CHAPTER - I

INTRODUCTION

- Significance of the Problem
- Methodology
Among the Asian countries, India is primarily a rural country with 76.9 per cent of the total population still living in villages (as per the 1981 census). Indian culture developed and flourished primarily in the rural communities. Even now, rural people wield overwhelming influence on social, economic and political activities in India. In fact, in the Indian context, development primarily means rural development only.

Understandably therefore rural development has been an integral part of India's development from the very beginning. Different schemes have been initiated to develop agriculture, small scale and village industries, rural transport and communication, education, health etc. Rural Development has assumed considerable significance throughout the planning era. The early development schemes such as Community Development Programme, Intensive Agricultural District Programme, Intensive Agricultural Area Programme, Drought Prone Area Programme and Command Area Development Programme etc., have all aimed at Rural Development. Considerable amounts have been spent over the years on these different schemes. However these schemes have not helped significantly all sections of the rural society (K.V. Reddy, 1988).
In view of this, the critical areas of development and the interlinkages amongst the different elements or dimensions of development have to be carefully identified and appropriate strategies have to be evolved.

The interface of agriculture and industry was overlooked in the early stages of planning for rural development.

In this context new Rural Development is viewed by Udai Pareek (1982) as

Rural Development as a process which leads to a continuous rise in the capacity of the rural people to control their environment accompanied by a wider distribution of benefits resulting from such control.

and by Michael Todaro (1977):

Rural Development encompasses (1) improvement in levels of living, including employment, education, health and nutrition, housing and a variety of social services; (2) decreasing inequality in the distribution of rural incomes and in rural urban balances in incomes and economic opportunities, and (3) the capacity of the rural sector to sustain and accelerate the pace of these improvements.
This understanding of rural development has led to a greater recognition of the linkage between agriculture and industry.

Industry and agriculture are inter-related and inter-dependent. As such an essential link should be provided by improving agriculture and introducing industries in the rural areas in a big way. Agricultural surpluses have played a crucial role in the industrialisation of many economies. As long as productivity of land is low, giving hardly any surpluses, industrialisation would not get real momentum. Increase in the productivity of land in its turn depends on structural and technological changes in agriculture. Further it may be stated that creation of industrial infrastructure is a necessity for progressive agriculture.

The wealth of human and natural resources in the rural areas should be tapped and fully exploited so as to produce maximum output. Schumacher, E.F. (1977) states that, in maximising output "None of course would suggest that output-per-man is unimportant; but the primary consideration can not be to maximise output-per-man; it must be to maximise work opportunities for the unemployed and underemployed. For a poor man the chance to work is the greatest of all needs, and even
poorly paid and relatively unproductive work is better than idleness". The stress should be on production by masses rather than mass production which is relevant in the Indian context.

**SIGNIFICANCE:**

In view of the importance given to rural industrialisation in recent years, agro-industries assume significance. Rural industrialisation is considered as a panacea for many of the socio-economic problems of developing countries like India. Since agro-industries have an inherent tendency towards decentralisation and dispersal, development of a network of these industries not only would result in rapid industrial growth but also reduce the inequity in the distribution of both income and economic opportunities in different parts of the country and among different sections of population.

In other words, Papi, G.V. (1965) assumes that the remedy lies in taking industry to the rural areas and letting industry penetrate agriculture. Industrialisation of agriculture, according to Papi, means "widening of the market for farm produce by regional interaction".

The concept of agro-industry is to wed agriculture with industry and to make them inseparable
activities for rural development and further to strengthen inter-dependence and linkages. Hence its definitional objectives include (a) fostering a spirit of inter-dependence, (b) providing markets for agro output in the rural area and enlarge markets for farmers, (c) providing employment and income sources from both farm and non-farm activity within the rural sector, (d) maintaining rural resource stability, improving productivity in agriculture and (e) generating economic linkages and spread effects.

There is a remarkable growth in agriculture output over the years. However, dependence on agriculture as a primary source of income, with its attendant evils of seasonal employment and subsistence incomes to many, poses a severe problem. This is due to the small size land holding of less than two hectares taking proponderance in the rural area. This naturally necessitates agro-industrial promotion in the rural areas. Another bane of agriculture is massive disguised unemployment. A vast majority of agricultural labour is seasonally employed. About 17 per cent of such labour is estimated to be redundant whose marginal product may not be much. Overcrowding in farm sector has been the main reason for the subsistence incomes and for low living standards.
of agriculture labour/artisans/small and marginal farmers etc.

The existing pattern brings into sharp focus the paramount importance of diverting rural manpower from agriculture to allied operations and to agro-industries. Absorbing them in agro-based industries has an advantage since these industries are closely linked to agriculture necessitating them to be rural-based.

Another aspect is to improve incomes in agriculture. This becomes possible only if the wastes and by-products are fruitfully utilised. Unfortunately farm outputs and farm wastes are considered as two independent entities. These have to be interdependent and interrelated leading to total utilisation of agricultural produce, including wastes, which are a major source of raw material for a variety of industrial products.

The interdependence also relates to (a) supply of wage goods to industrial sector, (b) supply of material for the building up of economic and social overheads in the agricultural sector and (c) supply of basic consumption goods to the agriculture population. The interdependence becomes stronger as development takes place.

Productivity increase in land depends largely on changes in technology taking place in relation to
land. Agro-industries are considered to be the suitable medium to achieve this. Imperfections in processing and marketing restrain farm output. Some attempts have been made to organise agro-industries on co-operative lines, leading to farmers' participation, organisation of infrastructure, greater usage of agricultural credit, marketing facility etc. Use of modern inputs and plant protection measures for agriculture also has taken place, where co-operative agro-industries have been set up, eg., sugar co-operatives.

