

A
UGC FUNDED MINOR RESEARCH PROJECT ON
“EMPLOYMENT GENERATION IN RURAL AREA
THROUGH SUGAR CO-OPERATIVES:
A STUDY OF SELECTED CO-OPERATIVE SUGAR
FACTORIES IN KOLHAPUR DISTRICT”
SUBMITTED TO UNIVERSITY GRANT COMMISSION
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DECLARATION

I hereby declare that the project entitled “**Employment Generation in Rural Area through Sugar Co-operatives: A Study of Selected Cooperative Sugar Factories in Kolhapur District**” Completed and written by me has not previously formed the basis for the award of any Degree or Diploma or other similar title of this or any other University or examining body.

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CERTIFICATE

This is to certify that the project entitled “**Employment Generation in Rural Area through Sugar Co-operatives: A Study of Selected Cooperative Sugar Factories in Kolhapur District**” which is being submitted herewith to UGC, New Delhi for the completion of Minor Research Work in Commerce and Management is the result of original research work completed by **Dr. MANSINGH SAMBHAJIRAO DABADE** the work embodied in this project has not formed earlier the basis for the award of any degree or similar title of this or any other University or examining body.

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PRINCIPAL

Date :

CHAPTER NO. 1

EMPLOYMENT- A CONCEPTUAL FRAMEWORK.

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1. Introduction:-

India has a rapidly expanding and a large sugar industry with about 566 sugar factories currently operating & is the largest sugar producer in the world. The opening up of the global economy has now made it imperative for the Indian sugar industry to gear up and mobilize its technological options including manpower training to maintain to competitive edge in the international market.

The importance of the sugar industry is more relevant now as it is an agro-based industry and can provide a cutting edge to the Indian economy in its future global transactions. It is therefore, essential to conduct reconnaissance of the existing resources in terms of technology system & manpower skill.

The technology up gradation of the industry therefore, should follow a two-pronged strategy consisting of synergies in the up gradation of the existing design of plant and process and manpower training. In nutshell, the objectives of the sugar industry should be to maximize productivity through efficient use of technology and the vast skilled manpower resources it has at its command.

To meet the challenge of high production of sugar, the Government has set up the Sugar Technology Mission dedicated to the task of technology up gradation with a view to reduce the cost of production through improvements in process efficiencies, optimization of plant and equipment and reduction in fuel and energy consumption. It also aims at improving the product quality to achieve higher realization both at the domestic & international levels.

Successful implementation of modern technologies for improving the overall productivity calls for a higher levels of skills of the operating personnel. Whereas, the classroom can provide the necessary theoretical knowledge, on the job training in the factory is

essential to sharpen the skills of the manpower employed. The expertise of the existing workers has to be continuously upgraded and the new entrants must be subjected to intensive training through well-designed programmes covering equipment familiarization, knowledge of operational methods & trouble shooting etc.

1.1 INTRODUCTION - EMPLOYMENT

Employment is commonly judged precisely by 'the fruit of action'. Generation of employment opportunities is a major challenge in our country. Unemployment in India, both in terms of magnitude and severity, indeed poses a formidable challenge. Mobilization resources, accelerated growth selective pattern of investment, proper choice of techniques, opportunities, and appropriate spectrum of economic activities in rural and urban areas with the consideration to the capital employment ratios and availability of complementary factors of production suggest multi-programmed approach required to tackle the problem.

Agriculture and allied sector activities have a very large employment generation potentiality. Most of the people in our country live in rural areas and will continue to do so far the foreseeable future. In these areas, unemployment is often high and there is a need to implement programmes to create work.

The present chapter deals with the various aspects of employment, it includes concept of employment, types of employment, terms used in relation to employment, some concepts relates to employment and Keynesian theory of employment.

1.2 CONCEPT OF EMPLOYMENT.

a. Employment /Workforce:

“The segment of population engaged in gainful activity i.e. the activities pursued for pay, profit or family gain constitutes the workforce or in other words the employment.”

There are three different estimates of ‘employed’ or ‘workforce’.

- 1) Number of persons usually employed (i.e. those worked for a relatively longer period of a period of 365 days.)
- 2) Average number of persons employed in a week.
- 3) Average number of persons employed per day. **1**

b. Employment:

“Gainful engagement in an occupation, business, trade or profession.” **2**

1.3 TYPES OF EMPLOYMENT.

Mainly there are two types of employment

- a) Direct employment/Wage employment.
- b) Indirect employment/Self employment.

a. Direct employment/Wage employment:

Where a person engaged in any economic activity in a manufacturing company or in a service sector and get returns from company/organization in cash (i.e. salary or wages) against the service is called direct employment/wage employment.

b. Indirect employment /Self employment:

Person who operate their own farm or non-farm enterprises or engage independently in a profession or trade on own account or with one or few partners is deemed to be self-employed in household enterprise. The essential features of the self-employed is that they have autonomy (i.e. how, where and when to produce) and economy independence (i.e. market, scale of operation and money) for carrying out their operation. The fee or remuneration received by them comprised two parts a) share of their labour and b) profit of the enterprise. In other words, their remuneration was determined wholly or mainly by scale or profits of the goods or services which were produced.

Categories of self-employed persons:

i) Own-accounts workers:

Those self-employed persons who operated their enterprises on their own account or with one or a few partners and who ran their enterprise without hiring any labour. They could, however, have had unpaid helpers to assist them in the activity of the enterprise.

ii) Employer:

Those self-employed persons who worked on their own account or with one or a few partners and, who by and large, ran their enterprise by hiring labour.

iii) Helpers in household:

Those self-employed persons (mostly family members) who were engaged in their household enterprises, working full or part time and did not receive any regular salary or wages in return for the work

performed. They did not run the household enterprise on their own but assisted the related person living in the same household in running the household enterprise.³

1.4 TERMS USED IN RELATION TO EMPLOYMENT.

The following terms are used in relation to employment.

a. Full Employment:

The condition which exist when all who are able and willing to work can find remunerative employment time consumed in vacations, changing jobs and similar periods without work cause a certain amount of unemployment at all times. As long as this dose not exceeds 3 to 4% of labour force, however, full employment is said to be exist.⁴

b. Primary Employment:

This comprises all extractive occupations, the products of which are foodstuffs and raw materials.

c. Secondary Employment:

A description of occupations engaged in the production of manufactured goods and in building and construction.

d. Tertiary Employment:

This comprises the labour force engaged in services to aid industry or for direct benefit of consumers.

e. Employment Costs:

Wage or salary paid to an employee plus the related payments for insurance, pension etc; that have to be met by the employer. Overheads related to the employee may also be included.

f. Employment Exchange:

An office at which people seeking employment and employers requiring work people may notify their respective needs. It is a market place for labour intended to replace the unguided individual search for work or for employee.

The credit of hitting the idea of employment exchange goes to the late Lord William Beveridge of England. On his advice Britain setup employment exchanges for the first time in 1909.

g. Employment Rate:

Employment rate refers to the percentage of workers who at a given time have been in employment. It is more usual to consider the unemployment rate.

Employment Rate = $\frac{\text{Persons engaged in employment}}{\text{Total manpower}} \times 100$

h. Employment Report:

The report, included in a company's annual report, giving details of such matters as numbers of employees, their age and sex distribution, their geographical locations the costs (including pensions and fringe benefits) of employment them, training schemes and costs, recognized trade unions and health and safety members. **5**

1.5 CONCEPT RELATED TO EMPLOYMENT.

a. Workers or Employed:

Persons who are engaged in any economic activity or who despite their attachment to economic activity have abstained for reason of illness, injury or other physical disability, bad weather, festivals, social or religious functions or other contingencies necessitating temporary absence from work constitute workers. Unpaid helpers who assist in the operation of an economic activity in the household farm or non-farm activities are also consider as workers. All the workers were assigned one of the detailed activity statuses under the board activity category 'working' or being engaged in economic activity or employed.

b. Seeking or available for work or unemployment:

Persons, who owing to lack of work had not worked but either sought work through employment exchange, intermediaries, friends or relatives or by making applications to prospective employers or expressed their willingness for work under the prevailing conditions of work or remuneration were considered as those who were seeking or available for work or unemployed.

c. Economic Activity:

Any activity resulting in production of goods and services that add value to national product was considered as an economic activity. Such activity included production of all goods and services for market i.e. production for pay or profit and the production of primary commodities for own consumption and own account production of

fixed assets, among the non-market activities. The entire spectrum of human activity falls into two categories:

- 1) Economic &
- 2) Non-economic activities.

Economic activities have two parts.

- 1) Market activities &
- 2) Non-market activities.

Market activities are those that involve remuneration to those who perform it

i.e. activity perform for pay or profit. These are essentially production of goods and services for the market including those of Government services etc.

Non-market activities are the production for own consumption of primary products including own account processing of primary products and own account production of fixed assets.

d. Labour Force:

Persons, who were either 'working' (or employed) or 'seeking or available for work' (or unemployed) constituted the labour force. Persons who were neither 'working' nor seeking or available for work for various reasons during the reference period were considered as 'out of labour force'. The persons under this latter category are students, those engaged in domestic duties, retirees, pensioners, recipients of remittance those living on aim infirm or disabled persons, too young or too old persons, prostitutes, smugglers etc., and casual laborers not working due to sickness.

e. Regular Salaried/Wage Employee:

Those people who worked in others farm or non-farm enterprises (both household and non-house hold) and in return, received salary or wages on a regular basis (i.e. not on the basis of daily or periodic renewal of work contract).

This category included not only persons getting time wage but also persons receiving piece wage or salary and paid apprentices, both full-time and part-time.

f. Casual Wage Labour:

A person who casually engaged in others farm or non-farm enterprises (both household and non-household) and in return, received wages according to the terms of the daily or periodic work contract is a casual wage labour.

g. Rural Labour:

Manual labour working in agricultural and/or non-agricultural occupations in return for wages paid either in cash or in kind and living in rural areas is a rural labour.

h. Agriculture Labour:

A person consider as agricultural labour, if he/she followed one or more of the following agricultural occupations in the capacity of a wage paid manual labours whether paid in cash or kind or both.

Farming

Dairy farming

Production of any horticultural commodity.

Raising of livestock, bees, poultry etc.

