after fall in variable costs. This leads to a fall in the profit margins of the company forcing them to increase the prices of their goods. As a result, they lose their market share to those suppliers who are operating outside the state and selling their commodities at very low price within the state. This would further aggravate the problem and lead to fall in further production rates resulting in unemployment within the economy as well as further dip in the unutilized capacity. This is nothing but acts as a vicious circle which would continue with further fall in the unutilized capacity.
- This process indicates that if Topcem Cements would cater to only to few states of N.E., West Bengal and Bihar, it would never be able to reach its full production capacity and investments would also not increase at all which is not a good sign for the state of Assam as it would keep lacking the much needed investments for it to grow in future.

Solution to come out of this vicious circle

- The only solution that could be provided from the researcher's end is to increase production and enjoy economies of scale. This would not only lead to fall in production costs but would also help the company fight its competitors in the home state. To further enjoy excess profits and reach profit maximization stage, marketization can be increased through exports and exploring outside nations. Although Topcem Cements is exporting, but only clinkers are exported to Nepal. Other countries still remains to be viable options to increase the market size of the company. This would also help the company enjoy comparative advantage over its outside competitors. Exports would also boost the opportunity of getting investments from external sources.
- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments, thereby breaking itself free from the vicious circle of unutilized capacity of production. FDI would further help them to enjoy economies of scale and increasing returns to scale which can further boost exports. These options still remain unexplored by the company.

7.3.1.3. Star Cement/ Cement Manufacturing Company Ltd.

Cement Manufacturing Company Ltd. is the largest cement manufacturer in North-East India. Their plant capacity is spread across 40 acres of land in the idyllic town of Lumshnong, a strategic location at Jaintia Hills, Meghalaya that ensures easy availability of high-grade limestone. Recently, Cement Manufacturing Company Ltd. has also set up their grinding unit at Sonapur, Kamrup District, Assam which has also led to an increase in their production capacity. Cement Manufacturing Company Ltd.'s brand "Star Cement" is one of the largest in the North-East region. Its output is marketed through a 400 big dealer network resulting in the largest market share in the North-East India *(Source: Company).*

The following information was collected about Star Cement as a part of the study:

1. **Form of Organization:** Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
0.6 million ton	0.6 million ton	1.6 million ton	1.6 million ton	1.6 million ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
0.4 million ton	0.4 million ton	0.8 million ton	0.8 million ton	0.8 million ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
0.2 million ton	0.2 million ton	0.8 million ton	0.8 million ton	0.8 million ton

5. **Markets:** N. E. States, Bihar, West Bengal.
   Exports (if any): Exporting clinkers to neighboring countries such as Nepal, Bhutan and Bangladesh.

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
Data not available	1,76,44,23,000	4,51,95,41,000	4,92,71,54,000	4,86,33,08,000

7. Source of Capital:

2010	2011	2012	2013	2014
Not available	• Shareholder's funds • Long term borrowings from banks ✓ State Bank of India ✓ Axis Bank ✓ Oriental Bank of Commerce	• Shareholder's funds • Long term borrowings from banks ✓ State Bank of India ✓ Axis Bank ✓ Oriental Bank of Commerce	• Shareholder's funds • Long term borrowings from banks ✓ State Bank of India ✓ Axis Bank ✓ Oriental Bank of Commerce	• Shareholder's funds • Long term borrowings from banks ✓ State Bank of India ✓ Axis Bank ✓ Oriental Bank of Commerce

7.3.1.3.1. Data Analysis

- If we see from above, it is clear that production installed capacity for Star Cement is increasing from the period 2010-14 as well as production utilized capacity is increasing from the period 2010-14, which is a good sign. Moreover, from the period 2010 and 2011, the company was utilizing almost 90 per cent of its installed capacity. However, after the expansion of the plant with additional one million ton capacity increase, the gap between installed capacity and unutilized capacity increased. They have not been able to utilize their production capacity optimally after the expansion took place.
- There could be three main reasons for it – first being low marketization in the state, second being cost inefficiency of the company and third being lack of investments of the company.

- The various sources of capital for them is mainly shareholder's funds and long-term borrowings from banks around the country.
- For 2011, if we look at the utilized capacity, it is 0.40 million metric ton and capital employed for utilizing this much capacity is Rs. 1,76,44,23,000. Further, 0.20 million metric ton capacity remain unutilized. To utilize another 0.20 million metric tonnes of capacity, additional investments worth Rs. 88,22,11,500 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- For 2012, if we look at the utilized capacity, it is 0.80 million metric ton and capital employed for utilizing this much capacity is Rs. 4,51,95,41,000. Further, 0.80 million metric ton capacity remains unutilized. To utilize another 0.80 million metric tonnes of capacity, additional investments worth Rs. 4,51,95,41,000 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- Similarly, for 2013, if we look at the utilized capacity, it is 0.80 million metric ton and capital employed for utilizing this much capacity is Rs. 4,92,71,54,000. Further, 0.80 million metric ton capacity remains unutilized. To utilize another 0.80 million metric tonnes of capacity, additional investments worth Rs. 4,92,71,54,000 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- And similarly for 2014, if we look at the utilized capacity, it is 0.80 million metric ton and capital employed for utilizing this much capacity is Rs. 4,86,33,08,000. Further, 0.80 million metric ton capacity remains unutilized. To utilize another 0.80 million metric tonnes of capacity, additional investments worth Rs. 4,86,33,08,000 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.

- Another striking feature that is observed is that investments have reduced from 2013 to 2014 amounting to Rs. 6, 38, 46, 000.
- The second reason for unutilized capacity could be low marketization. As has been mentioned above that the market size of North East cement demand is 5.8 million metric ton which indicates that the market size within the state is quite limited. From the above data, it is also seen that Star Cement is catering not only to markets of N.E. states but also Bihar and West Bengal. But still 50 per cent of production capacity remains to be unutilized. This could also be a result of cost inefficiency on the part of the company. Low marketization results in low levels of investment. Low investments results in low production and high product costs since fixed costs remain same even after fall in variable costs. This leads to a fall in the profit margins of the company forcing them to increase the prices of their goods. As a result, they lose their market share to those suppliers who are operating outside the state and selling their commodities at very low price within the state. This would further aggravate the problem and lead to fall in further production rates resulting in unemployment within the economy as well as further dip in the unutilized capacity
- This process indicates that if Star Cement would cater to only to few states of N.E., West Bengal and Bihar, it would never be able to reach its full production capacity and investments would also not increase at all which is not a good sign for the state of Assam as it would keep lacking the much needed investments for it to grow in future.

Solution to come out of this vicious circle

- The only solution that could be provided from the researcher's end is to increase production and enjoy economies of scale. This would not only lead to fall in production costs but would also help the company fight its competitors in the home state. To further enjoy excess profits and reach profit maximization stage, marketization can be increased through exports and exploring outside nations. Although Star Cements is exporting, but only clinkers are exported to Nepal, Bhutan and Bangladesh from Meghalaya plant. The final commodity i.e. cement still is not exported from the Assam grinding unit. The neighboring countries still

remains to be viable options to increase the market size of the company by exporting its final commodity. This would also help the company enjoy comparative advantage over its outside competitors. Exports would also boost the opportunity of getting investments from external sources.

- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments, thereby breaking itself free from the vicious circle of unutilized capacity of production. FDI would further help them to enjoy economies of scale and increasing returns to scale which can further boost exports. These options still remains to be unexplored by the company.

7.3.1.4. Barak Valley Cements Ltd.

Barak Valley Cements Ltd. was incorporated as a Public Limited company in the year 1999, under the Companies Act, 1956. Presently, the company is engaged in the business of manufacturing of cement of different grades and is marketing its product under the brand name "Valley Strong Cement". The company started its commercial production in 2001. Initially, the company started its commercial production at the capacity of the plant at 300 TPD, subsequently the company undertook various expansion and modernization plans from time to time which increased the installed capacity to 600 TPD of clinker and 750 TPD of cement.

The company is located in Assam and all the operations of the company are located in NE Region. The manufacturing unit is at Jhoom Basti, Devendranagar, Badarpurghat, District Karimganj, Assam. The company is ISO 9001:2008 certified company and the products confirm to BIS (Bureau of Indian Standards) specifications *(Source: Company)*.

The following information about Barak Valley Cements Ltd. has been collected as a part of the study:

1. **Form of Organization:** Company
2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
2,47,500 metric ton	2,47,500 metric ton	2,47,500 metric ton	2,47,500 metric ton	2,47,500 metric ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
2,07,923 metric ton	1,67,871 metric ton	1,83,073 metric ton	1,81,109 metric ton	1,74,272 metric ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
39,577 metric ton	79,629 metric ton	64,427 metric ton	66,391 metric ton	73,228 metric ton

5. **Markets:** Southern part of N.E. – Kachar, Mizoram, Imphal, Manipur
   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
1,26,56,13,378	1,04,63,12,589	1,10,94,80,540	1,17,74,56,579	1,14,25,68,006

7. Source of Capital:

2010	2011	2012	2013	2014
• Shareholder's Funds • Loan Fund ✓ IDBI ✓ NEDFI	• Shareholder's Funds • Loan Fund ✓ IDBI ✓ NEDFI	• Shareholder's Funds • Loan Fund ✓ IDBI ✓ NEDFI	• Shareholder's Funds • Loan Fund ✓ IDBI ✓ NEDFI	• Shareholder's Funds • Loan Fund ✓ IDBI ✓ NEDFI

7.3.1.4.1. Data Analysis

- If we see from above, it would be clear that the company has not gone for any expansionary phase, and therefore, the production installed capacity has remained same from the period 2010 to 2014. However, the striking part is that the utilized production capacity has fallen over the years and therefore there is a fluctuation in the investments as well.
- There could be three main reasons for it – first being low marketization in the state, second being cost inefficiency of the company and third being lack of investments of the company.
- The various sources of capital for them is mainly shareholder's funds and long-term borrowings from bank and financial institution.
- For 2010, if we look at the utilized capacity, it is 2, 07, 923 metric ton and capital employed for utilizing this much capacity is Rs. 1,26,56,13,378. Further, 39,577 metric ton capacity remain unutilized. To utilize another 39,577 metric tonnes of capacity, additional investments worth Rs. 24,09,02,549 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- For 2011, if we look at the utilized capacity, it is 1, 67, 871 metric ton and capital employed for utilizing this much capacity is Rs. 1,04,63,12,589. Further, 79, 629 metric ton capacity remain unutilized. To utilize another 79,629 metric tonnes of capacity, additional investments worth Rs. 49,63,14,582 is required (Source:

Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.