Agro-industries utilising local resources - physical resources, unemployed labour, unskilled workers - provide an answer for an integrated and balanced rural economy.

The review of the literature reveals that there are appreciable number of individual research studies that were made on agro-industries, particularly with reference to sugar industry. It is observed that these studies were mostly with reference to the states of Uttar Pradesh, Bihar and Maharashtra. To mention a few, N.A.Shah (1941), J.N.Mongia (1954), B.H.Patil (1969), D.S.Baviskar (1980), Vimal Raghavachari (1973), S.D.Tupe (1980), R.M.Kharche (1987) and many others have studied different aspects of sugar industry in Maharashtra. H.S.Sarma (1968),
A.K. Dass (1971) and others have studied some aspects of sugar industry in Uttar Pradesh. Similarly R. Sahay (1965), D.P. Singh (1966) etc., have made some studies on sugar industry in Bihar.

It is also noticed that there were very few studies on sugar industry in Andhra Pradesh and in particular on sugar co-operatives. Jagannada Rao (1980) made a study on the operational and financial performance and management of sugar co-operatives in Andhra Pradesh; Venkaiah (1981) made a study on the role of agro-based industries in the rural economy; Syed Ali (1985) analysed the production pattern and operational efficiency of a sugar factory.

From the above it can be observed that there is a paucity of literature on sugar co-operatives in Andhra Pradesh, particularly with reference to the impact of sugar co-operatives on farming community. In other words, as far as Andhra Pradesh is concerned it is not very clear whether the sugar co-operatives have succeeded in promoting/facilitating the expected benefits, viz., to secure increase in production, to provide opportunities for gainful employment and improving living standards and equitable distribution of gains etc. Hence, the present research study on the Nandyal Co-operative Sugars Ltd., assumes importance.
METHODOLOGY:

Objectives: The following objectives have been formulated for the purpose of the present study:

1. To portray the history and development of sugar industry with special reference to sugar co-operatives in India.
2. To examine the socio-economic characteristics of sugarcane growers and non-sugarcane growers;
3. To analyse the changes in agricultural practices and productivity.
4. To examine the changes in the employment opportunities.
5. To analyse the changes in the income levels.
6. To examine the changes in the standard of living.
7. To examine the general impact of the sugar co-operatives on the development of infrastructure, co-operative spirit and social participation.

Hypotheses:

1. Sugar co-operatives encouraged the adoption of modern farm technology among the sugarcane growers. The adoption of farm mechanisation and modern farm technology is related to farm size.
2. The man-days of employment generated and the size of holding are inversely related.

3. The increase in income through agriculture is positively related to the size of holding.

4. The overall development led to higher investment in human resource development; and the investment is positively related to the size of holding.

**Universe & Sample**: The sugarcane growing villages in three mandals of Nandyal revenue division of Kurnool district in Andhra Pradesh are the study area. All the sugarcane growers comprise the universe for the present study. In each mandal one village has been chosen for the present study.

A sample of 120 sugarcane growers and 40 non-sugarcane growers representing these revenue villages in and around Nandyal Mandal constitute our study sample. The sample was selected randomly among the farmers. The villages were selected on the basis of a pre-determined criteria. The criteria are that the villages must comprise both sugarcane growers and non-sugarcane growers; the villages must have irrigation facilities; they must be multi-caste village; and land holdings are not concentrated in a few families. Thus three villages, namely,
Deebakunta, Gosipadi mandal; Chabolu, Nandyal mandal, and Ayyaluru, Mahanandi mandal, have been identified and covered a sample of 30, 50 and 40 sugarcane growers and 9, 16 and 15 non-sugarcane growers respectively.

Data Collection: The study is primarily based on empirical data collected from the individual farmers (both sugarcane growers and non-sugarcane growers). The data were collected by administering a schedule. Data pertained to two intervals viz., 1981-82 (before the commissioning of the Sugar Factory) and 1991-92 (a decade after the commissioning of the Sugar Factory) and relate to agricultural practices, income, expenditure, infrastructure, etc. The necessary secondary data for the portrayal of sugar industry and the sugar factory under reference were collected from published data, reports and factory records.

Analysis: The empirical data was analysed using select independent variables. To depict socio-economic characteristics, variables such as age, educational levels, caste, size of land holding, sources of irrigation and annual income were used.

To analyse the changes and the impact of sugar factory, the data was processed using the independent variable, the size of holding. A comparison was made
between the two time periods. To explain the changes, the percentage of increase or decrease was calculated.

Limitations: The scope of study is limited to the impact of the sugar factory on the farmer community only but not on the entire village or the region.

Scheme of Presentation: The present study is presented in seven chapters.

The first chapter "Introduction" presents a brief introduction, gives an account of the significance of the problem and the need for the study and methodology.

The second chapter "Review of Literature" provides a brief and select review of the sugar industry.

The third chapter "A History and Development of Sugar Industry" depicts the history and development of the Sugar industry in India and the development of co-operative sugar industry in India.

The fourth chapter "The Setting" presents the profile of the study area, The Nandyal Co-operative Sugars Ltd., and the socio-economic character of the respondents.

The fifth chapter "Sugar Co-operatives: Impact and Trends of Change" analyses the trends of change on account of the co-operative sugar industry.
The sixth chapter "Sugar Co-operatives and Infrastructural Facilities" explains the development of the infrastructure and the details of the social participation.

The seventh chapter "Summary and Conclusions" presents the summery and major findings and conclusions.

Bibliography: The various books, reports, research papers consulted and cited in the present study are presented in the select bibliography.

Appendix provides the tool/data collection—the Schedule.