Any practice performed on a farm as incidental to or in conjunction with farm operations (including forestry and timbering) and the preparation for market and delivery to storage or to market.

Working in fisheries is excluded from agricultural labour. **6**

1.6 KEYNESIAN THEORY OF EMPLOYMENT.

In the Keynesian theory, employment depends upon effective demand. Effective demand results in output. Output creates income and income provides employment.

Therefore, the assumptions of Keynes were:

1. Effective demand,
2. Output,
3. Income
4. Employment are equal to each other. Keynes regards employment as a function of income.

According to Keynes, employment can be increased by increasing consumption and/or investment. Consumption depends on income and the propensity to consume, but income is a dependent variable which can be changed by any of the independent variables such as, the consumption function, the marginal efficiency of capital (MEC), the liquidity preference schedule and quantity of money. Consumption can thus be increased by raising the propensity to consume in order to increase income and employment. However, the propensity to consume depends upon the psychology of the people, their tastes, habits, wants and the social structure, which determines the distribution of income. All these elements remain constant during the short run. Therefore, the propensity to consume is stable.

Therefore, employment is depends on investment and it varies in the same direction as the volume of investment. Investment and employment can be increased by lowering the rate of interest. The rate of interest is determined by the demand for money and the supply of money.

By increasing the supply of money in the country the monetary authority can bring down the rate of interest, which will in turn, stimulate investment and employment.

Summary of Keynes's theory of Employment.

- 1) Level of output or income of a country depends on the level of employment.
- 2) The level of employment depends on the magnitude of effective demand.
- 3) Aggregate supply of an economy depends on physical and technical conditions of production.
- 4) Aggregate demand in a simple Kenesian model consists of consumption demand and investment demand.
- 5) Consumption demand depends on propensity to consume on the one hand and disposable income on the other.
- 6) Investment demand depends on the rate of interest and marginal efficiency of capital.**7**

1.7 DEFINITIONS OF WORKERS.

a. As per Factories Act, 1948 the term 'worker' means a person employed (directly or by or through any agency including a contractor) with or without the knowledge of principal employer, whether for remuneration or not in any manufacturing process, or in cleaning any part of the machinery or premises used for

manufacturing process or in any kind of work incidental to or connected with, the manufacturing process or the subject of the manufacturing process, but does not include any number of the armed forces of the union. [Sec.2 (1)]

b. According to the Central Sugar Wage Board Report, 1960,

“Workman means any person (including apprentice) employed in any industry to do any skilled or unskilled manual, supervisory, technical or clerical work for hire or reward, but dose not include any such person.

a) Who is mainly employed in a management under managerial or administrative capacity? Or

b) Who, being employed in a supervisory capacity, draws wages exceeding five hundred rupees per month or exercises either by the nature of the duties attached to the office or by reason of the powers vested in him, function managerial nature”.

1.8 CLASSIFICATION AND CATEGORISATION OF WORKERS ACCORDING TO EMPLOYMENT IN SUGAR FACTORY.

- a) Permanent workers.
- b) Seasonal workers.
- c) Apprentices.
- d) Temporary and Casual workers.
- e) Probationer.
- f) Substitute etc.

a. Permanent workers:

The permanent worker is one who is engaged on permanent basis and remained employed throughout the year and has completed his probationary period if any.

b. Seasonal workers:

“A seasonal worker is one who is engaged for the crushing season provided that if he is a retainer, he shall be liable to be called on duty at any time in the off season and if he refuses to join he shall lose his line as well as his retaining allowance. However, if he submits a satisfactory explanation of his not joining duty, he shall only lose his retaining allowance for the period of his absence.

c. Apprentices:

An ‘apprentice’ is a learner who may be given a nominal allowance during the course of his training to be fixed by the management concerned. The period of his apprenticeship will be such as may be fixed in the scheme approved by Government. The Central Wage Board for the sugar industry dealt with the practice of engaging apprentices and learners in the sugar industry and made some recommendation about their employment which provided that:

- 1) No apprentice shall be taken for unskilled manual jobs.
- 2) An apprentice shall not be paid less than 60% of minimum basic wage and dearness allowance or consolidated wages.
- 3) The period of apprenticeship in a sugar factory not exceed two years.

d. Temporary and Casual worker:

A casual/temporary worker is one who is engaged for a work which is essentially of a temporary nature or who is engaged temporarily as an additional workman to perform the work of a permanent nature.

e. Probationer:

A 'probationer' is one who is provisionally employed for a period to be specified by the management at the time of employment to fill a permanent vacancy or a new post of permanent nature and who may be confirmed at the completion of that period, if his service is found satisfactory.

f. Substitute:

A 'substitute' is one who is employed in place of permanent or seasonal workman who is temporarily absent on leave or otherwise.

1.9 CLASSIFICATION OF WORKERS ACCORDING TO SKILL.

According to the skill the workman of sugar factory are classified as follows.

a. Highly skilled:

Highly skilled are those who possess the highest technical qualifications. They are supervisory staff and occupy high post in the factory and are provided with accommodation and other facilities in the factory. It includes managers, chief engineers, chief chemist etc.

b. Skilled:

A skilled worker is one who possesses some preliminary training and experience. They are subordinate to highly skilled workers. It includes driver, laboratory incharge, fitters, boiler incharge etc.

c. Semi-skilled:

Semi-skilled worker is one who has some knowledge e.g. assistance to fitters, fireman, pump driver, oilman and other come under this category.

d. Unskilled worker:

Unskilled worker is one who does not possess any preliminary experience before recruitment and can be replaced by ordinary labour.

For each class of employee specified above, distinctive tickets have been provided bearing the name and the class.

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CHAPTER NO. 2

RESEARCH METHODOLOGY AND REVIEW OF LITERATURE.

Sr. No.	Title
2.1	Introduction.
2.2	Statement of problems.
2.3	Hypothesis.
2.4	Objectives of the study.
2.5	Scope of the study.
2.6	Research design.
2.7	Sampling.
2.8	Sampling design.
2.9	Procedure of data collection.
2.10	Statistical techniques used.
2.11	Limitations of the study.
2.12	Chapter scheme.
2.13	Review of literature.

2.1 INTRODUCTION:

Employment Generation:

Generation of employment opportunities is a major challenge in our country. Unemployment in India, both in terms of magnitude and severity, indeed possess a formidable challenge. Mobilization of resources, proper choice of techniques, appropriate development of economic activities in rural and urban areas with due consideration to the capital employment ratios and availability of complementary factors of production suggest multi-programmed approach required to tackle the problem.

Most of the people in our country live in rural areas and will continue to do so far the foreseeable future. In these areas, unemployment is often high and there is a need to implement programmes to create employment opportunities both self-employment and salaried jobs.

A number of research studies have undertaken in Commerce and Management and in Economics. However, no researcher has attempted to undertake a study at micro level by adopting a case study approach in this subject.

The role of co-operatives in generation of employment opportunities is not so far studied at required depth. The present study is a humble attempt in this direction.

2.2 Statement of the problem:

Co-operatives as an agencies are not only to act as business ventures but also as centers of socio-economic change in rural

Maharashtra. Co-operatives have certainly done commendable work in generation of employment opportunities in rural Maharashtra.

Success of co-operative sugar factories not only limited in production of sugar and its by-products but also in establishment of network of various types of co-operatives under its leadership and guidance.

The aim of present study is to critically study the contribution of co-operatives in Generation of Employment Opportunities in their command areas. Employment refers to both wage employment and self-employment.

2.3 Hypotheses:

- 1) There is a generation of both wage and self-employment.
- 2) Besides agricultural employment is generated in allied areas also.
- 3) The employment generated in co-operatives needs to be improved qualitatively in terms of work culture, organizational behaviour etc.

2.4 Objectives of the Study:

1. To review the progress of development of sugar co-operatives in Maharashtra.
2. To provide theoretical background to the concept employment generation in particular resulting from working of co-operative sugar factories.
3. To study the direct (wage) employment generated by Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar and Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

4. To study the indirect (self) employment generated by Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar and Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.
5. To measure the magnitude of both direct and indirect employment generated in relation to demographic features of the region.

2.5 Scope of the study:

For the purpose of detailed investigation a case of Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar and Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri were considered as ideal examples. To study the Employment Generation it covers the whole commanding area of sugar factories.

As these two sugar factories are located in the western part of the Kolhapur District the command areas of these two factories are spread in hilly part of the district. The study takes into consideration the total command area for the purpose of data collection.

It also takes into consideration direct as well as indirect employment generated by sugar co-operatives.

2.6 RESEARCH DESIGN:

This research study carried out by selecting Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar and Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri, which attempts to consider main area of 'Employment Generation' for research.

2.7 Sampling:

The sampling methods used for the study are Stratified, Quota and Purposive sampling.

2.8 Sampling Design:

Thus, the primary data was collected from employees inside the factory, permanent self-employed persons, seasonal self-employed persons, sugarcane harvesters and analyzed for main study.

Along with primary data, secondary data related to this survey was collected from different sources like sugar factory, Government offices etc. The secondary data collected from the sugar factory was in the form of annual reports.

The investigator to gather necessary data visited government offices like office of Sub-Registrar (Co-operative), District Statistical Office etc. Websites related to sugar co-operative sector in Maharashtra in general were visited and necessary documents were referred and downloaded for this study.

Thus, the data was collected by both the sources viz. primary and secondary.

2.9 Procedure of Data Collection:

A well thought and systematic procedure was adopted to collect the required data from the sugar factory and concerned respondents. For collection of information regarding employment generation inside the factories i.e. for direct employment generation the researcher met the concerned officials i.e. Managing Director and Labour Officer and through them the concerned data was collected.

For the purpose of indirect employment generation the well thought questionnaire was developed and through it the required data was collected.

Thus, the required data was collected with the help of personal interviews and valid questionnaire.

2.10 Statistical Techniques Used:

The collected data was exposed to different statistical techniques like percentage, mean, minimum, maximum and standard deviation of different aspects of respondents. Thus, the data was analyzed and interpreted with the help of these statistical techniques and conclusions were drawn.

2.11 Limitations of the Study:

Following are the main limitations of the present study.