- For 2012, if we look at the utilized capacity, it is 1, 83, 073 metric ton and capital employed for utilizing this much capacity is Rs. 1,10,94,80,540. Further, 64, 427 metric ton capacity remain unutilized. To utilize another 64,427 metric tonnes of capacity, additional investments worth Rs. 39,04,48,088 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- For 2013, if we look at the utilized capacity, it is 1, 81, 109 metric ton and capital employed for utilizing this much capacity is Rs. 1,17,74,56,579. Further, 66, 391 metric ton capacity remain unutilized. To utilize another 66, 391 metric tonnes of capacity, additional investments worth Rs. 43,16,32,441 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- For 2014, if we look at the utilized capacity, it is 1, 74, 272 metric ton and capital employed for utilizing this much capacity is Rs. 1,14,25,68,006. Further, 73, 228 metric ton capacity remain unutilized. To utilize another 73, 228 metric tonnes of capacity, additional investments worth Rs. 48,00,99,901 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- Since utilized production capacity is falling over the years, the analysis confirms that investments have been more or less stagnant, affirming the need for further investments in the company.
- The second reason for unutilized capacity could be low marketization. As has been mentioned above that the market size of North East cement demand is 5.8 million metric ton which indicates that the market size within the state is quite limited. From the above data, it is also seen that Barak Valley Cements Ltd. is catering to not only markets of N.E. states.
- Low marketization results in low levels of investment. Low investments results in low production and high product costs since fixed costs remain same even after fall in variable costs. This leads to a fall in the profit margins of the company forcing

them to increase the prices of their goods. As a result, they lose their market share to those suppliers who are operating outside the state and selling their commodities at very low price within the state. This would further aggravate the problem and lead to fall in further production rates resulting in unemployment within the economy as well as further dip in the unutilized capacity.

- This process indicates that if Barak Valley Cements Ltd. would cater to only to few states of N.E., it would never be able to reach its full production capacity and investments would also not increase at all which is not a good sign for the state of Assam as it would keep lacking the much needed investments for it to grow in future.

Solution to come out of this vicious circle

- The only solution that could be provided from the researcher's end is to increase production and enjoy economies of scale. This would not only lead to fall in production costs but would also help the company fight its competitors in the home state. To further enjoy excess profits and reach profit maximization stage, marketization also has to be increased through exports and exploring outside nations.
- Since a large proportion of Assam's boundaries are surrounded by neighboring allies, the outside markets is a viable option to increase the market size of the company. This would also help the company enjoy comparative advantage over its outside competitors. Exports would also boost the opportunity of getting investments from external sources.
- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments, thereby breaking itself free from the vicious circle of unutilized capacity of production. FDI would further help them to enjoy economies of scale and increasing returns to scale which can further boost exports. These options still remains to be unexplored by the company.

7.3.1.5. Raksha Cements Pvt. Ltd.

Raksha Cements Pvt. Ltd. has been manufacturing cement from state of the art plant situated in Tapesia, Sonapur, Assam. Known to be as one of the dominant players in the state, they have been driven by the philosophy of using local resources to meet the development needs of the region.

Raksha Cement is the North-East's foremost manufacturer of 43-grade Ordinary Portland Cement and Portland Pozzolana Cement with a North-East wide network of factories and marketing office. They are planning to expand up to 1, 90, 000 MT per annum. Their fully equipped laboratory is as per BIS norms *(Source: Company).*

The following information about Raksha Cements Pvt. Ltd. has been collected as a part of the study:

1. **Form of Organization:** Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
67, 500 metric ton	67, 500 metric ton	67, 500 metric ton	67, 500 metric ton	67, 500 metric ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
40, 000 metric ton	40, 000 metric ton	40, 000 metric ton	40, 000 metric ton	40, 000 metric ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
27, 500 metric ton	27, 500 metric ton	27, 500 metric ton	27, 500 metric ton	27, 500 metric ton

5. **Markets:** Entire N.E. Region

   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
6,33,50,000	6,33,50,000	6,33,50,000	7,83,50,000	7,83,50,000

7. **Source of Capital:**

2010	2011	2012	2013	2014
• Shareholder's Capital and • Loan fund	• Shareholder's Capital and • Loan fund	• Shareholder's Capital and • Loan fund	• Shareholder's Capital and • Loan fund	• Shareholder's Capital and • Loan fund

7.3.1.5.1. Data Analysis

- If we see from above, it would been clear that the company's production installed capacity has not increased over the years and remains same from the period 2010 to 2014. Also, the utilized production capacity also remains to be same for all the years. This indicates that the company has not emphasized much on increasing its production capacity over the years. As a result, investments also have remained more or less stagnant with slight increase in the year 2013.

- There could be three main reasons for it – first being low marketization in the state, second being cost inefficiency of the company and third being lack of investments of the company.
- The various sources of capital for them is mainly shareholder's funds and long-term borrowings from bank.
- For 2010, 2011 and 2012, if we look at the utilized capacity, it is 40,000 metric ton and capital employed for utilizing this much capacity is Rs. 6, 33, 50, 000. Further, 27, 500 metric ton capacity remain unutilized. To utilize another 27, 500 metric tonnes of capacity, additional investments worth Rs. 4, 35, 53, 125 is required (Source: Author's Calculation) for all the three years separately. Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- For 2013 and 2014, if we look at the utilized capacity, it is 40,000 metric ton and capital employed for utilizing this much capacity is Rs. 7, 83, 50, 000. Further, 27, 500 metric ton capacity remain unutilized. To utilize another 27, 500 metric tonnes of capacity, additional investments worth Rs. 5, 38, 65, 625 is required (Source: Author's Calculation) for the two years separately. Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- The second reason for unutilized capacity could be low marketization. As has been mentioned above that the market size of North East cement demand is 5.8 million metric ton which indicates that the market size within the state is quite limited. From the above data, it is also seen that Raksha Cements Ltd. is catering to only markets of N.E. states.
- Low marketization results in low levels of investment. Low investments results in low production and high product costs since fixed costs remain same even after fall in variable costs. This leads to a fall in the profit margins of the company forcing them to increase the prices of their goods. As a result, they lose their market share to those suppliers who are operating outside the state and selling their commodities at very low price within the state. This would further aggravate the problem and

lead to fall in further production rates resulting in unemployment within the economy as well as further dip in the unutilized capacity.

- This process indicates that if Raksha Cements Ltd. would cater to only to few states of N.E., it would never be able to reach its full production capacity and investments would also not increase at all which is not a good sign for the state of Assam as it would keep lacking the much needed investments for it to grow in future.

Solution to come out of this vicious circle

- The only solution that could be provided from the researcher's end is to increase production and enjoy economies of scale. This would not only lead to fall in production costs but would also help the company fight its competitors in the home state. To further enjoy excess profits and reach profit maximization stage, marketization can be increased through exports and exploring outside nations. Exports would also boost the opportunity of getting investments from external sources.
- Since a large proportion of Assam's boundaries are surrounded by neighboring allies, the outside markets is a viable option to increase the market size of the company. This would also help the company enjoy comparative advantage over its outside competitors.
- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments, thereby breaking itself free from the vicious circle of unutilized capacity of production. FDI would further help them to enjoy economies of scale and increasing returns to scale which can further boost exports. These options still remains to be unexplored by the company.

7.3.1.6. J. K. Avtar Pvt. Ltd.

J. K. Avtar Cements stands for competency and quality. J. K. Avatar is among the leader in aggregates and a prominent player in the fields of cements, concrete and other

downstream activities, making it one of the largest manufacturers of building materials. The core activities of J.K Avtar Cement include the production and distribution of cement and aggregates, the two essential raw materials for concrete. Their manufacturing plant is located in Byrnihat, Assam *(Source: Company)*.

The following information has been collected about J.K. Avtar Cement as a part of the study:

1. **Form of Organization:** Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
36, 000 metric ton	36, 000 metric ton	36, 000 metric ton	54, 000 metric ton	54, 000 metric ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
27, 000 metric ton	27, 000 metric ton	28, 800 metric ton	40, 320 metric ton	40, 320 metric ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
9,000 metric ton	9,000 metric ton	7, 200 metric ton	13, 680 metric ton	13, 680 metric ton

5. **Markets:** Assam, Arunachal Pradesh

   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
Data not available	Data not available	Data not available	20,26,75,062	19,94,87,971

7. **Source of Capital:**

2010	2011	2012	2013	2014
Data not available	Data not available	Data not available	• Shareholder's funds • Bank Borrowings	• Shareholder's funds • Bank Borrowings

7.3.1.6.1. Data Analysis

- If we see from above, it would be clear that the production installed capacity for the company has remained same from 2010 to 2012. However, it is very clear from the data compiled that the company had gone for expansion and therefore, their production installed capacity increased from 2013 onwards. The utilized capacity remained to be same for 2010 and 2011 but with the company going for expansionary phase, the utilized capacity also increased to a satisfactory level. Nevertheless, there is still a wide gap between installed production capacity and unutilized production capacity.
- As far as investments is concerned, not much data has been available in this regards. However, when the company went for expansion in 2013, it could be seen that their investments had increased but dropped down again in 2014.
- There could be three main reasons for it – first being low marketization in the state, second being cost inefficiency of the company and third being lack of investments of the company.

- The various sources of capital for them is mainly shareholder's funds and long-term borrowings from bank.
- For 2013, if we look at the utilized capacity, it is 40, 320 metric ton and capital employed for utilizing this much capacity is Rs. 20, 26, 75, 062. Further, 13,680 metric ton capacity remain unutilized. To utilize another 13,680 metric tonnes of capacity, additional investments worth Rs.6, 87, 64, 753 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- For 2014, if we look at the utilized capacity, it is 40, 320 metric ton and capital employed for utilizing this much capacity is Rs. 19, 94, 87, 971. Further, 13,680 metric ton capacity remain unutilized. To utilize another 13,680 metric tonnes of capacity, additional investments worth Rs. 6, 76, 83, 418 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- The second reason for unutilized capacity could be low marketization. As has been mentioned above that the market size of North East cement demand is 5.8 million metric ton which indicates that the market size within the state is quite limited. From the above data, it is also seen that J. K. Avtar Pvt. Ltd. is catering to only markets of Assam and Arunachal Pradesh which itself speaks a lot about the limited market size they are catering to.
- Low marketization results in low levels of investment. Low investments results in low production and high product costs since fixed costs remain same even after fall in variable costs. This leads to a fall in the profit margins of the company forcing them to increase the prices of their goods. As a result, they lose their market share to those suppliers who are operating outside the state and selling their commodities at very low price within the state. This would further aggravate the problem and lead to fall in further production rates resulting in unemployment within the economy as well as further dip in the unutilized capacity
- This process indicates that if J. K. Avtar Pvt. Ltd. would cater to only Assam and Arunachal Pradesh., it would never be able to reach its full production capacity and investments would also not increase at all which is not a good sign for the state of

Assam as it would keep lacking the much needed investments for it to grow in future.

