1. Introduction:

Sugar industry is an agro based industry with byproducts such as molasses, bagase, pressmud. Sugar cane is cultivated between latitudes from 35°. O' N and 35°. 5' under varying soil and climatic conditions. Important sugarcane producing countries in the world are Australia, Britain, West Indies, Cuba, India, Indonesia, Mauritius, South Africa and USA.

Sugarcane is known in India since early times during Atharva Veda (5000 BC), Sugar is mentioned in Pratimoksha a record of Buddhist role of life in Maha Bhashya of Patanjal (350 BC) and in Lalita Vistara and Jatakas. The Law Book of Manu "Dharma Shastra (200 BC-200 AD) contains references to sugar. The Chinese Buddhist pilgrim Fattin (399AD) and Huen-Tsang (629 AD) have mentioned about sugarcane in India. Ibn Batuta (1325-54) Abul Fazal In Ain-i-Akbar I have mentioned about sugar in India.

First sugar factory was started 1788 in Bihar by a civilian. India was exporting sugar in 18th and 19th centuries.

There are 17 sugar factories in Belgaum district. Majority of them in co-operative sector Hiranyakesi co-operative sugar
factory was the first to be started in co-operative sector in 1955 followed by Malaprabha Co-operative Sugar Factory in 1968, Ghataprabha Co-operative Sugar Factory at Gokak in 1970 and others at Chikkodi, Raibag, Nippani, etc.

2. Selection and Relevance of the Problem:

The commodity of sugar has been recognized as a significant part of our daily food. Its production depends on the sugarcane production and thus it is considered as an agro-based industry. The cultivation of sugarcane and production of sugar have given employment to a large number of people all over the world. The study of such an important commodity is very essential in view of the economic development of a region. The Belgaum district has been considered as a major sugar producing district in Karnataka. Hence the researcher has selected the present problem for an in depth study of sugarcane cultivation and sugar production in Belgaum district in general and M.K.Hubli in particular. Further its analysis helps in taking decisions for future development and planning.

3. Selection of the Study Area

The Study area is one of the oldest co-operative sugar factories in Belgaum district which is considered as the sugar district in Karnataka. Proximity of the location of the factory and
the easy availability of the data were the factors considered for the selection of the study area.

4. Limitations of the Study

The present study has been carried out within the following limitations.

i. The analysis of sugarcane cultivation is confined to Belgaum district in general and M.K.Hubli factory in particular.

ii. The study is based on primary as well as secondary data for a period of maximum (10) ten years from 1997 to 2007. This limitation is made mainly previous years.

iii. The study makes analysis in general for the whole Belgaum district, but it analysis the sugarcane and sugar production in detail in case of M.K.Hubli Shri Malaprabha Sugar Factory. The researcher has in-depth study of various dimensions of sugarcane cultivation and sugar production. It is believed that whater forces and events operating in case of M.K. Hubli sugar factory are also operating generally in case of all other remaining sugar factories functioning in Belgaum district.
The entire study has been carried out within the above said limitations.

5. Objectives of the Study

The present research study has been conducted with the following objectives.

1. To discuss the theoretical contributions on industrial location.

2. To examine the locational dimensions of Malaprabha Sahakari Sakkare Karkhane as case study.

3. To provide a geographical and economic personality of the study area

4. To discuss the spatio-temporal analysis of sugarcane production with special reference to the study area.

5. To analyze the production, marketing and infrastructural aspects of the study unit.

6. Hypotheses

The following hypotheses are setforth for the research study.

1. The study unit has adequate infrastructural facilities for its effective functioning.
2 The study unit is faced with the problem of inadequate availability of raw materials.

7. Methodology and Data Base

The present research work is a case study of locational dimensions of Malaprabha Sahakari Sakkare Karhane Ltd. M.K.Hubli. The Study is based on secondary data obtained through the records of the factory at M.K.Hubli.

The present work has been depended mainly on both primary and secondary data. The primary data has been collected through interview and questionnaire method and also through field observation.

The secondary data has been obtained from the records of the study unit at M.K.Hubli through personal visits to the factory. Other sources of data were the government publications on the sugar industry and published information by periodicals and research articles in various journals etc.

The data thus obtained is compiled and tabulated in specified and suitable tables for deriving appropriate inferences and conclusions. Graphical representations have been provided to highlight some significant trends.
8. Review of Literature

Relevant and relate literature on the topic of the present research study is limited and scanty. A few available and relevant studies have been reviewed here

Swapna Banerjee-Guha (1996)

The author has argued that the traditional theories of industrial location that had been developed in economics based on neo-classical approach (Weber 1929, Hoover194, Losch 1954, Isard 1956) focusing on the economic principles of industrial location with a regional perspective were used by Industrial Geography researches to analyze the spatial distribution of economic activity with respect to a static distribution of factors of production and market in the beginning.

Further the author perceives that subsequently the researcher went beyond their approaches and started analyzing the locational dynamics of large industrial corporations commanding a broad set of spatial choices tracing the subsequent works on industrial location in economics and geography. The author argues that they have focused on the role of capital and market.

V.Vidyanath (1986)
The author has observed that the spatial pattern of crop combinations highlights the regional variations in the level of agricultural development in Andhra Pradesh.

The industrial clusters have initiated the decentralized distributional pattern of industries. The study conducted in Madhya Pradesh has revealed that totally 64% of the industrial units in major/medium sector and 33% of small scale sector have been occupied by the seven industrial clusters lying in ten districts of the state. It means that half of major/medium industries and one third of small scale industries are agglomerated in one fifth of the district. The study on spatio-temporal analysis of industrial clusters in Madhya Pradesh indicate these trends.