- 1) Time limit: for the purpose of study researcher has collected during the years 2017-18 and 2018-19
- 2) Employment generation refers direct as well as indirect employment generated by sugar co-operatives. However, it does

not include some areas like peoples engaged in sugarcane farming, other material suppliers like oil, *goni*, machinery, parts of machinery etc.

2.12 Chapter Scheme:

The present study is divided into seven chapters, the brief outline of each of the chapter is as follows.

Chapter No.1

Employment- A conceptual framework.

This chapter deals with the concept of employment, types of employment, terms used in relation to employment, concepts related to employment, definition of workers, classification of workers as per skill, Kensiens theory of employment.

Chapter No.2

Research methodology and review of literature.

This chapter deals with the Research Methodology and Review of Literature. In research methodology it defines all the aspects of research design such as, about research, statement of problem, hypothesis, objectives of the study, scope of the study, research design, sampling design, procedure of data collection, statistical techniques used, limitations of the present study etc. It includes twenty seven review of past study.

Chapter No.3

Sugar co-operatives-center of employment generation.

This chapter deals with the total employment generated by sugar factory under study, employment generated in private contract, employment generated in transportation and employment generated in allied sectors in command area.

Chapter No.4

Profile of Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar and Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

This chapter deals with the profile of Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar and Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri. It includes location and area of karkhana, quality of soil in the region, area of operation, information about co-generation unit, distillery plant, environment department, main administrative building, organisational chart, horticulture, socio-economic activities and its effects, information about medical center, industrial training center, paper plant, information about department wise computerization, financial position of Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar and Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri., details of cane crushed, technical performance and working results of distillery division.

Chapter No.5

Analysis and interpretation of direct employment.

This chapter deals with the analysis and interpretation of direct employment. It includes direct employment generated by sugar factory.

Chapter No.6

Analysis and interpretation of indirect employment.

This chapter deals with the analysis and interpretation of indirect employment. It includes Taluka wise self-employment generated, village wise self-employment generated, age, sex, caste wise classification, educational level of self-employed persons. It also includes employment generated by self-employed units.

Chapter No.7

Findings, conclusions and suggestions.

This chapter summarizes all the important findings of the study. The conclusions and suggestions are drawn by the data analyzed and interpreted critically. A few suggestions for the employment generation have been made at the end. At last, bibliography and appendix is attached.

2.13 Review of Literature:

Introduction:

Employment is commonly judged precisely by 'the fruit of action'. Generation of employment opportunities is a major challenge in our country. Unemployment in India, both in terms of magnitude and severity, indeed poses a formidable challenge. Mobilization resources, accelerated growth selective pattern of investment, proper choice of techniques, opportunities, and appropriate spectrum of economic activities in rural and urban areas with the consideration to the capital employment ratios and availability of complementary factors of production suggest multi-programmed approach required to tackle the problem.

Agriculture and allied sector activities have a very large employment generation potentiality. Most of the people in our country live in rural areas and will continue to do so far the foreseeable future. In these areas, unemployment is often high and there is a need to implement programmes to create work.

The present chapter deals with the review of literature of employment generation, research methodology etc.

- 1) D.Ghosh, 1971;** stressed that in the short period, the scope for employment in any economy is defined by the amount and variety of the capital equipment that available to co-operate with labour in producing the national output. He mentioned that there are two ways in which employment may be increased even in short run.

First, the existing capital equipment can be used more intensively; factories may work more than one shift.

Second, a lot can be done to extend employment in old labour intensive industries and to discover new areas of labour intensive production.

He also mentioned that in the long run, opportunities for employment grow at the rate at which the national output expands. Obviously, the national output must grow at least as fast as the employable population if the country is to cope up with.

The finding of his study was that the leadership of advanced countries, in which labour is scarce, relatively to capital. In the invention of techniques and partly of economies of scale, there is a tendency for large scale capital intensive methods of production to replace small scale labour intensive techniques as national income and with it the output of individual industries grows. In these circumstances national output must grow still more rapidly, to offset the loss of employment caused through the displacement of labour as an agent of production by capital. It is, of course possible to muzzle the growth of capital intensive industries in various ways, but that will be at the expense of the long run growth of employment.

- 2) **Mr. N.K.Sarkar, 1972;** mentioned in his article that the important substitution strategy in economic development, followed by many developing countries in Asia, had been blamed by some economists for the slow growth of employment in them. It was argued that if market signals via the price mechanism were followed closely, the transition in these economies, from agriculture to labour intensive industry and

hence to a capital intensive economy would take place more easily.

- 3) T.S.Papola, 1972;** mentioned the Government Policy on Employment. Government established a committee for that task in 1970. The committee submitted its Interim Report in 1972. As the sub-title of the report the committee had recommended certain short-term measures for employment. Basic issues were like strategies of development and techniques of production which were of fundamental importance for a programme of employment generation on a sustained basis, these were the came up of the committee.

He found in his study that the Indian economy had grown substantially in both productive sectors viz, agriculture and industry. It was the non-agriculture sector mainly industry, which was supposed to be the main source of employment, but the rate of growth of employment in this sector had lagged behind the growth of output. He also found out that there had been a fall in manufacturing employment in the past 1965 period. Construction activity, which provided about 25% of total additional non-agricultural employment during the 2nd & 3rd plans, also experienced a steep decline after 1966. So the backlog of unemployment had been increased, which was added annually over six million new entrants to the labour market.

- 4) S.V.Sethuraman, 1972;** found out in his study that the main cause of the poverty in India is the lack of adequate employment opportunities. He attempted to measure the extent of rural underemployment between seasons by regions. For that purpose he used variation in wage rate of agricultural and non-

agricultural labour, assumed plausible values of elasticity's of demand and supply of labour. He also stated, the method of measuring unemployment or underemployment could help the policy maker to estimate the wage bill and hence the total cost of rural workers, required to provide full employment at predetermined wage rate.

- 5) Mr. M.L.Dantwala, 1972;** focused on formulating policies and programmes for reduction of poverty and unemployment. He stressed not on an estimate of the agreeable number of unemployed or underemployed but a better understanding of the anatomy of unemployment. For that purpose he took the help of 27th round of National Sample Survey Report.

The paper was based on data from 10 states for which information was available.

He took the review of picture of poverty, productivity Vs employment.

- 6) Mr. J.Dholakia, 1977;** took a brief review of the various programmes of promoting productive employment in rural areas, especially the crash programme for Rural Employment. He analyzed the various criteria for assessing unemployment. He also explained the paradox of positive rate of growth associated with rising rate of unemployment in India.

He argued that in the Indian Economy planning for full employment would require planning for investment, technological change and generation of output.

He made a strong plea that in a labour surplus economy, planning must be employment oriented.

7) **P.K. Ray, 1998;** mentioned that the generation of employment opportunities has been a prime objective of our national plans. He analyzed:

- a) The approaches adopted by the National Sample Survey Organization (NSSO) in carrying out labour force survey and
- b) The emerging scenario on employment, unemployment and underemployment. The unemployment situation as revealed by the available statistics and the working of employment exchanges was also analyze and compared with that which emerge from the buildings of the labour force surveys conducted by the NSSO.

According to him, the main emphasis in employment generation was on the development of the unorganized sector of the economy in which the promotion of self employment and the development of small scale industries were given importance.

8) **Prof. Amartya Sen, 1999;** explores the interrelationships between institutions, technology and employment. He provided a conceptual frame work for the use of existing technological knowledge as an employment strategy in developing countries. Professor Sen stressed on the importance of adequate institutional and incentives structures and pricing policies.

Two significant sets of guidelines emerged from his study.

First, household production modes, prevalent in agriculture and services in less developed countries, have substantial implication for the utilization of technologies with domestic non-wage labour.

Second, too much emphasis should not be placed on developing new intermediate technologies through research and

development as the existing 'technological shelf' is available. A notable conclusion of his study was that economic and employment policies, if formulated in isolation from the specific political, social and institutional milieu (social surroundings) are bound to flounder (struggle on vainly).

The study was conducted by Prof. Sen for the International Labour Organization in the 1970's emphasizes the use of social benefit-cost analysis as a tool to evaluate employment policies and optimal resource allocation in developing countries.

- 9) **Mr. Ajay Kumar, 1999;** examined the impact of foreign trade and technology on employment generation with special reference to India. He stressed that in developing country like India, trade and foreign technologies can play a significant role in creating employment. The experience from many of the developed as well as developing countries showed that the structural reforms, particularly the liberalization of international trade is likely to result in significant employment generation. It is observed that the overall impact on employment is likely to be positive in some sectors. The importance of some primary sector activities has to be re-oriented with respect to the employment generation in the economy. He mentioned it is imperative to place greater emphasis on Research & Development for designing labour intensive technology so as to employ more labour and less capital especially in agriculture, agro-based industries.

- 10) R. Radhakrishna, 2002;** reflected some aspects of agricultural growth, employment and poverty in India in his paper. He mentioned that slow growth of rural non-farm sector failed to create sufficient jobs for employing the large surplus agricultural labour and suggested for reorienting policies for the growth of non-farm sector which is essential for long-term poverty alleviation. He also argued for a substantial investment in human resource development for enhancing people's inherent capacity. Along with this, there should be attempts to create more economic space for the poor by equipping them with assets and skills for livelihood outside agriculture. All this should contribute to the generation of self-reliant employment.

He also states that the employment potential of the non-form sector appears to be directly related to the commercialization of agriculture. Yield improvements and the growth of the rural non-form sector contributed to the diversification of employment opportunities. However, the slow growth of the rural non-farm sector failed to create sufficient jobs for employing the large surplus agricultural labour.

- 11) Errol D'souza, 2003;** discussed in his paper that self employment the core of the informal sector was traditionally believed to result from Government and other rigidities that segment the labour market. He said that, 'recently the opposite view has been advanced, which sees the informal sector to pay above market clearing wages to retain workers and prevent losses on account of the training and recruitment costs incurred on these workers'. He argued that self-employment is due to rationing in the formal sector and that by accessing the

resources in the social network, opportunism in the labour market can be reduced which enables self-employed enterprises to survive by paying lower wages. The high unemployment rate or high discount rates of individuals induce the latter to accept such a self-employed contract.