Solution to come out of this vicious circle

- The only solution that could be provided from the researcher's end is increase production and enjoy economies of scale. This would not only lead to fall in production costs but would also help the company fight its competitors in the home state. To further enjoy excess profits and reach profit maximization stage, marketization also has to be increased through exports and exploring outside nations.
- Since a large proportion of Assam's boundaries are surrounded by neighboring allies, the outside markets is a viable option to increase the market size of the company. This would also help the company enjoy comparative advantage over its outside competitors. Exports would also boost the opportunity of getting investments from external sources.
- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments, thereby breaking itself free from the vicious circle of unutilized capacity of production. FDI would further help them to enjoy economies of scale and increasing returns to scale.

7.3.1.7. Shivshakti Cements

Shivshakti Cements is a manufacturing unit under H.M. Cements Ltd. which is mostly into manufacturing of PPC cement with an installed production capacity of 200 TPD. The unit is located at village Byrnihat, Assam. Presently, the plant is manufacturing the best possible quality cement as required by the Bureau of Indian Standards (BIS). For the first time in North-East India, the plant is installed with PLC system which controls automatically the production and enable for very uniform control over the operating parameter which gives consistent quality of the end product.

The Central Government Organization of National Highway Authority of India (NHAI) has issued their approval for use of Shivshakti Cement both for construction of National Highways in the North-Eastern Region.

The company is marketing their product in all the major cities/towns of North-East India through a network of highly dedicated dealers and distributors.

The company has taken up projects to create green belt for the sake of environmental pollution at their factories and residential colonies *(Source: Company)*.

The following information has been collected about Shivshakti Cements for the study:

1. **Form of Organization:** Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
72,000 metric ton	72,000 metric ton	72,000 metric ton	72,000 metric ton	72,000 metric ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
72,000 metric ton	72,000 metric ton	72,000 metric ton	72,000 metric ton	72,000 metric ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
0	0	0	0	0

5. **Markets:** N. E. India

   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
60 lakhs	60 lakhs	65 lakhs	70 lakhs	75 lakhs

7. **Source of Capital:**

2010	2011	2012	2013	2014
• Shareholder's Funds • Bank Loan	• Shareholder's Funds • Bank Loan	• Shareholder's Funds • Bank Loan	• Shareholder's Funds • Bank Loan	• Shareholder's Funds • Bank Loan

7.3.1.7.1. Data Analysis

- From the above, it could be seen that the company's production installed capacity has remained same from the period 2010 to 2014. The noticeable part here is that the company has been able to utilize 100 per cent of its production capacity even though investments are increasing minimally.
- The main reason that led them to reach 100 per cent capacity utilization is strong marketization. The company's products have been well accepted in the market and at the same time national level organizations such as M/s Maytas Infra, M/s MBL, M/s. KNR Patel, National Highway Authority of India (NHAI), Assam Roofing, N. F. Railway etc. are their customers.
- But looking at the sources of capital and capital employed, it could be said that scope of investments are there as the company has not gone for expansion over the years.

- Moreover, their market size is quite limited to only N.E. States. Exports in the neighboring vicinity is an unexplored area for the company. Exports would also boost the opportunity of getting investments from external sources.
- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments.
- FDI would further help them to enjoy economies of scale and increasing returns to scale.

7.3.1.8. Cement Corporation of India

Cement Corporation of India (CCI) was incorporated as a company wholly owned by Govt. of India on 18th January 1965 with the principal objective of achieving self-sufficiency in cement production. Cement Corporation of India (CCI) is a multi-unit organization at present having 10 units spread over eight states with a total annual installed capacity of 38.48 lakh MT.

Cement Corporation of India (CCI) with a strong workforce of 907 employees as on 2012 has always encouraged balanced regional growth with most of its factories located in underdeveloped/backward areas. It has been contributing to the development of areas around factories by adopting nearby villages and providing the basic facilities like school, healthcare, drinking water etc. *(Source: Company)*.

Cement Corporation of India (CCI) unit in Assam is known as Bokajan Cement Plant which is located in Bokajan in the Karbi Anglong district, Assam. The first production in the Bokajan Cement Plant started on 1/4/1977.

The following information has been collected about Cement Corporation of India, Bokajan Unit for the study:

1. **Form of Organization**: Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
1, 98,000 Metric ton	1, 98,000 Metric ton	1, 98,000 Metric ton	1, 98,000 Metric ton	1, 98,000 Metric ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
1, 50, 101 Metric Ton	1, 33,265 Metric Ton	1,03,335 Metric Ton	1, 33, 350 Metric Ton	Data Unavailable

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
47, 899 Metric Ton	64, 735 Metric Ton	64, 665 Metric Ton	64, 650 Metric Ton	Data Unavailable

5. **Markets:** N. E. States

   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
1,28,01,591	1,18,31,227	1,11, 91, 922	Data Unavailable	Data Unavailable

7. **Source of Capital:**

2010	2011	2012	2013	2014
• Reserves and Surplus • Bank Loans • Govt. funding	• Reserves and Surplus • Bank Loans • Govt. funding	• Reserves and Surplus • Bank Loans • Govt. funding	• Reserves and Surplus • Bank Loans • Govt. funding	• Data Unavailable

7.3.1.8.1. Data Analysis

- If we see above, we get to see a unique position of the company. The company has not gone for any expansion phase in the period under study and investments are falling drastically over the years. The Bokajan Plant has almost reached a dying out phase. However, the company is working for expanding a clinkerization unit and grinding unit in Silchar area, Assam, which are ongoing projects run by the company and are running behind schedule.
- If we look at the production installed capacity and production capacity utilized, the gap between the two have been continuously increasing making it a point of concern for the company.
- It was also clear after meeting the officials of the company that the limestone deposits in the nearby vicinity of the plant is getting diminished which is also one of the prime reasons why the Bokajan plant has reached a dying out phase.
- No doubt the company requires huge investments, but at the same time, it is also a matter of concern that the unit has to be shifted where there is an easy accessibility of raw materials. Therefore, the ongoing projects taken up by the company would be a respite in this situation.
- Investments in the form of FDI may also turn around the situation for the company as it would also bring with the much needed Research and Development for the

plant to revive back. Exports would also boost the opportunity of getting investments from external sources.

7.3.1.9. Jumbo Cement/ River Valley Cement Corporation

"Jumbo Cement" is a brand name operating under River Valley Cement Corporation which is mostly into manufacturing of PPC Cement. The unit is located at Changsari, Assam. The plant is also manufacturing quality cement as prescribed under Bureau of Indian Standards (BIS). The company is presently marketing its products to all major cities of N.E. States *(Source: Company).*

The following information has been collected about River Valley Cement Corporation for the study:

1. **Form of Organization:** Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
72, 000 Metric Ton	72, 000 Metric Ton	72, 000 Metric Ton	72, 000 Metric Ton	72, 000 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
72, 000 Metric Ton	72, 000 Metric Ton	72, 000 Metric Ton	72, 000 Metric Ton	72, 000 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
0	0	0	0	0

5. **Markets:** N.E. States

   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
11, 67,25, 419	11, 67,25, 419	11, 67,25, 419	12,41,39,706	12,41,39,706

7. **Source of Capital:**

2010	2011	2012	2013	2014
• Shareholder's funds • Loan Fund	• Shareholder's funds • Loan Fund	• Shareholder's funds • Loan Fund	• Shareholder's funds • Loan Fund	• Shareholder's funds • Loan Fund

7.3.1.9.1. Data Analysis

- From the above, it could be seen that the company's production installed capacity has remained same from the period 2010 to 2014. The noticeable part here is that the company has been able to utilize 100 per cent of its production capacity even though investments have increased just minimally in 2013.
- The main reason that led them to reach 100 per cent capacity utilization could be strong marketization.
- But looking at the sources of capital and capital employed, it could be said that scope of investments are there as the company has not gone for expansion over the years.

- Moreover, their market size is quite limited to only N.E. States. Exports in the neighboring vicinity is an unexplored area for the company. Exports would also boost the opportunity of getting investments from external sources.
- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments.
- FDI would further help them to enjoy economies of scale and increasing returns to scale.

7.3.2. Overview of the Plastic Industry:

The Indian Plastic Industry has made noteworthy achievements ever since it made a beginning in the Indian market in 1957. Thereafter, many significant milestones were achieved and the industry has been rapidly growing since then. Currently, the Indian plastic industry is spread across the country, employing over 4 million people. The Indian plastic industry is presently a highly fragmented one with an estimation of around 25, 000 firms out of which 20 per cent is dominated by top players, 15 per cent of the firms can be categorized as medium-scale enterprises and majority are operating on a small-scale basis *(India Exports and Business Trade Zone, 2014).*

Substantial developments in the plastic machinery sector coupled with matching developments in the petro-chemical sector, both of which support the plastic processing industry have facilitated the plastic processors to develop capacities to cater to both domestic and foreign markets through exports. In 2012-13, exports of Indian plastics stood at US$ 7.2 billion and is expected to reach US$ 10 billion by 2015 *(Ministry of Commerce and Industry, Govt. of India, 2012).*

Large investments in telecom, ports, roads, power and railways has ensured that this sector continues to grow to more than 10 per cent per annum for several years to come.

For coming years. Plastic would continue to be a growth industry, with boosting exports for fresh investments in polymerization and downstream processing capacity.

The Polymer consumption in the Country has seen a marginal de-growth in July 2013- June 14 period. Overall consumption numbers stay at around 11 million tons for entire range of Plastics in the year 2013-14. It is expected that consumption of plastics may start on growth path in the current year *(Annual Report, Supreme Industries, 2013-14)*.

The imports of Plastics products, however, are still growing steadily. A large percentage of such imports are coming heavily under-invoiced which affects several local convertors by distorting their operational economy.

The following companies have been considered for the study:

List of Organizations under Study	
SL. No.	**Name of the Organization**
1	Supreme Industries Ltd.
2	Magnum Industries
3	Alpet Containers
4	Milijuli Plastics
5	Thakuria Industries
6	Thakuria Polymake Industries

7.3.2.1. Supreme Industries

Founded in 1942, Supreme is an acknowledged leader of India's plastics industry. Handling volumes of over 2, 85,000 tonnes of polymers annually, effectively makes Supreme Industries the country's largest plastics processors.

Supreme Industries offer the widest and most comprehensive range of plastic products in India. Its twenty three advanced plants are powered by technology from world leaders, and complement their extensive facilities for R & D and new product development.