➤ Prasanta Pathak Vaskar Saha (1992)

The authors in their paper “Measurement of Localization Performance” maintain that as the location factor of a spatial unit is in the ratio form between the spatial value and the national value. The uniform changes of both will not change the spatial location factor value significantly.

➤ C.N.Ray and R.M.Patel (1994)
The authors in their paper "Backward Area Industrial Development-A case study of Mehsana District - Gujarat", have expressed the view that other than the incentive policies, factors like Kalol, Kadi, Mehsana and Vijapur compared to rest of the talukas.

> **Howard A Stafford (1985)**

The author in his article "Environmental Protection and Industrial Location" have observed that for most of the locational decisions investigated, environmental regulations did not rank among the most important factors considered. When such regulations were of some significance uncertainties about when the necessary permits would be obtained were more important than spatial variations in direct cost.

The author is emphatic when he says that environmental regulations will not lead to major shifts in the location of industry within the US for the traditional locations factors remain predominate.

> **Poornima Amin (1991)**

The author in her paper "Small Scale Industries in a Rapidly Developing Industrial Economy of Gujarat- A Study in Regional Perspective" has observed that Small scale industries
have become an integral part of the states industrial economy. Their spread across the sub regions has brought in a new dimension of rapidly developing states overall industrial economy.

Package of infrastructural facilities readily available inside and around these estates have attracted large number of small and medium size factory units through out the state. Industrial Estates had attracted large number of small factory units across the sub regions of the state.

➢ **Yadinder Sing, Upinder Satheq and Indu Nayyar (2005)**

Discussing the factors contributing to Industrial Growth of Ludhiana in Punjab the authors have mentioned the following in their article “Urbanization in Punjab Northwest India-urban Industrial Growth of Ludhiana City (1971-2001)”.

- Locational Advantage of being connected by road and rail to all centers of Punjab and India.

- Early Start of Industry which began in 1898 and the both world wars gave a big fillip to growth of industries.

- Abundant availability of labour at low wages

- Industrially produced merchandise is in good demand in trade circles because of its good quality
• Easy transport facilities
• Easy availability of capital

➤ Pawar C.T. and Pujari A.A.

The authors have made an analysis of Soil Degradation in Sugarcane Farming –A Micro level Analysis. The analysis has revealed that the soil degradation is coming as a serious problem in sugarcane tract of the region resulting in decline of crop yield and soil fertility. The authors have observed that intensive cultivation excessive input consumption continuous main cropping without crop rotation have led to disturb the physical and chemical composition and properties of soil exposing them to the hazards of soil degradation.

➤ V.N. Sharma (1983)

The author in his paper “Spatio-Temporal Analysis of Industrial Clusters –A Case of Madhya Pradesh” has affirmed that spatial clustering of industrial activities in a few pockets of region has been a very significant aspect of Modern industrial Development. Such concentration not only minimizes the locational costs (Weber 1909, Losch 1940, Isard 1956) in the beginning but also mobilize infrastructure bases encourage
efficiency and augur betterment at the regional level. The authors further contend that the agglomeration and continuous bristling of industries, which are spread over a space with developed industrial infrastructure may be identified as industrial clusters (Perroux 1950, Bouderville 1961, Klessen 1967) The author says when clustering of manufacturing units is functionally as well as spatially interlinked to each other they form an industrial complex (Hansen 1972 Isard 1960)

The author perceives that the modern concept of industrial development has to be viewed not only from the production and employment perspective, but also from the larger perspective of social goods and spatial patterning of human activities in development may be achieved with the setting up of a few nucleus plants preferably in the backward regions.

9. Design of the Study

The entire study has been systematically presented by dividing it into six relevant topics beginning with a preface.

The study starts with a preface where in the objectives, hypothesis, selection of the problem and study area, methodology and literature review etc have been clearly spelled out by the researcher.
The First chapter has been devoted to the conceptual framework which deals with spatial dimensions of sugar industries, Government Policies, historical aspects of sugarcane and sugar production, and management etc. This chapter provides a base for further studies of said commodities.

The Second chapter sheds light on the geographical setting of the Belgaum district covering its location, Physiographic, Comate, Soil, Water, Vegetation and other socio-economic aspects. This study is important in-order to understand the total environment of the study region in relation to sugarcane and sugar production.

The Third chapter analyses the locational aspects of manufacturing industries. In this chapter a spatial profile is being given explaining the concept of location, locatioanal problems, and manufacturing industries as geographic phenomena etc.

The Fourth chapter makes an in-depth analysis of spatio-temporal aspects of sugarcane production. This includes particularly the study of varieties of sugarcane, sugar dimensions, by products analysis, problems and their spatio-temporal analysis.
In the Fifth chapter the researcher has made an attempt to analyze critically Shri Malaprabha Sahakari Sakkare Karkane. It is a case study which in fact represents all the sugar industries functioning in Belgaum district. Though the sugar industries locations are varying the forces governed them are generally same. The researcher has made a sincere attempt in studying the case study of Shri Malaprabha Sahakari Sakkare Karkane.

The Sixth chapter deals with the main findings, summary and suggestions. In this chapter the researcher has drawn certain conclusions along with findings and suggestions.

The bibliography (literature) has been given at the end of all chapters.