- 12) Amrita Sher Gill and Upinder Sawhney, 2003;** mentioned that considerable interstate variations exist in the development of non-farm rural employment in India. After survey he found that on the one hand Kerla (71.34%), Punjab (46.49%) and West Bengal (41.6%) have quite high percentage of rural labour in non-farm employment, on the other Chattisgarh (13.1%), Bihar (17.51%) and Maharashtra (19.92%) have a relatively low development of rural non-farm sector. In their analysis they found that the level of development of industrial sector was found to be inversely related with inter-state variations in rural non-farm employment. The most important factor influencing

Inter-state variations in rural non-farm employment was found to be the level of agricultural development in a state, it alone explained 50% of the validation.

- 13) Prasad Rao Mecharla, 2004;** examined the relationship between education and skills on the one hand and rural employment on the other. In two villages-one developed and other less developed in the Krishna and Visakhapatnam districts respectively of Andhra Pradesh.

He stated that expenditure on education and training, improvement of health and skills, contribute to productivity by raising the quality of the population, and these outlays yield a continuing return in the future. An improvement in the quality

of the human factor is as essential as investment in physical capital. An advance in knowledge is necessary to remove economic backwardness and instil the human abilities and motivations that are more favorable to economic achievement.

He also states in his study that the education is significantly positively related to employment in each village.

The main finding of his study was that the human capital based of the rural workforce has to be improved and strengthened by providing more education and better skills to the workers in the rural areas in order to increase their employability outside agriculture and as per his opinion that was the best way to promote employment in the rural areas which in turn would help poverty reduction.

- 14) A.K.Singh, Ashutosh Joshi and G.S.Mehta, 2004;** took a survey on employment structure, conditions and productivity in micro and small enterprises, for that purpose they used a stratified sampling survey method. They classified the micro enterprise into two segments i.e.

- a) Micro 1, those employing less than six workers and
- b) Macro 2, those employing 10 to 19 workers.

The main finding of their study was the micro enterprises could generate higher employment.

- 15) Chetan Agarwal and Vijay Sharma, 2017;** provides a comprehensive account of advanced research methods used in the field of Commerce. The volume has been designed in such a manner that they help in identifying the missing links in the field of Commerce research and provide guidelines to a steadily

increasing number of younger scholars who are getting interested in pursuing research work in different branches of Commerce and Management. It shall go a long way in mitigating the problems of researchers and shall be extremely useful in formulating priorities and significant programmes in promoting business research.

- 16) **S.N.Tripathi, 2012;** mentioned that in rural India, people for centuries solving their common problems by discussion and consensus by community effort and co-operative action. The co-operative movement in India began as a credit movement. Although non-credit activities were later introduced in the co-operative structure, but credit activities still continued to constitute the most significant element of the co-operative movement. Today, the Indian co-operative movement is one of the biggest in the world, encompassing agricultural credit, marketing, handlooms, fisheries, food processing, house-building, milk-production, sugar co-operatives and many more.

- 17) **M.Karthikeyan, 2010;** This book is a pioneering attempt focusing on the role and impact of government on cooperative movement. The broad spectrum of support from the government viz, financial, administrative, legislative and education and training towards cooperative movement has been analyzed and presented. The impact of such promotion by the government has been discussed with the dimensions of constitution, management and administration and business of cooperatives.

- 18) M.L.Narasaiah, 2004;** mentioned modern small scale industry differs from large scale industry mainly in the size of the plant operation. In its technology, it is on par with or closely approximates the modern large scale industry. In fact, the whole class of small scale industry can exist to serve the needs of related large scale industry. Therefore, employment potential of small scale modern industry per unit of output is not much different from the one in the large scale counterpart of the same industry. From the point of view of employment, the principal differentiating feature of small scale modern industry is that it offers much greater scope for what may be called self-employment as distinct from wage employment. In Karve committee report, 1955 it is stated that “the principal of self-employment is at least as important to a successful democracy as that of self Government”. The argument is based on the assumption that small enterprises are labour intensive and thus create more employment per unit of capital employment.
- 19) Billy Edesson, 2014;** It is an edited book. This book focuses exclusively on rural management as opposed to rural or community or sustainable development. Its focus is the practical dimensions of organizing and managing rural enterprises and community based organizations. The book covers the functioning of among others, producers’ cooperatives, non-governmental organizations, self-help groups, local and organizations dealing with natural resource management with case studies.

20) P.P.Singh, 2018; focused in his book on the areas of rural economic development, rural development in India, rural poverty and labour problems , rural entrepreneurship, globalization and rural development, role of financial institutions in rural development, agriculture and rural development, unemployment in rural areas, infrastructure and rural development.

21) Anshuman Sharma, 2014; This book substantially contributes to the main stream of knowledge in the field of research and business communication and attends all the vital facets of the emerging concepts with clarity. The aim of the book is to help in becoming competent in the process of management and consultancy research activities.

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CHAPTER NO.3

SUGAR CO-OPERATIVES – CENTER OF EMPLOYMENT GENERATION.

Sr.No.	Title
3.1	Introduction.
3.2	Total employment generated by Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar.
3.3.1	Total employment generated by Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

3.1.1 Introduction:

Generation of employment opportunities is a major challenge in our country. Unemployment in India, both in terms of magnitude and severity, indeed poses a formidable challenge. Mobilization of resources, proper choice of techniques, opportunities, appropriate development of economic activities in rural and urban areas with due consideration to the capital employment ratios and availability of complementary factors of production suggest multi-programmed approach required to tackle the problem.

Most of the people in our country live in rural areas and will continue to do so far the foreseeable future. In these areas, unemployment is often high and there is a need for Governments to implement programmes to create employment opportunities, both self-employment and salaried jobs.

Co-operatives as an agency are not only to act as business ventures but also as centers of socio-economic change in rural Maharashtra. Co-operatives have certainly done commendable work in generation of employment opportunities in rural Maharashtra.

Success story of co-operative sugar factories not only limited in production of sugar and its by-products but in establishment of net work of various types of co-operatives under its leadership and guidance. In this chapter, the attempt of study is to

evaluate the role of co-operatives in generation of employment opportunities.

By following ways sugar co-operative plays a vital role in context of employment generation.

Following table gives, the details about factory wise total employment (direct as well as indirect) generated.

Table No. 3.1
Total Employment Generated by Shri Tatyasaheb Kore Warana Sahakari
Sakhar Karkhana Ltd. Warnanagar.

Areas	Male	Female	Sub-Total	Total	%
A) DIRECT EMPLOYMENT (In Sugar Factory)					
I) Permanent Employees	815	18	833		
II) Seasonal Employees	513	--	513		
III) Temporary	35	--	35	1381	3.38
B) INDIRECT EMPLOYMENT					
<i>a) In Warna group:</i>					
i) Warna Shikshan Mandal: Teaching:					
Permanent	224	87	311		
Temporary	110	37	147		
Non-Teaching:					
Permanent	218	20	238		
Temporary	128	06	134	830	2.03
ii) Warna Bazar:					
Permanent	346	83	429		
Temporary	90	138	228	657	1.61
iii) Warna Dudh Sangh (including dairy)					
Permanent	1727	17	1744		
Temporary	240	10	250	1994	4.87
iv) Lijjat Papad Kendra					
Permanent	01	05	06		
Temporary	--	450	450	456	1.12
v) Bhagini Mandal					
Permanent	05	05	10		
Temporary	--	55	55	65	0.16
vi) Savitri Mahila Sanstha					
Permanent	46	24	70		
Temporary	01	05	06	76	0.19
vii) Warna Transportation					
Permanent	23	--	23		
Temporary	--	--	--	23	0.06
viii) Warna Agro					
Permanent	120	05	125		
Temporary	40	10	50	175	0.43
ix) Warna Mahila Bank					
Permanent	22	07	29		
Temporary	04	01	05	34	0.08
x) Amrut Sevak Pat					

Sanstha					
Permanent	16	04	20		
Temporary	03	01	04	24	0.06
xi) Warna Coop Bank					
Permanent	465	27	492		
Temporary	70	12	82	574	1.42
xii) Warna Hospital					
Permanent	08	02	10		
Temporary	90	73	163		
Doctors	20	03	23	196	0.48
xiii) Irrigation					
Permanent	--	--	--		
Temporary	67	--	67	67	0.16
b) In Command Areas					
Sugar factory related	4456	443	4899		
Warna group related	13347	2126	15473	20372	49.93
c) Seasonal Employees:					
i) Sugarcane cutters	5908	1413	7321		
ii) Seasonal self employment	243	38	281		
iii) Transportation	640	--	640		
iv) Private contract	214	08	222	8464	20.74
d) Employment generation in self-employment units (allied areas)					
	4415	464	4879	4879	11.96
e) Dairy distributors					
	496	44	540	540	1.32
TOTAL	35166	5641		40807	100.00

(Source: Primary Data)

From the above analysis, it is clear that by sugar co-operatives employment has been generating by two ways i.e. direct employment and indirect employment or self-employment.

In case of **direct employment** the employment is generated by two ways-

- i) Permanent employment and
- ii) Seasonal employment.
- iii) Temporary employment.

Sugar co-operative provides permanent employment to 833 persons, out of that 815 were male and just 18 candidates from female category. The reason behind is the physical nature of job. These females were engaged in the job like hospital, sanitation etc.

In case of seasonal employment, Karkhana provides 513 seasonal employments in different departments like Production unit, Cane Development, General Administration etc. The important thing is that 100% seasonal employees were male candidates. The reason behind is that generally seasonal job is in a production unit and having physical in nature and in shift also and it is inconvenient for ladies. Therefore, women are not attracted towards seasonal job in sugar factory.

Due to sugar factory 35 people got an employment on temporary basis. Due to heavy nature of job all male candidates are engaged in this job.

In indirect employment it is generated by three ways i.e. i) Permanent and ii) Seasonal/ Temporary/ Daily wages and iii) Self-employed people due to sugar factory. Indirect employment includes the employment generated through Warna group and in allied areas of the karkhana. With the help of karkhana total indirect employment generated in the allied areas is 39426. It means total 39426 people

got an indirect employment due to karkhana. Out of which 5623 are female candidates. It indicates that due to Warana sugar factory huge indirect employment is generated.

In case of permanent employment, the employment has mainly generated by two ways-

- a) Through Karkhana.
- b) Through Warana Group.