Supreme is credited with pioneering several products in India like Cross- Laminated Films, HMHD Films, Multilayer Films and SWR Piping Systems to name a few.
The Company has sold 2, 75, 463 tons of Plastic products as against 2, 70, 650 tons of Plastic products in the previous year, reflecting a growth of 1.78 per cent in product turnover by volume. The Company exported goods worth US $ 13.58 million as against US $14.32 million in the previous year registering de-growth of 5.17 per cent *(Source: Company).*

The following information has been collected about Supreme Industries for the above study:

1. **Form of Organization:** Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
900 metric ton	900 metric ton	1200 metric ton	1200 metric ton	1200 metric ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
765 metric ton	765 metric ton	900 metric ton	900 metric ton	960 metric ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
135 metric ton	135 metric ton	300 metric ton	300 metric ton	240 metric ton

5. **Markets:** N.E, West Bengal, Bihar, Orissa, Madhya Pradesh

   Exports (if any): Bhutan (roughly 10 per cent of production)

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
6,32,31,750	8,13,73,580	9,05,87,610	11,78,71,300	14,28,34,670

7. **Source of Capital:**

2010	2011	2012	2013	2014
• Shareholder's funds • Loan Fund ✓ Central Bank of India ✓ Axis Bank Ltd. ✓ BNP Paribas ✓ ICICI Bank Ltd. ✓ IDBI Bank Ltd. ✓ Standard Chartered Bank ✓ State Bank of India ✓ Vijaya Bank	• Shareholder's funds • Loan Fund ✓ Central Bank of India ✓ Axis Bank Ltd. ✓ BNP Paribas ✓ ICICI Bank Ltd. ✓ IDBI Bank Ltd. ✓ Standard Chartered Bank ✓ State Bank of India ✓ Vijaya Bank	• Shareholder's funds • Loan Fund ✓ Central Bank of India ✓ Axis Bank Ltd. ✓ BNP Paribas ✓ ICICI Bank Ltd. ✓ IDBI Bank Ltd. ✓ Standard Chartered Bank ✓ State Bank of India ✓ Vijaya Bank	• Shareholder's funds • Loan Fund ✓ Central Bank of India ✓ Axis Bank Ltd. ✓ BNP Paribas ✓ ICICI Bank Ltd. ✓ IDBI Bank Ltd. ✓ Standard Chartered Bank ✓ State Bank of India ✓ Vijaya Bank	• Shareholder's funds • Loan Fund ✓ Central Bank of India ✓ Axis Bank Ltd. ✓ BNP Paribas ✓ ICICI Bank Ltd. ✓ IDBI Bank Ltd. ✓ Standard Chartered Bank ✓ State Bank of India ✓ Vijaya Bank

7.3.2.1.1. Data Analysis

- If we see from above, it would be clear that the company has gone for expansionary phase, and therefore, the production installed capacity has increased from the period 2012. As a result, there has been substantial increments in investments made thereof. The utilized production capacity has also increased since then. But unutilized capacity remain to be seen in all the years.
- There could be three main reasons for it – first being low marketization in the state, second being cost inefficiency of the company and third being lack of investments of the company.
- The various sources of capital for them is mainly shareholder's funds and long-term borrowings from banks.
- For 2010, if we look at the utilized capacity, it is 765 metric ton and capital employed for utilizing this much capacity is Rs. 6, 32, 31,750. Further, 135 metric ton capacity remain unutilized. To utilize another 135 metric tonnes of capacity, additional investments worth Rs. 1,11,58,544 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- For 2011, if we look at the utilized capacity, it is 765metric ton and capital employed for utilizing this much capacity is Rs. 8, 13, 73,580. Further, 135 metric ton capacity remain unutilized. To utilize another metric 135 tonnes of capacity, additional investments worth Rs. 1,43,60,044 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- For 2012, if we look at the utilized capacity, it is 900 metric ton and capital employed for utilizing this much capacity is Rs. 9, 05, 87,610. Further, 900 metric ton capacity remain unutilized. To utilize another 900 metric tonnes of capacity, additional investments worth Rs. 3,01,95,870 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.

- For 2013, if we look at the utilized capacity, it is 900 metric ton and capital employed for utilizing this much capacity is Rs. 11, 78, 71,300. Further, 300 metric ton capacity remain unutilized. To utilize another 300 metric tonnes of capacity, additional investments worth Rs. 3,92,90,433 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- For 2014, if we look at the utilized capacity, it is 960 metric ton and capital employed for utilizing this much capacity is Rs. 14, 28, 34,670. Further, 240 metric ton capacity remain unutilized. To utilize another 240 metric tonnes of capacity, additional investments worth Rs. 3,57,08,668 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- The second reason for unutilized capacity could be low marketization. Although, Supreme Industries is catering to various parts of the country in states such as Assam, West Bengal, Bihar, Orissa and Madhya Pradesh, but if we can see that the export market is limited to only exporting to Bhutan. The other neighboring countries still remain unexplored. Moreover, only 10 per cent of production is actually exported. If production capacity could be increased through further investments, there would be a greater likelihood for the company to export further in the neighboring allies in future. Exports would also boost the opportunity of getting investments from external sources.
- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments which is again an undone part for the country as far as sources of Investments are concerned.
- FDI would further help them to enjoy economies of scale and increasing returns to scale. The much needed skilled labor that the company said as a major hindrance in this part of the region would also be taken care of through FDI.

7.3.2.2. Magnum Industries

In line with the vision of being the leading player in Poly Ethylene Terephthalate (PET) in Eastern India, Magnum Industries was set up in Guwahati Assam.

There has been an industrialization drive in this part of India due to Government sops and lot of Multinational and Indian FMCG giants have set up shop here and thus created the need for vendors to meet their packaging needs.

Apart from focusing on the local market for preforms for mineral water units and Bottle Blowers, Magnum Industries have also set up Single Stage ASB machine for supply of bottles to institutional buyers located here.

Magnum Group has, in its 25 years of service to the plastic industry, come to signify quality, satisfaction and an endless pursuit for perfection. From a single unit of (Poly Propylene) PP Bags manufacturing to the current state of technology production process, the company has come a long distance.

In the current state of intense competition, the Magnum Group has made a niche for itself in the market with growing number of customer base *(Source: Organization).*

The following information was collected about Magnum Industries for the study:

1. **Form of Organization:** Proprietorship/Sole Trader

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
N.A.	1275 Metric Ton	1275 Metric Ton	1275 Metric Ton	2325 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
N.A.	956 Metric Ton	956 Metric Ton	956 Metric Ton	1860 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
N.A.	319 Metric Ton	319 Metric Ton	319 Metric Ton	465 Metric Ton

5. **Markets:** N.E. States

   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
N.A.	4,19,81,590	4,19,81,590	4,19,81,590	7,20,36,735

7. **Source of Capital:**

2010	2011	2012	2013	2014
N.A.	• Promoter's Contribution • Bank Loan ✓ Bank of Baroda	• Promoter's Contribution • Bank Loan ✓ Bank of Baroda	• Promoter's Contribution • Bank Loan ✓ Bank of Baroda	• Promoter's Contribution • Bank Loan ✓ Bank of Baroda

7.3.2.2.1. Data Analysis

- If we see from above, we could find that Magnum Industries is running as a proprietorship firm which indicates that it has not been registered as a company under the Companies Act 1956. This means that the capital required by the organization is wholly owned by the owner himself and he depends largely on his own savings and profits of the business.
- Since the owner here enjoys the profits from the business alone, scope of investments from external sources like domestic investments and foreign investments as such become negligible because any outsider cannot really have a stake in the company until the owner wants so. Moreover, sole proprietorships cannot raise capital through external sources because ownership interest in the business cannot be offered to potential investors.
- Therefore, scope of investments would only exist if the firm registers itself as a company because if we see the production capacity of the firm, it is relatively high and the amount of capital employed in 2014 also gives the firm the stature of medium-scale enterprise. Therefore, the owner should think of expanding the business to new heights through transforming it into a registered company under Companies Act.
- Had it been a company, the scope of additional investment inflow through various external sources for 2011, 2012 and 2013 would have been Rs. 1,62,04,191 separately for the three years and Rs. 1,80,09,184 for 2014 (Source: Author's Calculation).
- As far as marketization is concerned, if production capacity could be enhanced through additional investments, market size for the firm would automatically expand allowing them to export the excess production to the neighboring countries. Exports would also boost the opportunity of getting investments from external sources.

7.3.2.3. Alpet Containers

Alpet Containers established in the year 1998 has a long and respected reputation of being one of the forerunners in manufacturing of Poly Ethylene Terephthalate (PET) Bottles in India and a Pioneer in the Pharma PET Bottle sector. They introduced this technology with the setting up of their first manufacturing base in Daman (Union Territory of India) in the year 1998 and a second unit in Guwahati, Assam (Eastern Region of India). Alpet Containers believes and strives towards continuously upgrading itself with New Technologies with a focus approach towards customer satisfaction by enabling it to be cost effective, competitive and to meet the ever expanding demands and delivery schedule of its customers without compromising on quality.

All the factories are strategically located in tax exempted areas to give additional value to Alpet Containers ever increasing customer base.

Alpet Containers is working diligently towards making an entry into manufacturing containers specifically catering to the mineral water, cosmetic, household segments etc. as it foresees a potential growth at a rapid speed in these sectors *(Source: Organization).*

The following information was collected about Alpet Containers for the study:

1. **Form of Organization:** Sole Trader/Proprietorship

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
600 Metric Ton	700 Metric Ton	700 Metric Ton	700 Metric Ton	700 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
456 Metric Ton	552 Metric Ton	616 Metric Ton	614 Metric Ton	544 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
144 Metric Ton	148 Metric Ton	84 Metric Ton	86 Metric Ton	156 Metric Ton

5. **Markets:** Assam, Maharashtra.

   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
Not Available	30,00,000	25,00,000	25,00,000	25,00,000

7. **Source of Capital:**

2010	2011	2012	2013	2014
• Promoter's Capital • Term Loan	• Promoter's Capital • Term Loan	• Promoter's Capital • Term Loan	• Promoter's Capital • Term Loan	• Promoter's Capital • Term Loan

7.3.2.3.1. Data Analysis

- If we see from above, we could find that Alpet Containers is running as a proprietorship firm which indicates that it has not been registered as a company under the Companies Act 1956. This means that the capital required by the

organization is wholly owned by the owner himself and he depends largely on his own savings and profits of the business.

- Since the owner here enjoys the profits from the business alone, scope of investments from external sources like domestic investments and foreign investments as such become negligible because any outsider cannot really have a stake in the company until the owner wants so. Moreover, sole proprietorships cannot raise capital through external sources because ownership interest in the business cannot be offered to potential investors.
- Therefore, scope of investments would only exist if the firm registers itself as a company because if we see the production capacity of the firm and capital employed annually, it is a small-scale enterprise. Therefore, the owner should think of expanding the business to new heights through transforming it into a registered company under Companies Act.
- Had it been a company, the scope of additional investment inflow through various external sources for 2011would have been Rs. 8, 04,348. For 2012, it would have been Rs. 3, 40, 909. For 2013, it would have been Rs. 3, 50, 163. For 2014, it would have been Rs. 7, 16,912. (Source: Author's Calculation).
- Further, it could also be interpreted from the data above that additional investments can definitely improve the utilized capacity of the firm as it is continuously on a fall from 2013 onwards.
- As far as marketization is concerned, if production capacity could be enhanced through additional investments, market size for the firm would automatically expand allowing them to export the excess production to the neighboring countries and improve their profit margins drastically and also help them enjoy economies of scale. Exports would also boost the opportunity of getting investments from external sources.