Table No. 3.2 Generation of Permanent Employment

(DIRECT EMPLOYMENT + INDIRECT EMPLOYMENT)

Particulars	Employment		Total
	Male	Female	
a) Through Karkhana	815	18	833
b) Through Warana Group	3130	329	3459
Total	3945	347	4292

(Source: Primary data)

Through Karkhana total 833 candidates got permanent type of employment. Out of these only 18 candidates are from female category. The reason behind is that the heavy nature of job. The 18 female candidates are survival their job in office of the sugar factory.

Through Warana group total 3459 people got an permanent employment. There are thirteen different types of business comes under the Warana group. Out of 3459 employees 3130 employees are

from male categories and 329 are of from female category. It means Warna sugar factory having an huge potential of generation of permanent type of employment especially in rural areas.

In case of **indirect employment** the employment is generated by four ways –

- i) Indirect Permanent Employment.
- ii) Indirect Temporary Employment.
- iii) Indirect Seasonal Employment, and
- iv) Indirect Employment Generated in Self-Employed Units.

In case of indirect permanent employment total 3459 people got an employment out of which 3130 are from male category and rest of 329 from female category.

In case of indirect temporary employment total 12493 people got an employment, out of which 7670 people from male category and 4823 from female category.

Table No. 3.3

**Total Employment Generated by Shri Dudhganga Vedganga Sahakari Sakhar
Karkhana Ltd. Bidri.**

Areas	Male	Female	Sub-Total	Total	%
A) DIRECT EMPLOYMENT (In Sugar Factory)					
I) Permanent Employees	457	02	459		
II) Seasonal Employees	118	01	119		
III) Temporary	30	--	30	608	
B) INDIRECT EMPLOYMENT					
i) Senior College:					
Teaching:					
Permanent	29	01	30		
Temporary	10	07	17	47	
Non-Teaching:					
Permanent	14	--	14		
Temporary	05	01	06	20	
ii) Junior College					
Teaching:					
Permanent	10	02	12		
Temporary	--	--	--	12	
Non-Teaching:					
Permanent	05	01	06		
Temporary	--	--	--	06	
iii) Sainik Shala					
Teaching:					
Permanent	05	03	08		
Temporary	01	01	02	10	
Non-Teaching:					
Permanent	02	01	03		
Temporary	01	01	02	05	
C) In Command Area	3650	356	4006	4006	
D) Seasonal Employees:					
i) Sugarcane cutters	3940	1043	4983	4983	
ii) Seasonal self employment	257	31	288	288	
iii) Transportation	540	--	540	540	
iv) Private contract	18	--	18	18	
E) Employment generation in self-employment units (allied areas)					
	4012	423	4435	4435	
TOTAL	13104	1874	14978	14978	100.00

(Source: Primary Data)

From the above analysis, it is clear that by sugar co-operatives employment has been generating by two ways i.e. direct employment and indirect employment or self-employment.

In case of **direct employment** the employment is generated by two ways-

- i) Permanent employment and
- ii) Seasonal employment.
- iii) Temporary employment.

Sugar co-operative provides permanent employment to 459 persons, out of that 457 were male and just 02 candidates from female category. The reason behind is the physical nature of job. These females were engaged in the job like hospital, sanitation etc.

In case of seasonal employment, Karkhana provides 119 seasonal employments in different departments like Production unit, Cane Development, General Administration etc. The important thing is that only one seasonal employee is from female candidates. The reason behind is that generally seasonal job is in a production unit and having physical in nature and in shift also and it is inconvenient for ladies. Therefore, women are not attracted towards seasonal job in sugar factory.

Due to sugar factory 30 people got an employment on temporary basis. Due to heavy nature of job all male candidates are engaged in this job.

In indirect employment it is generated by three ways i.e. i) Permanent and ii) Seasonal/ Temporary/ Daily wages and iii) Self-employed people due to sugar factory. Indirect employment includes the employment generated through Karkhana group and in allied areas of the karkhana. With the help of karkhana total indirect employment generated in the allied areas is 14370. It means total 14370 people got an indirect employment due to karkhana. Out of which 1874 are female candidates. It indicates that due to Bidri sugar factory huge indirect employment is generated.

In case of permanent employment, the employment has mainly generated by two ways-

- c) Through Karkhana.
- d) Through Warana Group.

Table No. 3.4 Generation of Permanent Employment
(DIRECT EMPLOYMENT + INDIRECT EMPLOYMENT)

Particulars	Employment		Total
	Male	Female	
c) Through Karkhana	457	02	459
d) Through Karkhana Group	65	08	73
Total	522	10	532

(Source: Primary data)

Through Karkhana total 457 candidates got permanent type of employment. Out of these only 02 candidates are from female category. The reason behind is that the heavy nature of job. The 02 female candidates are survival their job in office of the sugar factory.

Through Karkhana group total 73 people got a permanent employment. There are thirteen different types of business comes under the Karkhana group. Out of 73 employees 65 employees are from male categories and 08 are of from female category. It means Bidri sugar factory having an huge potential of generation of permanent type of employment especially in rural areas.

In case of **indirect employment** the employment is generated by four ways -

- v) Indirect Permanent Employment.
- vi) Indirect Temporary Employment.

vii) Indirect Seasonal Employment, and

viii) Indirect Employment Generated in Self-Employed Units.

In case of indirect permanent employment total 73 people got an employment out of which 65 are from male category and rest of 08 from female category.

CHAPTER NO. 4

PROFILE OF THE STUDY

4.1 Profile of Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar and

4.2 Profile of Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

4.1 Profile of Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar

Warana valley owes its revolutionary socio-economic development to its Chairman, Leader & founder of Shree Warana Sahakari Sakhar Karkhana Limited, late Shri. V. A. alias Tatyasaheb Kore. Exactly 54 years back, Warana valley was a barren & hilly track, notorious for dacoity only. Under unavoidable circumstances, a common man could dare to enter the region.

This dark picture is totally changed due to only vision of our great Leader late Shree Tatyasaheb Kore. Karkhana got industrial license from Govt. of India under No. L25N215-69 LC dated 11.9.1959. The society was registered on 27th September, 1955 under The Maharashtra Co-operative Societies Act, 1960.

The Society was not engaged in just to manufacture the sugarcane allied products and to earn profit concern for the benefit of cane cultivators, but a nucleus of all-round development of the rural area of operation through its co-operative organization & to help for

increasing economic growth of rural population, leading towards Integrated Rural Development of India, in real sense.

Sugar factory having capacity 9000 TCD. Initially this sugar factory was started with 1000 T.C.D. crushing capacity during 1959-60. This crushing capacity has been increased from 1000 to 2000 T.C.D. in 1969-70, 2000 to 2500 T.C.D. in 1979, 2500 to 3000 T.C.D. in 1981-82, 3000 to 4000 T.C.D. in 1989-90, 3000 to 4000 T.C.D. in 1989-90, 4000 to 5000 in 1998 & capacity increased from 5000 to 7500 T.C.D. in 2003-04. The sugar factory coming under Warana Group along with other three sugar factories taken to run on Lease basis, has reached a highest crushing of sugarcane in India at 20000 Tonnes crushing of sugarcane per day with production of sugar per day 24000 quintals reaching to turnover of Rs. 550.00 crores during the Financial Year 2008-09. As well as karkhana has installed raw sugar reprocessing unit in 2004-05, during this year, we have imported raw sugar and to export fine sugar.

Presently Sugar Refinery plant with 500 TPD has been set up to process the raw sugar and export of fine sugar is expected by the end of the crushing season of 2010-11.

For getting benefits from by-products karkhana has installed bagasse based Pulp - Paper Mill in 1983 with capacity of 20 MT per day production of white cream wove paper of 45, 60 grammage. Now, Karkhana has installed and commissioned 8 TPD Sodium Lignosulphonate Unit. Sodium Lignosulphonate is produced from black liquor of sugar factory and with some other chemicals. This chemical is used in cement and paint Industries like Oil and Natural Gas Corporation and BASF also in paint and leather industry. This

will boost the profit of the sugar factory and offer better returns to cane farmer members Lignosulphonate is produced by Warana only and it is import substitute product. Warana which is the only Manufacturer of Lignosulphonate in India.

Further in the year 1989, Karkhana has installed and started Distillery plant to utilize the by-product molasses with 30 KLPD capacity producing Ethanol, Industrial Alcohol and Rectified Spirit. Now Kakrhana has increased the capacity of distillery up to 90 KLPD with Ethyl Acetate, Acitic Acid, grain-base alcohol project, ENA plant etc. Another Distillery plant with 45 KLPD has been set up at Pusad District Yawatmal which is ready for production. State of the art facility to treat distillery spent wash comprising of bio-methanation followed by evaporation and aerobic bio-composting to achieve zero discharge. This will be a major part of tremendous source of income to sugar factory as well as sugarcane growers/members.

The Warana Dairy plant with a capacity of milk collection of 18.93 lakhs litres per day covering 200 villages in the area has reached turnover at Rs. 460.20 crores during the Financial Year 2008-09. For its qualitative and quantitative excellent performance it has been acquired an ISO 9002 certification and recognized as Exporter by Government of India.

The Warana Co-operative Bank Ltd. took its birth in 1966 and is playing a Pivotal role in the overall development of Warana area by creating the banking mind to mobilize Deposit of Rs. 383 crores and advancing loan of Rs. 211 Crores at subsidised interest rate to the members.

The Warana Bazar - Consumer service project undertaken in 1978 to reach the rural interior through 50 branches and 2 departmental stores are working with Annual turnover of Rs. 86.49 crores. Warana Mahila Udyog is working with annual turnover of Rs. 5.00 crores employing 650 No. of women. Shree Warana Vibhag Shikshan Mandal providing educational facilities from KG to Graduation in the discipline of arts, science, commerce, medical, technical and engineering etc. for last 50 years. Mahatma Gandhi Medical Trusts' 200 bedded hospital for the sick and rural poor people. Warana Wired Village Project, a pilot project first of its kind to Asia connected 70 villages and 150 computer networking nodes, internet facilities to the rural community. Not in the list but not the least, the project in hand like Power Generation with 44 MW Bio-gas and Bio-Fertilizers Plant by using the waste water and waste material to overcome the environment issues.

The factory has received so many awards since its inception. The Factory has received 1st prize for its best technical efficiency in the year 1988-89 at National Federation of Co-Operative Sugar Factories Limited; New Delhi & 1st prize for its best technical efficiency in the year 1997-98 from Vasantdada Sugar institute Pune & Maharashtra Rajya Sahkari Sakhar Karkhana Sangh Ltd., Mumbai. Also the factory has awarded twice as "The Most Innovative Sugar Factory" by Vasantdada Sugar Institute, Pune. Presently our factory has awarded "Best Financial Management Award" by Vasantdada Sugar Institute, Pune in such a crucial position of co-operative sugar factories. The factory is getting First Prize / Award constantly for Maximum sugar exports at National Level. The list of various awards achieved by sugar factory is enclosed herewith.

At present, the Authorized Share Capital is Rs. 15 crores, comprising of 30,000 shares of Rupees 5,000/- each. Out of this 29,250 shares for producer members and 750 for non-producer members. On the eve of Golden Jubilee of Sugar Factory Sugar factory Management allotted a bonus share of Rs. 5,000/- each and KLE Health policy to the members and its family. Presently there are 19863 producer members and 79 non-producer members. These are cane growers from 80 villages forming the area of operation of the Sugar Factory . Our by-laws mentions that every producer member must hold at least 1/2 acre of sugar cane land. For weaker sections & back-ward class farmers, this limit has been reduced to 10 gunthas & 5 gunthas respectively. It is a fact that about 86% of the members are small & marginal land holders owning sugar cane land less than 1 hectare.

It is a true fact that immediate results of the successful running of the factory are the high returns to the producer members for the sugar cane supplied by them. These returns are highest in the State and most of the times in India consistently.

Thus, the main object of Co-Operative movement in Agro-based industries of processing & Marketing is being achieved.

The sugar factory is impetus / parent organization for creation and growth of Milk Dairy, Departmental Stores, Educational Institute with K.G. to graduation/post graduation in Arts, Commerce, Science and Engineering education. As on 2008 the total group turnover has reached to Rs. 1200 crores per annum. The dream of ideal village of our Great National Leader Mahatma Gandhi is fulfilled by our beloved leader Hon'ble late Shree Tatyasaheb Kore through an ideal village Warananagar.

The main highlights are :

- Expansion OF Sugar Factory within Minimum capital expenditure for extra 4000 TCD (4000 to 8000 TCD).
- Taken over additional three sugar factories on lease i.e., Unit No. 4 - Shree Datta Sahakari Sakhar Karkhana Ltd., Asurle-Porle, Taluka Panhala, District Kolhapur and Unit No. 5 - Sudhakar Rao Naik SSK Ltd., Pusad, At Post Pusad, Gunj-Savana, Tal. Mahagaon, Dist. Yewatmal. The Ajara Shetakari Sahakari Sakhar Karkhana Ltd. Gavase, Tal. Ajara, District Kolhapur. The total crushing capacity of all the units in the year 2009 is more than 20000 Tonnes per day.
- Bagged ISO-9002 Certification at first in Maharashtra for our Sugar Factory. Also bagged ISO:9001-2000 Certification. Achieved the Status of Export House at first in India in co-operative sugar industry.
- Manufacturer of ISO Grade Sugar in India - only unit.
- Within a year time coming with Tetra Pack Cane Juice at International Level.
- Commissioning and running of Wired Village Project for 70 villages.
- Lignosulphonate Chemical - The import substitute : Only the Manufacturer in India.
- Various new irrigation schemes started in the area of operation under the management of sugar factory and increased the sugar cane

production about 3,00,000 tonnes per year and thus saved the transportation cost in crores of rupees.

- Started and now running successfully the Warana Wired Village Project first in Asia and through this project now information is available to members at their village computer centers.
- Completed expansion of 4000 tonnes within a short span and increased the capacity from 4000 TCD to 8000 TCD with minimum cost.
- Maximum production in distillery up to 75 lacs litres in the history of distillery.
- Tried to keep maximum yield of sugarcane per acre and getting awards at State Level and National Level.
- Best Capacity Utilization of the sugar factory.
- Better services to workers and society through media of Worker's Society, Workers Kalyan Mandal, Ganeshotsav mandal and Warana Vibhag Shikshan Mandal.
- Organizing various seminars for Directors, Officers above Supervisory staff and also for the workers to enlighten them to keep up with a present scenario.
- For creating scene of involvement of youth and members started "Tatyasaheb Kore Jyoti" from all villages to Samadhi of Tatyasaheb Kore at Warananagar on his death anniversary.

· Various State and National Level Awards have been achieved by the Sugar Factory.

1. Shree Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Limited is founded by late Tatyasaheb Kore and was leading the same since its inception to his demise in 1994. Thereafter, his name was incorporated in the title of the organisation. However, it is popularly known as Warana Sakhar Karkhana in Marathi, Maharashtra's official language, and **Warana Sugar Co-operative** in English and so this organisation is mentioned in this write up briefly as **WSC**. It is the mother institution of all the bodies together in Warananagar which has made it a role model of the rural development in India. The Warana Complex comprises several co-operatives, trusts, societies etc. for which WSC is the nucleus.

2. It may be noted that a co-operative is often misconstrued as merely a form of business organisation. The fact is that it is a vehicle to reach the goal of development based on the co-operative principles which are enunciated in the Schedule 1 of The Multi-State Co-operative Societies Act, 2002, a Central Act. The Prize Guidelines, the concept of the Jindal Foundation about the Rural Development and Poverty Alleviation is specified in detail. It is pertinent to note here that a Co-operative, a body corporate under the Co-operative Societies Act, is most suited to accomplish the ideals laid down in the Guidelines. WSG by strictly adhering to these principles has reached the goal to fully satisfactory extent. Warananagar was fortunate in having the leadership of the late Tatyasaheb Kore, a great visionary, who was always very keen on two aspects - (1) whatever constructive work taken in hand must finally proved to be

better than the best and (2) the common man must be the main beneficiary.

3. The word Warana is taken from the name of the river, a tributary of Krishna, which flows West to East forming the boundary of the districts of Kolhapur and Sangli. The area of operation of WSC comprises 70 villages which are located on both the sides of the river. This Co-operative has affected total socio-economic revolution in this area. Prior to the advent of WSC, this area was notorious for the rampant decoities and murders. With WSC coming on the scene, there was a sea change in the situation in the very short span and virtually a new life began for the villagers of the basin. This was the first milestone in the success path of WSC.

4. Prior to the establishment of WSC, the cane farmers in the area were producing jaggery (non-centrifugal sugar) and were at the mercy of the market rates for their produce. Many a times, these rates used to be at the rock bottom making it uneconomical to produce jaggery, eventually compelling the farmers to burn down their standing cane. The late Tatyasaheb Kore also had once resorted to this unhappy step. With the setting up of WSC, the farmers were saved from the vagaries of the said market rates.

5. The financial operations of a sugar co-operative always remain to be quite different from that of its counterpart in the company sector. After deducting all the expenses (except that of sugarcane) from the total realization from selling sugar and all the by-products, the rest of the amount is divided by the number of tons of cane crushed and thus a rate per ton of cane is fixed. In 1969-70, when the rest of the sugar factories in the country were paying between Rs. 90 to 125 per ton, WSC paid Rs. 208! This was a very big surprise for the sugar industry in India and thereafter every other sugar factory started

taking cognizance of WSC uninterruptedly till date. As regards cane price, WSC has always remained in the top bracket since then.

6. WSC had its initial capacity of 1000 tons crushing per day (TCD). It was expanded from time to time and had reached 7500 TCD early last decade. It is ranking first among all the sugar factories in Maharashtra in terms of production for the past several years. Between 2006 to 2009, it has emerged as the largest exporter of sugar among all the sugar factories in the country. This co-operative has obtained several awards for efficiency in various parameters from national and state level relevant institutions. (The details are given in a separate annexure.) It has consistently remained in the forefront towards the utilization of the by-products. In these efforts, emphasis was on innovation, pollution control and renewable energy with a stress on avoiding warming. (Details are given in this nomination paper under separate items.)

7. The New Companies Bill to be placed before the Parliament in its ensuing Monsoon Session proposes to stipulate Corporate Social Responsibility (CSR) for the first time in the company sector (which is being enormously termed as the corporate sector since every organisation other than a company is a body corporate registered under one Act or the other.) So far as WSC is concerned, CSR is shouldered from the day one. Member's Economic Participation and Concern for Community are the two among the seven co-operative principles. Taken together they translate into CSR. From the attractive cane price paid to about 18 thousand farmer members of WSC, several deductions are made every year, most of them are for what is now called as CSR. The Companies Bill stipulated minimum contribution to CSR at 2 per cent of the profit. In the sugar industry, sugarcane cost is always taken above 60 per cent of the cost of

production. In WSC, the deductions have always remained above 2 per cent of the cane ratio. Thus, WSC is observing CSR since its inception very much above the benchmark laid down in the Companies Bill. It may be noted that most of the sugar companies in India remain in red intermittently. For them, CSR would not be applicable in the loss making years. However, in WSC, the deductions are going on continuously without any gap for over half a century now.

8. The principle of Co-operation among Co-operatives is at the sixth place in the Schedule 1 mentioned in the second para above. In its furtherance, WSC taken on lease five sick closed sugar co-operatives during the past five years with the purpose of their revival. Two of them could not be continued because of some differences. In the rest of the three, their farmer-members are quite happy with WSC for the efforts being made by the latter.

9. Most of the sugarcane WSC gets comes from fields irrigated by lifts as flow irrigation is not introduced in the area. For this purpose, WSC has helped its farmer-members to form co-operative irrigation societies and has fully supported these ventures in all the respects. This has made possible for the concerned farmer-members to enhance their earnings by increasing cane farming substantially.

10. With the 'liberation' of the prohibition in Maharashtra during the late Sixties, most of the major sugar co-operatives in the State ventured into producing Indian-made Foreign Liquor and Country Liquor. WSC steadfastly opted otherwise.