7.3.2.4. Milijuli Plastics

Milijuli Plastics is a small partnership firm based at Guwahati, Assam. The organization is basically into production of plastic packaging products for various organizations engaged

in mostly in the FMCG sector like performance packaging film products, protective packaging products, and cross-laminated film products *(Source: Organization).*

The following information has been collected about Milijuli Plastics for the study:

1. **Form of Organization:** Partnership

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
100 Metric Ton	120 Metric Ton	130 Metric Ton	140 Metric Ton	150 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
70 Metric Ton	84 Metric Ton	91 Metric Ton	98 Metric Ton	105 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
30 Metric Ton	36 Metric Ton	39 Metric Ton	42 Metric Ton	45 Metric Ton

5. **Markets:** N.E. States

   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
1,00,00,000	1,00,00,000	1,00,00,000	1,00,00,000	2,00,00,000

7. **Source of Capital:**

2010	2011	2012	2013	2014
• Own Capital • Bank Loan	• Own Capital • Bank Loan	• Own Capital • Bank Loan	• Own Capital • Bank Loan	• Own Capital • Bank Loan

7.3.2.4.1. Data Analysis

- As we can see form above that the organization is a partnership firm. A partnership firm may be or may not be registered under The Companies Act 1956, but they have to necessary be contained under the Indian Partnership Act, 1932.
- This means that partnerships may receive more funds than a sole proprietorships. Furthermore, partnerships can attract investors by offering ownership interest in the business provided they are registered as a company which remains to be unknown in this case.
- Therefore, scope of investments would only exist if the firm registers itself as a company because if we see the production capacity of the firm and capital employed annually, it is a small-scale enterprise. Therefore, the owners should think of expanding the business to new heights through transforming it into a registered company under Companies Act.
- The scope of additional investment inflow through various external sources would be Rs. 42, 85,714 for all the years separately (Source: Author's Calculation).
- Further, it could also be interpreted from the data above that additional investments can definitely improve the utilized capacity of the firm.
- As far as marketization is concerned, if production capacity could be enhanced through additional investments, market size for the firm would automatically expand allowing them to export the excess production to the neighboring countries and improve their profit margins drastically and also help them enjoy economies of scale. Exports would also boost the opportunity of getting investments from external sources.

7.3.2.5. Thakuria Industries

Thakuria Industries is a proprietorship firm which is based out at Guwahati, Assam. The organization is at present engaged into manufacturing of polythene tubes.

The following information has been collected about Thakuria industries for the study:

1. **Form of Organization:** Sole Trader/Proprietorship

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
104 Metric Ton	104 Metric Ton	104 Metric Ton	104 Metric Ton	104 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
72 Metric Ton	72 Metric Ton	72 Metric Ton	72 Metric Ton	72 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
32 Metric Ton	32 Metric Ton	32 Metric Ton	32 Metric Ton	32 Metric Ton

5. **Markets:** Assam
   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
32,00,000	32,00,000	32,00,000	32,00,000	32,00,000

7. **Source of Capital:**

2010	2011	2012	2013	2014
• Promoter's Capital • Bank Loan	• Promoter's Capital • Bank Loan	• Promoter's Capital • Bank Loan	• Promoter's Capital • Bank Loan	• Promoter's Capital • Bank Loan

7.3.2.5.1. Data Analysis

- If we see from above, we could find that Thakuria Industries is running as a proprietorship firm which indicates that it has not been registered as a company under the Companies Act 1956. This means that the capital required by the organization is wholly owned by the owner himself and he depends largely on his own savings and profits of the business.
- Since the owner here enjoys the profits from the business alone, scope of investments from external sources like domestic investments and foreign investments as such become negligible because any outsider cannot really have a stake in the company until the owner wants so. Moreover, sole proprietorships cannot raise capital through external sources because ownership interest in the business cannot be offered to potential investors.
- Therefore, scope of investments would only exist if the firm registers itself as a company because if we see the production capacity of the firm and capital employed annually, it is a small-scale enterprise. Therefore, the owner should think of expanding the business to new heights through transforming it into a registered company under Companies Act.
- Had it been a company, the scope of additional investment inflow through various external sources for all the years separately would have been Rs. 14, 22, 222.
- As far as marketization is concerned, if production capacity could be enhanced through additional investments, market size for the firm would automatically expand allowing them to export the excess production to the neighboring countries and improve their profit margins drastically and also help them enjoy economies of

scale. Exports would also boost the opportunity of getting investments from external sources.

7.3.2.6. Thakuria Poly-make Industries

Thakuria Poly-make Industries, a sister concern of Thakuria Industries is a newly established proprietorship firm based out at Guwahati, Assam. The organization is engaged in manufacturing garbage bags for medical departments and polythene tubes used for various purposes.

The following information has been collected about Thakuria Poly-make industries for the study:

1. **Form of Organization:** Sole Trader/ Proprietorship

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
N.A.	N.A.	N.A.	N.A.	300 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
N.A.	N.A.	N.A.	N.A.	100 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
N.A.	N.A.	N.A.	N.A.	200 Metric Ton

5. **Markets:** Assam

Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
N.A.	N.A.	N.A.	N.A.	70, 00, 000

7. **Source of Capital:**

2010	2011	2012	2013	2014
N.A.	N.A.	N.A.	N.A.	• Promoter's Capital • Bank Loan

7.3.2.6.1. Data Analysis

- If we see from above, we could find that Thakuria Poly-Industries is running as a proprietorship firm which indicates that it has not been registered as a company under the Companies Act 1956. This means that the capital required by the organization is wholly owned by the owner himself and he depends largely on his own savings and profits of the business.
- Since the owner here enjoys the profits from the business alone, scope of investments from external sources like domestic investments and foreign investments as such become negligible because any outsider cannot really have a stake in the company until the owner wants so. Moreover, sole proprietorships cannot raise capital through external sources because ownership interest in the business cannot be offered to potential investors.
- Therefore, scope of investments would only exist if the firm registers itself as a company because if we see the production capacity of the firm and capital employed annually, it is a small-scale enterprise. Therefore, the owner should think

of expanding the business to new heights through transforming it into a registered company under Companies Act.

- Had it been a company, the scope of additional investment inflow through various external sources for the current year would have been Rs. 14, 00, 000 (Source: Author's Calculation).
- As far as marketization is concerned, if production capacity could be enhanced through additional investments, market size for the firm would automatically expand allowing them to export the excess production to the neighboring countries and improve their profit margins drastically and also help them enjoy economies of scale. Exports would also boost the opportunity of getting investments from external sources.

7.3.3. Overview of the Food-Processing Industry

The food processing industry is one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth. Off late, the food sector has been witnessing a significant change in the consumption pattern. A large part of this shift in consumption is influenced by the processed food market, which accounts for 32 per cent of the total food market amounting to US$ 29.4 billion.

The Confederation of Indian Industry (CII) has estimated that the food processing sector has the potential of attracting US$ 33 billion of investment in 10 years and would generate employment of around nine million people.

The Ministry of Food Processing, Govt. of India indicates the following segments within the food processing industry:

SEGMENTATION OF DIFFERENT SECTORS IN FOOD-PROCESSING INDUSTRY

Sectors	Products
Dairy	Whole milk powder, skimmed milk powder, condensed milk, ice-cream, butter, ghee, cream

Fruits and Vegetables	Beverages, juices, concentrates, pulps, slices, frozen and dehydrated products, potato wafers/chips etc.
Grains and Cereals	Flour, bakeries, starch glucose, cornflakes, malted foods, vermicelli, beer and malted extracts
Fisheries	Frozen and canned products mainly in fresh form
Meat and Poultry	Frozen and canned products mainly in fresh form
Consumer Foods	Snack food, namkeens, biscuits, ready to eat food, alcoholic and non-alcoholic beverages

(Source: Ministry of Food Processing India, Annual Report, 2004)

Though the industry is large in size, it is still at a nascent stage in terms of development of the country's total agriculture and food produce, and currently only two per cent of it is processed.

The Indian food processing industry stands at US$ 135 billion and is estimated to grow with a CAGR of 10 per cent to reach $200 billion by 2015. The industry is presently contributing seven per cent to India's GDP and is on tracks to ensure profitability in the coming decades.

The food processing sector has the potential to grow in Assam as Assam has a conducive soil for cultivations of fruits and vegetables. The demand for processed food is growing in the state with changes in the income pattern of the consumers.

Opportunities exist in processing, sourcing, setting up cold chains and logistics. Apart from rice mills, flour mills and oil mills, many small establishments have recently come up in the state. The Government of India has also approved of setting up a Food Processing Industrial Park at Chaygaon, near Guwahati. In North East, there are more than 93 Food Processed Orders (FPO) registered processing units.

The following organizations have been considered for the study:

List of Organizations under Study	
SL. No.	**Name of the Organization**
1	Arohan Foods
2	Bhogali Jalpan Pvt. Ltd.
3	Hometek India Pvt. Ltd.
4	Kishlay Foods Pvt. Ltd.
5	Repose Foods Pvt. Ltd.

7.3.3.1.Arohan Foods

Arohan Foods is India's first pork integrator. As pioneers of organized pork production in India, Arohan Foods reaches out to customers across the North-Eastern Region of the country.

Arohan Foods has grown fast and responsibly by working directly with the small-holder farmers. Today, Arohan Foods is one of the biggest players in the industry, with operations and market across the region and an industry-leading approach towards sustainability *(Source: Company).*

The following information has been collected about Arohan Foods for the study:

1. **Form of Organization:** Partnership

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
N.A.	60 Metric Ton	360 Metric Ton	360 Metric Ton	360 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
N.A.	60 Metric Ton	288 Metric Ton	288 Metric Ton	288 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
N.A.	0	72 Metric Ton	72 Metric Ton	72 Metric Ton

5. **Markets:** PAN India

   Exports (if any): Planning to export in future to neighbouring countries like Bhutan, Nepal.

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
N.A.	Data unavailable	Data unavailable	Data unavailable	Data unavailable

7. **Source of Capital:**

2010	2011	2012	2013	2014
N.A.	• Promoter's Fund • Loan Fund	Venture Capital from Omnivore Partners	Venture Capital from Omnivore Partners	Venture Capital from Omnivore Partners

7.3.3.1.1. Data Analysis

- As we can see form above that the organization is a partnership firm. A partnership firm may be or may not be registered under The Companies Act 1956, but they have to necessary be contained under the Indian Partnership Act, 1932.

- This means that partnerships may receive more funds than a sole proprietorships. Furthermore, partnerships can attract investors by offering ownership interest in the business provided they are registered as a company which remains to be unknown in this case.
- The firm is operating smart and therefore they have been able to attract Venture Capitalists for their investments which is a very good sign as far as the state's economy is concerned. They are the only firm in North-East to attract foreign investments in the form of Venture Capitalists.
- Further, it could also be interpreted from the data above that additional investments can definitely improve the utilized capacity of the firm. As the amount of capital employed is not known for the organization, additional investments required for full capacity utilization cannot be calculated.
- As far as marketization is concerned, if production capacity could be enhanced through additional investments through various other external sources like domestic and foreign investments, market size for the firm would automatically expand allowing them to export the excess production to the neighboring countries and improve their profit margins drastically and also help them enjoy economies of scale. Exports would also boost the opportunity of getting investments from external sources.