11. The area of operation of WSC consists of 70 villages which are connected by Broad-band. This has helped the farmers to avail of all the WSC related information at the village level only. This has made it possible for them to avoid spending time and money on visiting the

sugar factory. By using this networking facility, computer based school education is being implemented in the schools in these villages. This wired village project has been set up under the Prime Minister's Task Force on Information Technology. It is now proposed that Warananagar should have VPN (Virtual Private Network) connectivity which will be used in the other areas, namely, Warana Dairy, Warana Bazar, Educational Institute etc.

12. In the Golden Jubilee year, during the visit of former President of India, Dr. APJ Abdul Kalam, by his auspicious hands WSC has introduced a Vaidhyashree (F) Medical Insurance Scheme sponsored by KLE Health Care Services, Belgaum. Under this scheme, medical treatment as well as hospitalization facility can be availed by the families of shareholder-members and workers residing in the area of operation of 80 villages. Our Sugar Factory has been spending Rs. 1.00 crore on this insurance scheme to improve the health of the members for every year. Due to various schemes implemented by WSC, the overall standard of living of the people of these 80 villages has been improved substantially.

13. Next to WSC, the other major economic activity is that of the Warana Dairy which is registered as a co-operative society by the name Shree Warana Sahakari Dudh Utpadak Prakriya Sangh Limited. It daily collects about five lakh litres of milk and the annual sales have now surpassed Rs. 600 Crore. It sells milk and various milk products and also exports the same. 'Warana' is the largest selling brand of Shrikhand in our country. The dairy supplies skimmed milk & powder to the Defence establishments and ghee to Yogaguru Shri Ramdev Baba for manufacturing Ayurvedic medicines. Cadbury gets some of their products manufactured here. Thus, Warana is one of the major players in the Indian dairy sector.

14. The village milk co-operatives collect milk from the individual farmers and, in turn, supply the same to the Warana Dairy. Majority of the farmers in the area of operation of WSC could not produce sugarcane due to various limitations. Among them were marginal farmers, landless labourers etc. Because of Warana Dairy, they started producing milk thus they got a good source of livelihood. The number of milk supplying farmers here is 10 times that of the number of cane supplying farmers to WSC. Among them, 30 per cent are women milk producers. In our country, the National Dairy Development Board had laid down a pattern of milk development. It was not adopted in Warana Dairy who had developed its own pattern as a result it could pay the highest rate for milk in India to the farmers. The Warana Dairy continuously provides several inputs in various ways to the village milk co-operatives thus strengthening them to be viable units.

15. The Warana Bazar is the first super bazaar in the rural India. Registered as Shree Warana Vibhag Sahakari Grahak Mandal Limited, the Warana Bazar started its operations in 1978. It has now two big departmental stores, 55 branches and three franchisee. With 555 employees, this year the annual sales are likely to cross Rs. 125 crore. This Consumer Co-operative has proved to be a grand success because of several innovative ideas put into action. The number of shareholder-members is a little over 20 thousand out of which about 80 per cent are women. Their dominance is reflected in the Board of Directors and also in the Staff. This co-operative makes consumers aware in the matter of spurious goods. They get goods cheaper at the Warana Bazar than anywhere else. With the advent of the mall culture, the consumer co-operatives in the metropolitan areas are crumbling down while Warana Bazar is growing up from strength to

strength. In the States of Maharashtra, Karnataka and Goa, the Warana Bazar is taken as the model consumer co-operative. The consumer co-operative movement in these States gets active help from the Warana Bazar. A notable feature of the Warana Bazar is that it felicitates the mothers in the vicinity of Warananagar who give birth to a girl child. This is a humble effort to arrest the dwindling sex ratio.

16. Established in 1966, the Warana Sahakari Bank Ltd. is a primary co-operative bank with 25 branches now mostly in the rural areas. All of them are computerized and connected with each other by adopting core banking solution. The deposits with this bank have now reached Rs. 500 Crore. In the matter of priority lending, this bank has always remained above the RBI norms. It has continuously maintained all the prudential parameters as laid down by RBI.

17. All the educational activities in Warananagar, from KG to PG, are managed by Shree Warana Vibhag Shikshan Mandal, in its 100 acre sprawling campus. After WSC came into operation, the late Tatyasaheb Kore realized that the immediate need of the area of operation is a college and so even before the primary and secondary educational facilities was set up at Warananagar, a college was established. For this purpose, WSC got constructed a building from its own funds for the college and handed it over on lease to the Shikshan Mandal. The most notable thing in this regard is that WSC has done this before erecting a building for its office. The campus of the Shikshan Mandal comprises schools and colleges teaching Arts, Science, Commerce, Engineering, Technology, Pharmacy disciplines etc. It has also a Sainik School. All these education centres are recognized as of very high standard by the respective authorities.

18. Warana Bhagini Mandal, registered as a trust provides gainful employment to hundreds of ladies in various trades. A notable programme undertaken by this trust is of providing training to girls who have failed in their SSC Examination. In such a situation, the parents immediately opt for girl's marriage. Here, the Bhagini Mandal gives them training of a very short duration in several trades enabling them to become self employed and making them confident to face the life.

19. Surajya Foundation (SF) is registered as a trust and is operating from Warananagar. After completing his education, a man has to face various hurdles while entering the real life. SF comes on the scene here. It makes the youths to adopt always a positive approach and further moulds them to become eligible for various chances to reach a higher goal in life. By availing of appropriate training from SF, thousand of youths got jobs better than they aspired initially. In the educational campus at Warananagar, the students are groomed by SF for higher jobs offered by the Public Service Commissions. Though SF is operating in Maharashtra, its area of operation is the whole country and so it will spread its activities at the national level in the not too distant future.

20. The extent of geographical area differs from institution to institution. However, it could be said that the inner circle is of 25 Km. radius while the outer one is of 100 Km. About the impact assessment study, a separate note is given in this nomination. The source of funding has remained always official and no doubtful and objectionable route is used. The internal accruals are sizable. All the institutions in Warananagar have well thought out and large 'Future Action Plans' which could not be detailed here due to the paucity of the space.

21. Warananagar has always remained on the look out for the various schemes of rural development proposed from time to time by the Ministry of Rural Development, Government of India, the Department of Rural Development, Government of Maharashtra, National Bank for Agriculture and Rural development and National Co-operative Development Corporation. This has enabled Warananagar to introduce the latest schemes in this sector.

22. The Prime Minister Shri Manmohan Singh has recently said, "The economic growth would not be sustainable unless it is made inclusive." From this write up, the Jury will certainly agree that WSC has adopted it as a policy from its inception.

4.2 Profile of Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

INTRODUCTION:

This factory is registered on 10th October, 1956 under the Maharashtra Co-operative Societies Act, 1960. The site was approved by the State Selection Committee of Government of Maharashtra. After collecting requisite amount of share capital and with a crushing capacity of 5000 metric tons of sugarcane per day, the project was completed within just 16 months. In March, 1958 the factory commenced its regular season.

LOCATION AND AREA:

The Kolhapur District lies between 15° & 17° North latitude and 73° & 74° East longitude. It is bounded on the north by Sangali District, on the west by the Ratnagiri District and on the south and east by the Belgum District of Karnataka State. The district lies in the

Krishna-Panchganga river basin and is fed by large number of tributaries which originates in the western hill tops, and flow over the slope of Sahyadri towards the eastern part of the district, except two minor streams in Bavada tahsil, like sukh river and the Tillari which drain into Arabian Sea in the east.

Bidri Karkhana situated in the Southern part of Kolhapur District, influenced by the Crowning Heroic personality of late Chhatrapati Shahu Maharaja the then ruler of the erstwhile princely State of Kolhapur, Shirol and its surrounding area are endowed with two major flowing rivers viz; Dudhganga and Vedganga. Water supply lift irrigation schemes in co-operative, collective and private sector were already in operation.

The field of operation i.e. sugarcane cultivation, consists of 130 villages within a radius of about 50 miles from Bidri.

QUALITY OF SOIL:

The karkhana is situated in Kagal taluka and in the south-west part of the Kolhapur district. This region is comes under the Sahaydri vally. As this is a hilly area the quality of soil is mixed i.e. some soil is deep black, some soil is reddish. They are fairly rich in phosphorus contents and the crops respond well to the application of nitrogen. In Kolhapur district most of the agriculture land has been covered under irrigation and therefore, sugarcane has been grown in this region as a cash crop.

Sugarcane is the main irrigated crop in the district. In Kolhapur district sugarcane is produced in largest quantities in Karveer and Shirol Talukas.

AREA OF OPERATION:

The area of operation of the Sugar Factory comprises of 130 villages from Kagal, Radhanagari and Bhudargad talukas of Kolhapur District (Maharashtra). Out of these 130 villages, 20 villages from Kagal and RADhanagari Talukas have been exclusively allotted to the factory and remaining villages are common with the other neighboring factories.

AWARDS:

The working results of the karkhana is one of the best in the country for which the karkhana have been awarded first prize by the National Federation of Sugar Factories Ltd; New Delhi, over a period of consecutive seven years for excellent technical performance. The sugar factory also have been awarded first prize and commendation certificate by Government of India, Ministry of food, for the year 1987-88 and in 1988-89 ,for the same performance.

EXPANSION:

True to the objectives of co-operative movement, the Management of Bidri Karkhana had in its mind integrated rural development for which the cultivators were to be paid remunerative price for their cane. Without economic viability this could not be achieved. Therefore, the crushing capacity of the original 5000 TCD was increased to 10000 TCD as a part of the first phase of expansion.

1. Updating of plant and machinery.
2. Crushing the entire cane in optimum period so as to get high recovery.
3. To produce 2 M.V. extra power through co-generation.

4. To make self-sufficient by-product units in respect of Bagasses, Molasses, Steam and Power, Electricity, Industrial Alcohol etc.

The scheme of modernization-cum-expansion was implanted incorporating new proven technology like Single Milling Tandem, Vertical Crystallizer, High-Pressure Boilers with suitable power turbines for Co-Generation. In the third stage the crushing capacity is increased up to 10000 M.T. per day.

CO-GENERATION:

Bidri Karkhana is a one of the efficient karkhana in generating and supplying to grid surplus power through co-generation in the State. So as to overcome the short supply of power to some extent, apart from providing Electricity to by-product units through co-generation they started providing surplus power generated to MSEB grid.

ENVIRONMENT DEPARTMENT:

The factory management has established a separate Environment Management Cell to look after all the related issues of Pollution Control headed by a Manager (environment) having a post graduate degree in the subject.