7.3.3.2. Bhogali Jalpan Pvt. Ltd.

Established in the year 1997, Bhogali Food Products Pvt. Ltd. derives the name from Bhogali Bihu, one of the important festivities of Assam. Bhogali Food Products Pvt. Ltd. has popularized the concept of producing homemade natural and traditional delicacies in proper hygienic conditions in a large scale. Therefore, all the products are available in plastic pouches that keep the products pure and fresh. The food products under Bhogali Food Products Pvt. Ltd. are genuine traditional Assamese Packaged food. The company is also an ISO 9001:2008 Certified Company *(Source: Company).*

The following information have been collected about Bhogali Food Products Pvt. Ltd for the study:

1. **Form of Organization:** Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
1800 Metric Ton	1800 Metric Ton	1800 Metric Ton	7200 Metric Ton	7200 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
1800 Metric Ton	1800 Metric Ton	1800 Metric Ton	2160 Metric Ton	2160 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
0	0	0	5040 Metric Ton	5040 Metric Ton

5. **Markets:** Entire Assam

   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
40,00,000	40,00,000	40,00,000	1, 20,00, 000	1, 20,00, 000

7. Source of Capital:

2010	2011	2012	2013	2014
• Own capital generated • Bank Loan from Central Bank of India	• Own capital generated • Bank Loan from Central Bank of India	• Own capital generated • Bank Loan from Central Bank of India	• Own capital generated • Bank Loan from Central Bank of India	• Own capital generated • Bank Loan from Central Bank of India

7.3.3.2.1. Data Analysis

- If we see from above, it would be clear that the company has gone for an expansionary phase, and therefore, the production installed capacity has increased substantially from the period 2013 compared to the previous years. As a result, there has been substantial increments in investments made thereof.
- The company has been able to utilize 100 per cent of its production capacity till 2012 even though there has been no increment in the investments made in those years. The main reason that led them to reach 100 per cent capacity utilization could be strong marketization. Whatever is produced is directly absorbed within the local markets.
- The utilized production capacity has increased from 2013. But unutilized capacity remain to be seen in the coming years.
- There could be three main reasons for it – first being low marketization in the state, second being cost inefficiency of the company and third being lack of investments of the company. The company also mentioned that their company's low marketization is also a result of lack of infrastructure in the form of testing laboratories which are not available for testing the quality of foods for expansion
- The various sources of capital for the company is mainly promoter's funds and long-term borrowings from banks.

- For 2013 and 2014, if we look at the utilized capacity, it is 2160 metric ton and capital employed for utilizing this much capacity is Rs. 1, 20, 00,000. Further, 135 metric ton capacity remain unutilized. To utilize another 5040 metric tonnes of capacity, additional investments worth Rs. 2,80,00, 000 is required (Source: Author's Calculation). Therefore, we can conclude that additional investments are required for capacity to be fully utilized considering the capital employed only.
- Bhogali Jalpan is catering to only in the state of Assam and as such market size is quite limited.
- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments which is again an undone part for the country as far as sources of Investments are concerned.
- FDI would further help them to enjoy economies of scale and increasing returns to scale. The much needed skilled labor that the company said as a major hindrance in this part of the region would also be taken care of through FDI. Exports would also boost the opportunity of getting investments from external sources.

7.3.3.3. Hometek India Pvt. Ltd.

Hometek India Pvt. Ltd. is a partnership firm established in the 1950's in Guwahati, Assam who is engaged in production of different variants of Namkeen Snacks under the brand name 'Chittchore'. The company has completed 50 years in the field of food processing industry.

As a quality driven organization, it strictly follows stringent quality control measures at every stage of their operation to ensure healthy and hygienic production. The organization is also a member of the prestigious Snacks Food Association (SFA), Virginia, USA (*Source: Company).*

The following information has been collected about Hometek India Pvt. Ltd. for the study:

1. **Form of Organization:** Partnership Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
1080 Metric Ton	1080 Metric Ton	1080 Metric Ton	1080 Metric Ton	1080 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
720 Metric Ton	720 Metric Ton	720 Metric Ton	900 Metric Ton	900 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
360 Metric Ton	360 Metric Ton	360 Metric Ton	180 Metric Ton	180 Metric Ton

5. **Markets:** All over N.E., Orissa, Bihar, Rajasthan, North Bengal, Uttaranchal.

   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
1, 35,00,000	1, 35,00,000	1, 35,00,000	1,55,00,000	1,65,00,000

7. **Source of Capital:**

2010	2011	2012	2013	2014
Shareholder's funds	Shareholder's funds	Shareholder's funds	Shareholder's funds	Shareholder's funds

7.3.3.3.1. Data Analysis

- As we can see form above that the organization is a partnership firm. A partnership firm may be or may not be registered under The Companies Act 1956, but they have to necessary be contained under the Indian Partnership Act, 1932.
- This means that partnerships may receive more funds than a sole proprietorships. Furthermore, partnerships can attract investors by offering ownership interest in the business provided they are registered as a company. In this case, Hometek India Pvt. Ltd. is a registered company.
- Therefore, scope of investments exists for the firm through external sources. Further, if we see the production capacity of the firm and capital employed annually, it is a small-scale enterprise.
- The company is almost nearing its full production capacity in the recent years. Another striking part that we see here is that the company is running through the investments made by the family members i.e. only through promoter's contribution. If we go by accounting standards, too much of reliance on self-capital is also not beneficial from the company's point of view because the company becomes more tax payable when it is relying only on its own capital. Therefore, the company should look for prospective investors in the future in the form of domestic or foreign investors.
- As far as marketization is concerned, the company is concentrating on delivering its products to a wide array of places. But exports still remain an unexplored area. Exports would also boost the opportunity of getting investments from external sources.

7.3.3.4. Kishlay Foods Pvt. Ltd.

Kishlay Snack Products is a registered partnership venture promoted in the year 2004 for manufacturing of processed food stuffs in the region. It is based out at Guwahati, Assam. The unit is equipped with most modern and sophisticated imported as well as indigenous machinery lines to manufacture ready to eat food stuffs like Potato Chips and Extruded

Namkeens under its own registered brand of 'Zing', 'Krunch', 'Mamooz', 'Tricone', 'Non-stop', and 'Krispy'.

The following information has been collected about Kishlay Foods Pvt. Ltd. for the study:

1. **Form of Organization:** Company

2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
19100.36 Metric Ton	19100.36 Metric Ton	19100.36 Metric Ton	19100.36 Metric Ton	19100.36 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
14325.27 Metric Ton	14325.27 Metric Ton	14325.27 Metric Ton	14325.27 Metric Ton	14325.27 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
4775.09 Metric Ton	4775.09 Metric Ton	4775.09 Metric Ton	4775.09 Metric Ton	4775.09 Metric Ton

5. **Markets:** N.E. States, Orissa, Bihar

   Exports (if any): Bhutan

6. **Capital Employed: (in Rs. Lakhs)**

2010	2011	2012	2013	2014
N.A.	298.66	137.89	70.25	125.89

7. **Source of Capital:**

2010	2011	2012	2013	2014
• Promoter's Contribution • Bank loan	• Promoter's Contribution • Bank loan	• Promoter's Contribution • Bank loan	• Promoter's Contribution • Bank loan	• Promoter's Contribution • Bank loan

7.3.3.4.1. Data Analysis

- From the above, it could be seen that the company's production installed capacity has remained same from the period 2010 to 2014. The noticeable part here is that the company has been able to utilize more than 70 per cent of its production capacity even though investments have decreased drastically after 2011 and then increased minimally in 2014.
- One of the reasons could be their strong marketization. Kishlay Foods must have a strong network base in terms of dealers and suppliers which is allowing them to enjoy a high utilized production capacity.
- But unutilized capacity remain to be seen in all the years. There could be three main reasons for it – first being low marketization in the state, second being cost inefficiency of the company and third being lack of investments of the company.
- The various sources of capital for them is mainly shareholder's funds and long-term borrowings from banks.
- Although, Kishlay Foods is catering to various parts of the country in states of North East, Bihar, and Orissa, but we can see that the export market is limited to only exporting to Bhutan. The other neighboring countries still remain unexplored. If production capacity could be increased through further investments, there would be a greater likelihood for the company to export further in the neighboring allies in future. Exports would also boost the opportunity of getting investments from external sources.
- If the company goes into increasing its production, the other important requirement would be increase in investments. If the company is short of investments, it can

always look for viable options of investments from within the country or outside the country in the form of domestic or foreign investments which is again an undone part for the country as far as sources of Investments are concerned.

- FDI would further help them to enjoy economies of scale and increasing returns to scale. The much needed skilled labor that the company said as a major hindrance in this part of the region would also be taken care of through FDI.

7.3.3.5. Repose Foods Pvt. Ltd.

Repose Foods Pvt. Ltd. is a registered company established in the year 1931. The company is into manufacturing of processed food stuffs in the region. It is based out at Guwahati and Mangaldoi, Assam. The products of the company are commonly known under the brand 'SRD-Repose' *(Source: Company).*

The following information has been collected about Repose Foods for the study:

1. **Form of Organization:** Company
2. **Total Production Installed Capacity:**

2010	2011	2012	2013	2014
450 Metric Ton	550 Metric Ton	750 Metric Ton	1000 Metric Ton	1200 Metric Ton

3. **Production Capacity Utilized:**

2010	2011	2012	2013	2014
400 Metric Ton	500 Metric Ton	700 Metric Ton	800 Metric Ton	1100 Metric Ton

4. **Unutilized Capacity (2 – 3):**

2010	2011	2012	2013	2014
50 Metric Ton	50 Metric Ton	50 Metric Ton	200 Metric Ton	100 Metric Ton

5. **Markets:** Guwahati, Assam
   Exports (if any): Nil

6. **Capital Employed: (in Rs.)**

2010	2011	2012	2013	2014
Data unavailable	Data unavailable	Data unavailable	Data unavailable	Data unavailable

7. **Source of Capital:**

2010	2011	2012	2013	2014
• Promoter's contribution • Bank loan • Private Investment	• Promoter's contribution • Bank loan • Private Investment	• Promoter's contribution • Bank loan • Private Investment	• Promoter's contribution • Bank loan • Private Investment	• Promoter's contribution • Bank loan • Private Investment

7.3.3.5.1. Data Analysis

- It can be seen from above that the firm's installed capacity has been increasing consistently from the period 2010 to 2014. Also, utilized capacity is also consistently increasing in all these years.

- One of the reasons could be their strong marketization. Repose Foods must have a strong network base in terms of dealers and suppliers which is allowing them to enjoy a high utilized production capacity.
- The firm is operating smart and therefore they have been able to attract Private investors for their investments which is a very good sign as far as the state's economy is concerned.
- Further, it could also be interpreted from the data above that additional investments can definitely improve the utilized capacity of the firm. As the amount of capital employed is not known for the organization, additional investments required for full capacity utilization cannot be calculated.
- As far as marketization is concerned, if production capacity could be enhanced through additional investments through various other external sources like domestic and foreign investments, market size for the firm would automatically expand allowing them to export the excess production to the neighboring countries and improve their profit margins drastically and also help them enjoy economies of scale. Exports would also boost the opportunity of getting investments from external sources.

7.3.4. Overview of the Handloom Industry

The handloom sector occupies a unique and distinct place in the Indian Economy, besides being the largest generator of non-farm rural employment.

The handloom industry is largely household based, carried out with labour contributed by the entire family. It is dispersed, spread across thousands of villages and towns in the country. Along with the artistry of weavers, the Indian handloom industry demonstrates the richness and diversity of Indian culture. The sector which employs about 4.3 million people, is the second largest employment provider for the rural population in India after agriculture.

The total handloom cloth production in India reached 6.9 billion sq.m. in 2012-13, up from 6.6 billion sq.m. in 2008-09. The export of handloom products increased from US$ 435.38 million in 2011-12 to US$ 466.59 million in 2012-13, registering a growth rate of around 7.16 per cent *(Ministry of Handlooms and Textiles, Govt. of India, 2014).*

Traditionally, handloom is a major cottage industry in the state of Assam. It continues to be an important labour-intensive and agro-based cottage industry providing direct and indirect employment to about 25 lakh people in the state. Handloom is inexorably linked with Assamese culture and heritage. It also plays a very important role in the socio-economic development of the state. Assam is a proud owner of more than 13 lakh looms out of the total 28 looms in the country. In-spite of being intensely connected with the culture of the state, the Handloom Industry has not flourished in commercial sphere to the required extent. At present about 2.05 lakh looms are being utilized for commercial weaving in the true sense. About 6 lakh looms run semi-commercially and earn subsidiary income. Rests are domestic looms and are run to meet the domestic requirements. Moreover, handloom weaving provided direct and indirect employment to about 25 lakh people in the state.

The state accounts for highest production of non-mulberry silk, muga and eri in the country. Assam has the monopoly in the world in the production of Muga, the "Golden Silk", as more than 95 per cent of Muga silk is produced in Assam. The state is also a major producer of Eri Silk.

According to the State Sericulture Department, the state has produced 114.56 Metric Ton Muga Raw Silk, 1061.61 Metric Ton Eri Raw Silk and 11.25 Metric Ton Mulberry Silk during the year 2011-12.

7.3.4.1. A Collective Study for 10 Handloom Units in Assam

Since it was difficult to make an individual analysis of all ten units under study due to unavailability of data on a yearly basis, therefore, a collective study for the units have been made below.

The following information was collected about the 10 units that have been considered for the study:

1. **Form of Organization:** All the units are operating as either micro or a small-scale unit.
2. **Total Production Installed Capacity:**

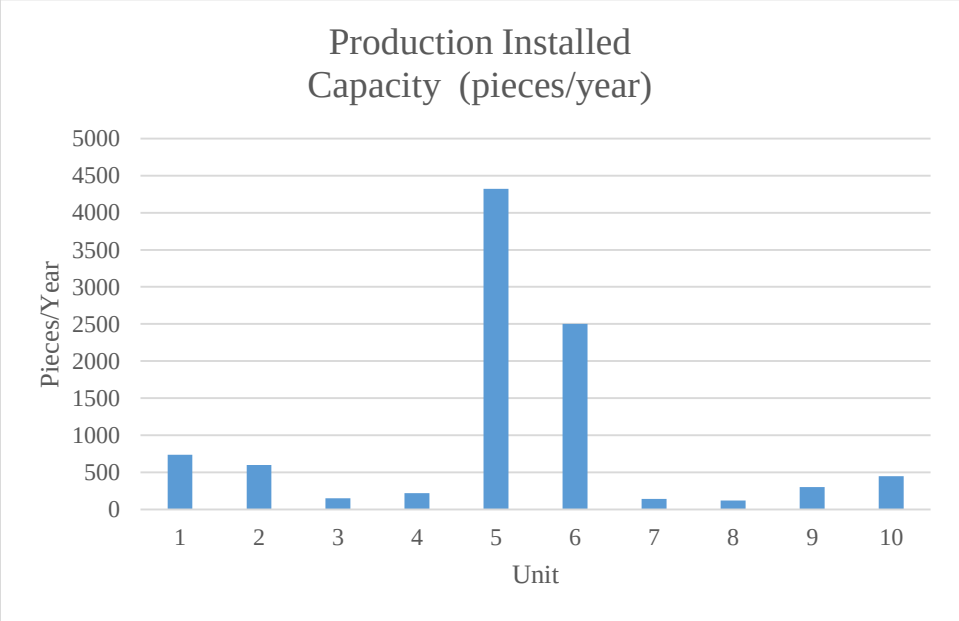

Figure 7.3: Production Installed Capacity of 10 units in pieces/year. **Source:** Field Study, Author

Data Analysis

- If we see from the above diagram 7.4, it could be seen that the production installed capacity of the individual unit ranges from 120 pieces/year to 4320 pieces/year.

There are two units whose installed capacity is 2500 pieces/year and 4320 pieces/year respectively.

- The total number of handlooms considering all the 10 units stand at 169.
- Since the looms are manually run, therefore the production installed capacity per loom is relatively low.

3. Production Capacity Utilized:

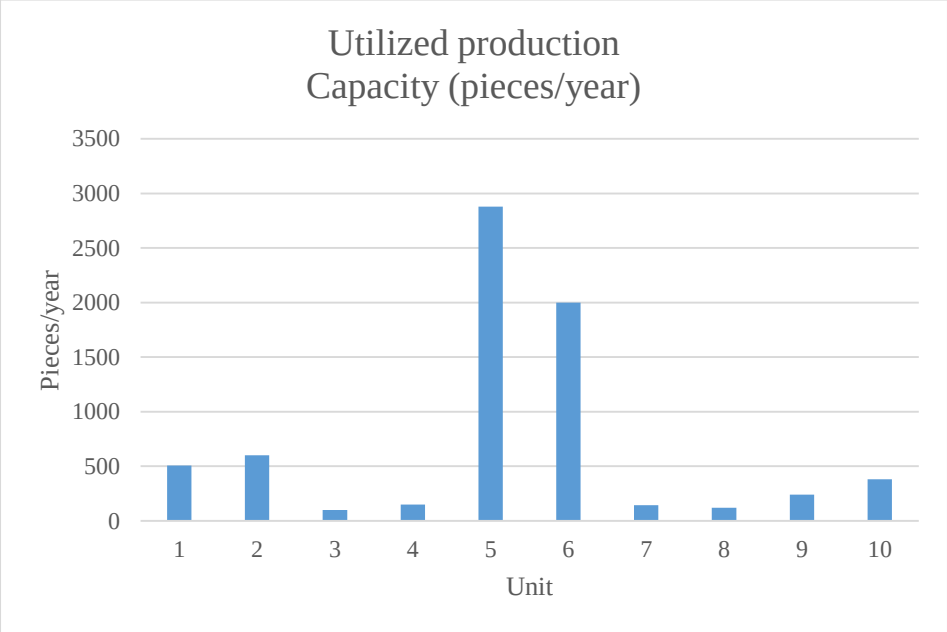

Figure 7.4: Production Utilized Capacity of 10 units in pieces/year. **Source:** Field Study, Author

Data Analysis

- The figure clearly depicts that the production capacity utilized of the individual unit is relatively high in relation to their installed capacities.
- One reason could be high demand for their goods in the local markets. Since they make traditional attires depicting their culture and heritage, therefore the products are well accepted in their own state. Most of the units themselves market their commodities and supply in the local markets and within the state.

4. **Unutilized Capacity:**

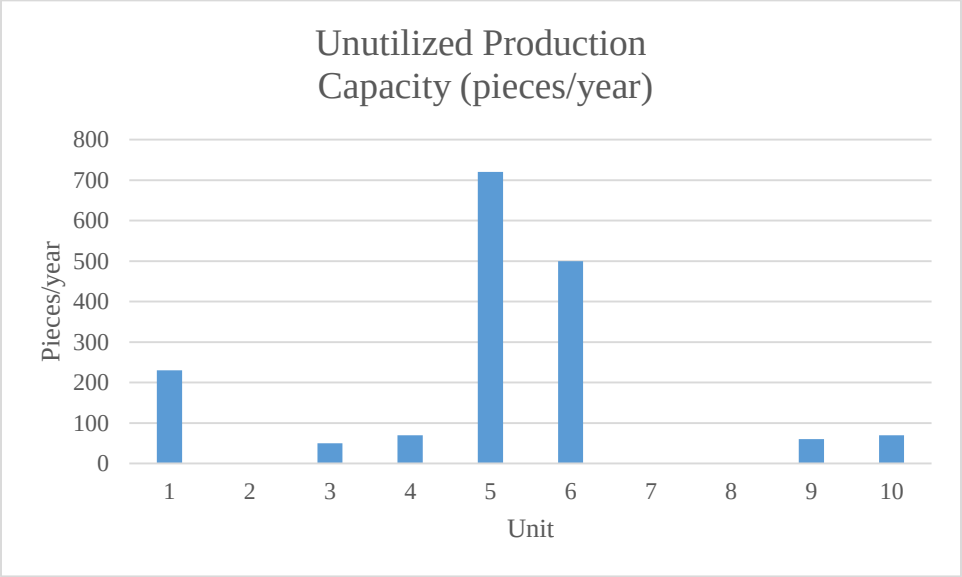

Figure 7.5: Production Utilized Capacity of 10 units in pieces/year. **Source:** Field Study, Author

Data Analysis

- As it has been already mentioned above that most of the units are meeting their full capacity utilization, which could also be seen from the above figure depicting the utilized capacities of the individual units on a yearly basis.
- One reason for full capacity utilization could be high marketization and market size as a whole could be high.
- For those units whose production installed capacity is high, their unutilized capacity is also relatively high. Some of the reasons that were cited by the owners of the units were unavailability of labors at times, productivity of laborers, and pattern/design of the clothes also hampers the utilized capacities at times.

5. **Markets and Exports (if any):**

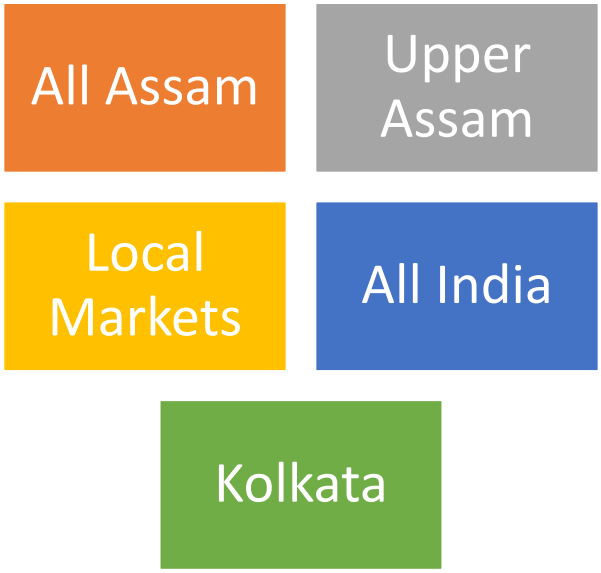

Figure 7.6: Markets catered to by the 10 units. **Source:** Field Study, Author

Data Analysis

- All the units are catering to major cities of the state of Assam, two units are catering to the major cities of India, and two units are also supplying their commodities to Kolkata. There is one unit who is supplying its products only to Upper Assam side.
- None of the units are exporting their commodities outside the state. There is one unit whose products are taken by few NGOs and then is exported to Afghanistan and U.K. This indicates that exports remain to be an unexplored area by the industry as a whole.

6. **Capital Employed: (in Rs.)**

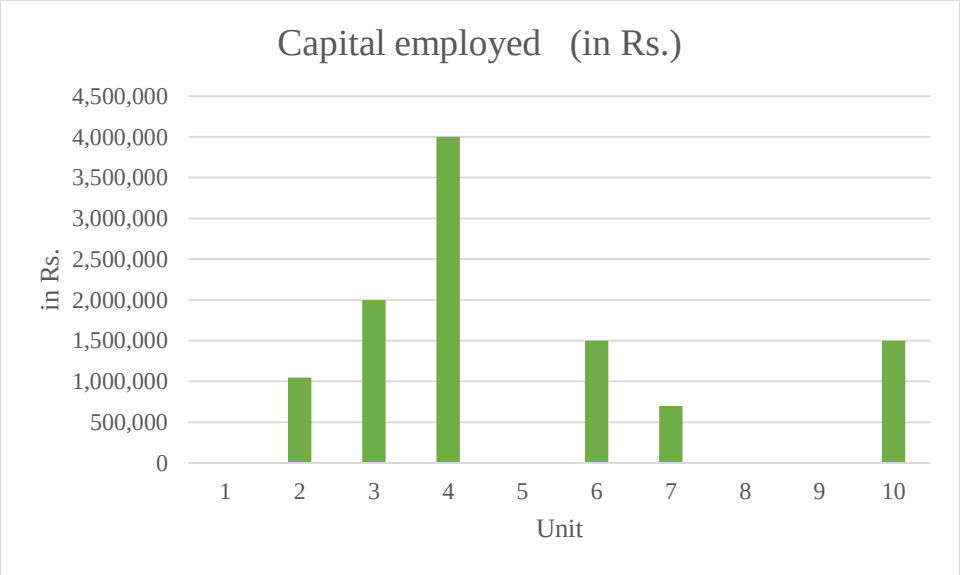

Figure 7.7: Capital employed (in Rs.) by 10 units yearly. **Source:** Field Study, Author

Data Analysis

- By seeing the capital employed by the units individually, it could be understood that the units' investments mostly run between Rs. 10,00,000 to Rs. 40,00,000 indicating that these are micro and small-scale units.
- Moreover, the striking part is that the investment amounts are lump-sum amounts given by the units. None of the units maintain any standardized book-keeping records of their accounts and as a result they themselves are unaware of the average investments that they have made on average basis. There are four units who are completely unaware of the total investments made by them and therefore capital employed for these units are not available.
- Also, since many units have also not been able to reach their full capacity utilization, another reason for it could be lack of investments. Therefore, scope of investments remain to be there for all the units to increase their production capacity.

7. **Sources of Capital:**

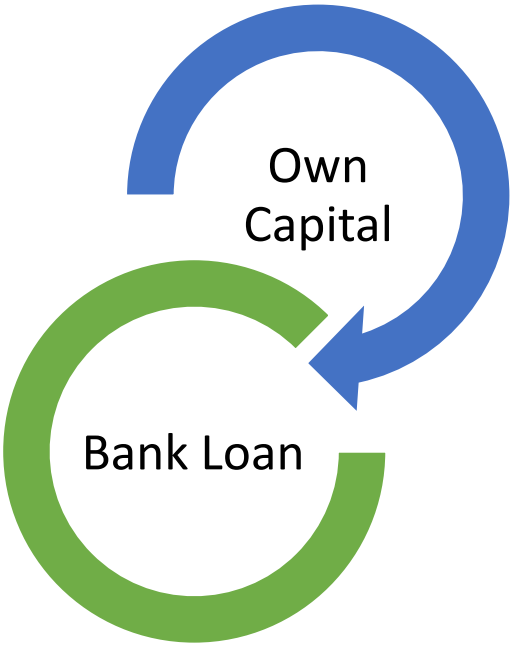

Figure 7.8: Sources of Capital of the 10 units under study. **Source:** Field Study, Author

Data Analysis

- All the units are investing on their business through their own capital. There are few units who are also relying on bank loan from Assam Gramin Vikas Bank for funds.
- If we go by accounting standards, too much of reliance on self-capital is also not beneficial from the unit's point of view because the unit becomes more tax payable when it is relying only on its own capital. Therefore, the units must look for prospective investors in the future.

7.4. FINDINGS OF THE STUDY:

Trends in the Rate of capital formation (domestic investments) in Assam in relation to GSDP

- Investments have been playing a pivotal role in inhibiting the growth of the state of Assam.
- Government must work on supplementing efforts to increase the flow of inward domestic investments into the state.

Scope of Investments and Exports in Assam

Cement Industry

- The market size of North-East Cement demand is 5.8 million metric ton for FY 2012-13.
- For most of the cement corporations under study, uninstalled production capacity could be witnessed due to three main reasons: lack of investments, cost inefficiency on the part of the companies or low marketization.
- Low marketization results in low levels of investment. Low investments results in low production and high product costs since fixed costs remain same even after fall in variable costs. This leads to a fall in the profit margins of the company forcing them to increase the prices of their goods. As a result, they lose their market share to those suppliers who are operating outside the state and selling their commodities at very low price within the state. This would further aggravate the problem and lead to fall in further production rates resulting in unemployment within the economy as well as further dip in the unutilized capacity.
- Additional investments are required by all the companies for the production capacity to be fully utilized considering the capital employed by the firms.
- To break free from the vicious circle of unutilized production capacities by all the firms under study, it is important to reach full production installed capacity by them and enjoy economies of scale.
- As far as small market size of the state of Assam is concerned, the outside markets of the neighboring allies of the state in the form of exports is a viable option to increase the market size of the companies which is unexplored from the industry's point of view. Exports would also boost the opportunity of getting investments from external sources.

- Other than shareholder's funds and long-term borrowings from banks, investments from other external sources in the form of domestic and foreign investments are also open for the companies to explore.
- Investments from external sources mostly in form of Private Domestic Investments and Foreign Direct Investments can also help the companies enjoy increasing returns to scale allowing them to explore the export market and gain comparative advantage.

Plastic Industry

- For all the plastic units under study, it could be seen that almost 95 per cent of the units are operating as proprietorship firms which means that the firms are not necessarily registered under the Companies Act, 1956. This indicates that the capital required by the organization is wholly owned by the owner himself and he depends largely on his own savings and profit of the business.
- Moreover, sole proprietorships cannot raise capital through external sources because ownership interest in the business cannot be offered to potential investors.
- Scope of investments would only exist if the firm registers itself as a company.
- However, exports remain to be completely unexplored by all the units excepting Supreme Industries who is exporting to Bhutan and is the only registered company out of the six firms under analysis.

Food Processing Industry

- In the food-processing sector, it could be seen that almost all the organizations under study are registered companies and most of them are operating as small and medium-scale enterprise.
- For most of the food processing corporations under study, uninstalled production capacity could be witnessed due to three main reasons: lack of investments, cost inefficiency on the part of the companies or low marketization.
- Additional investments are required by all the companies for the production capacity to be fully utilized considering the capital employed by the firms.

- To break free from the vicious circle of unutilized production capacities by all the firms under study, it is important to reach full production installed capacity by them and enjoy economies of scale.
- As far as small market size of the state of Assam is concerned, the outside markets of the neighboring allies of the state in the form of exports is a viable option to increase the market size of the companies. Exports haven't been explored by any of the organization excepting Kishlay Foods who is exporting to Bhutan. Exports would also boost the opportunity of getting investments from external sources.
- Other than shareholder's funds and long-term borrowings from banks, investments from other external sources in the form of domestic and foreign investments are also open for the companies to explore.
- Investments from external sources mostly in form of Private Domestic Investments and Foreign Direct Investments can also help the companies enjoy increasing returns to scale allowing them to explore the export market and gain comparative advantage.
- One of the partnership firms, Arohan Foods are getting foreign funding in the form of Venture Capitalists.
- Repose Foods Pvt. Ltd., one of the oldest food-processing units in Guwahati is getting domestic investment from private investors.

Handloom Industry

- Handloom industry is one such sector in Assam which is running presently as micro or small-scale industry.
- The production installed capacity of the individual unit ranges from 120 pieces/year to 4320 pieces/year.
- The total number of handlooms considering all the 10 units stand at 169.
- For those units whose production installed capacity is high, their unutilized capacity is also relatively high. Some of the reasons that were cited by the owners of the units were unavailability of labors at times, productivity of laborers, and pattern/design of the clothes also hampers the utilized capacities at times.

- All the units are catering to major cities of the state of Assam, two units are catering to the major cities of India, and two units are also supplying their commodities to Kolkata.
- None of the units are exporting their commodities outside the state. Scope of exports from the industry remain to be seen in the long-run.
- The investment amounts are lump-sum amounts given by the units. None of the units maintain any standardized book-keeping records of their accounts and as a result they themselves are unaware of the average investments that they have made on average basis.
- All the units are investing on their business through their own capital. Therefore, lack of investments remain to be seen for all the units. Scope of investment is seen in the industry as a whole.

7.5. CONCLUSION

Investments and exports play a very vital role in the growth of any country's economy which has been rightly proved in the analysis. Investments and exports have been major determinants in the growth of India's GDP. But we cannot rightly say the same for Assam economy as it is lacking the much needed investments and exports which boost investments further. Therefore, an attempt has been made to show the companies and units operating under various sectors who have the scope of attracting Investments and boosting exports at the same time. Export growth would further pave the way for inward investments in the region.

Hence, it is of utmost importance that the business firms as well as the government understand and take appropriate measures as mentioned in the study through which exports and investments could be boosted in the highlighted sectors that would lead to inclusive growth for the economy of the state of Assam.