It has a task to look after the effluent treatment of sugar factory and distillery. Due to the efforts of department the effluent quantity has reduced to meager 600m³/d for crushing of 7500 TCD. The effluent is treated in the full-fledged ETP based on activated sludge process. The treated effluent is used for irrigation of about 40 Ha of land.

The distillery effluent is one of the most polluted constituents of the process. The factory management has adopted boiling primary and composting as secondary treatment for disposal of spent wash.

Press-mud, Bagas and Ash are mixed in definite proportion with the spent wash and keep it for 21 days to get good quality of compost. The ready compost is distributed to the member farmers at a subsidized rate of Rs. 50/- per ton. The compost is good in humes content and bacterial content. The application of compost has helped to improve the yield of crop and improve the soil quality.

MAIN ADMINISTRATIVE BUILDING:

The management has constructed the beautiful main administrative building, which one must see personally to understand its spaciousness and the accommodation for the various office units of the factory with all modern and convenient facility and décor installed within the premises for administration and communication.

HORTICULTURE:

The factory established a horticulture department and under took the plantation programme and covered an area of 50 hector under the green belt. It is an eye-soothing and pleasant experience to see the lush green trees and plants of different types. It is one of the great tools of recreation. It reduces the tiredness of the employees.

SOCIO-ECONOMIC ACTIVITIES AND ITS EFFECTS:

The aim and object of the co-operative sugar factory is to secure social justice and import modern technology in agricultural operations. Apart from this the other prime motive is to improve the

economic conditions of the agriculturists through the co-operative processing and marketing of their products especially of sugarcane and its by-products. Besides attaining the economic uplift of the cane cultivators, the co-operative leaders aimed at spreading to the weaker sector of the community at large, a part of the gains arising from successful functioning of the sugar factory, providing much needed irrigation facilities and disseminating technical guidance and agricultural extension service to obtain high yields. In addition to this, other social activities like education, primary health, and small agro based industries and all-round development of the farmers is the primary aim. The sugar factory's agricultural extension service includes soil testing, tractor ploughing etc.

a) Co-operative Lift Irrigation Schemes have been functioning on rivers Panchganga and Krishna in the area of operation of the factory covering about 12,946 acres of land under irrigation.

b) Merely increasing the area under sugarcane crop will not serve the purpose to get high average yield of quality cane per acre. Keeping this view in mind the factory had undertaken and carried out the following cane development activities.

- i) Installation of Soil Testing Laboratory.
- ii) Improvement of soil fertility by supplying sun hemp for green manure and use of sugarcane trash as compost.
- iii) Installation of Heat Therapy Unit for successful implementation of three tier system of seed multiplication and its distribution.
- iv) Installation of drip irrigation system in operational area of Karkhana.
- v) Ratoon management.

It has undertaken various special socio-economic activities for improving the economic conditions and standard of living of the villages in operational area of Karkhana.

- i) The cultivator members are encouraged to construct Gobar Gas Plants of various capacities and are provided with a subsidy amount. The subsidy ratio is based on installed capacity of Gobar Gas. So far 692 members took the advantage of the scheme.
- ii) The factory has purchased one tractor having 80 HP capacity and two tractors having 35 & 50 HP capacity respectively to facilitate the agriculturists for development of their lands.
- iii) The factory has also established Workers Co-operative Credit Society. This society is functioning very smoothly by rendering short-term loans to its members to the extent of Rs.1 lakh.
- iv) As a part of social activity the factory has constructed seventeen huts in the area of operation involving an expenditure of Rs.2.90 lakhs for the benefit of landless people. Moreover, an amount of Rs. 2.29 lakhs has been remitted to the Collector of Kolhapur for construction of additional huts.

MEDICAL CENTER:

As a part of social obligation, the Management of the Karkhana has established a Medical Center in the premises of the Karkhana with modern building and equipped with all instruments and facilities to render the medical needs not only to its workers and staff but also to the population residing in the surrounding of this complex. The

prime object of this venture is to extend the medical facilities to the weaker section at nominal charge

CANE-DEVELOPMENT:

It is obvious that the production of sugar will be directly dependent on quality and quantity of raw material. i.e. sugarcane. The factory has therefore given top priority to the sugarcane development programmes. A separate Cane Development Department is functioning for Development of Sugarcane in the area of operation. Trained and qualified personnel are appointed to look after the activities. To increase the yield per acre and to improve the quality of cane through modern and scientific method of cultivation various planning methods are applied through Soil Testing Laboratory. The schemes are implemented through Sugarcane Development Fund (SDF), Cane Development Fund (CDF), Subsidy and other schemes.

In SDF scheme, Improvement of Soil Fertility, Installation of Heat Treatment, use of Gypsum & Fertile, Drip Irrigation and Digging of Bore-wells has been incorporated and in DCF scheme, distribution of foliar spray fertilizers are incorporated. Besides subsidy for basal dose, for plant ratoon, distribution of sunhemp/dhainchhya seed, biofertilizers, insecticides and weedicide, micronutrients, crop loan scheme etc. have been in operation.

Karkhana is also making good contribution to the social clause like Earth quake, Famine, Flood, Construction of huts to the homeless people for which members are contributing through their final cane bills.

SHRAMIK BHAVAN/KAMGAR BHAVAN:

Kamgar Bhavan is a symbol of unity and hard work of workers. Workers are using this platform for doing discussion on various important topics. They are arranged their workshop for training in this place.

LABOUR WELFARE/KAMGAR KALYAN:

Various programmes are conducted by Kamgar Kalyan Department for workers and their families. Motivational gifts are given to the children of the workers. The school uniform is provided by bhavan to the students of Sakhar Shala. The medical aid up to Rs. 1 lakh is given by this society to the workers and their family members for operation.

The Modern Gymnasium, Kusti Aakhada, Library, Nursery, Cultural Hall is constructed in the premises for workers and their children.

Farmers Training and Workshop:

A training is given by the scientist of Vasantdada Sugar Institute, Pune for water and compost management for sugarcane crop at Chandur and Kavathegulang.

TABLE NO. 4.1

**A) THE AWARDS WON BY SHRI DUDHGANGA VEDGANGA SAHAKARI
SAKHAR KARKHANA LTD. BIDRI.**

NO.	PARTICULARS	YEARS	RANK
1.	Efficiency Award by National Federation of Co-operative Sugar Factories Ltd. New Delhi. (Continuously for Seven Years)	1982-1988	Second Prize
2.	Efficiency Award by Deccan Sugar Institute Pune (Now Vasantdada Sugar Institute Pune)	1987-1988	First Prize.
3.	Commendation of certificate by Govt. of India, Ministry of Food & Civil Suppliers, New Delhi.	1987-1988	Second Prize
4.	Commendation of certificate by Govt. of India, Ministry of Food & Civil Suppliers, New Delhi.	1988-1989	----
5.	Award from Vasantrao Naik Pratishthan, Mumbai for Social Work.	1988-1989	Second Prize
6.	Efficiency Award by Zilha Parishad, Kolhapur on State Level basis.	1988-1989	First Prize.
7.	Commendation Certificate by National Federation of Co-operative Sugar Factories Ltd., New Delhi on High Recovery Zone.	1988-1989	----
8.	Technical Efficiency Award by Vasantro Naik Prtishthan, Mumbai.	1989-1990	Second Prize
9.	Best Managing Director Award from Vasantdada Sugar Institute, Pune	1999-2000	----
10.	Best Chief Agricultural Officer Award by Vasantdada Sugar Institute, Pune	2000-2001	----
11.	Efficiency Award by Vasantdada Sugar Institute, Pune	2000-2001	----
12.	Best Sugarcane Management Award by Vasantdada Sugar Institute, Pune	2001-2002	----
13.	Best Chief Engineer Award by Vasantdada Sugar Institute, Pune	2002-2003	----
14.	Best Cane Development Officer Award by Vasantdada Sugar Institute, Pune	2002-2003	----
15.	Dr. R.J.Rathi Award by Maratha Chamber of Commerce, Industrial & Agriculture, Pune for Good Environmental Contribution in Maharashtra Industrial Estate.	2002	----
16.	Zonal Cane Development Award (South Maharashtra) by Vasantdada Sugar Institute, Pune	2002-2003	First Prize
17.	Best Distillery Manager Award by Vasantdada Sugar Institute, Pune	2003-2004	----
18.	Best Chief Chemist Award by Vasantdada Sugar Institute, Pune	2003-2004	----
19.	Awards from Maharashtra State Government,		

	Zilha Parishad, Lions Club, Rose Society in Several times for Horticulture Department.	----	----
20.	Sorts Award for Athletic Games by State Federation of Co-operative Sugar, Mumbai.	----	----
	AWARDS FOR FARMERS.		
21.	Oos Bushan Puraskar by Vasantdada Sugar Institute, Pune to Shri Mahadev Patil, Kur for Maximum Production (per hector 233 tones)	2002-2003	----
22.	Vasantrao Naik Award by Vasantdada Sugar Institute, Pune to Shri Sadashiv N. Kulkarni, Kumbhoj for Best Production of Sugarcane Per Acre.	2002-2003	First Prize
23.	Technical Performance Award for Best Quality Export Sugar by Vasantdada Sugar Institute, Pune.	2009-10	Second Prize
24	Technical Efficiency Award by Vasantro Naik Prtishthan, Mumbai.	2018-19	Second Prize

CHAPTER NO. 5

ANALYSIS AND INTERPRETATION OF DATA- DIRECT EMPLOYMENT GENERATION.

CONTENTS

Sr.No.	Title
5.1	Introduction.
5.2	Direct employment Generation.
	a) Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar.
	b) Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

5.1 INTRODUCTION:

This chapter analyze and interprets the primary data collected from:

- a) Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar and
- b) Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

5.2 Direct Employment Generation:

Direct employment generation refers to employment provided by sugar factory inside the factory or it is directly provided by the sugar factory.

5.2.1 Direct Employment Generated by Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar:

The Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar plays crucial role in the generation of employment in the rural region of Maharashtra. Due to sugar factory economy in the rural areas becomes very sound. All the area is developed due to sugar factory. It helps to promote the allied businesses also.

Table No.5.1

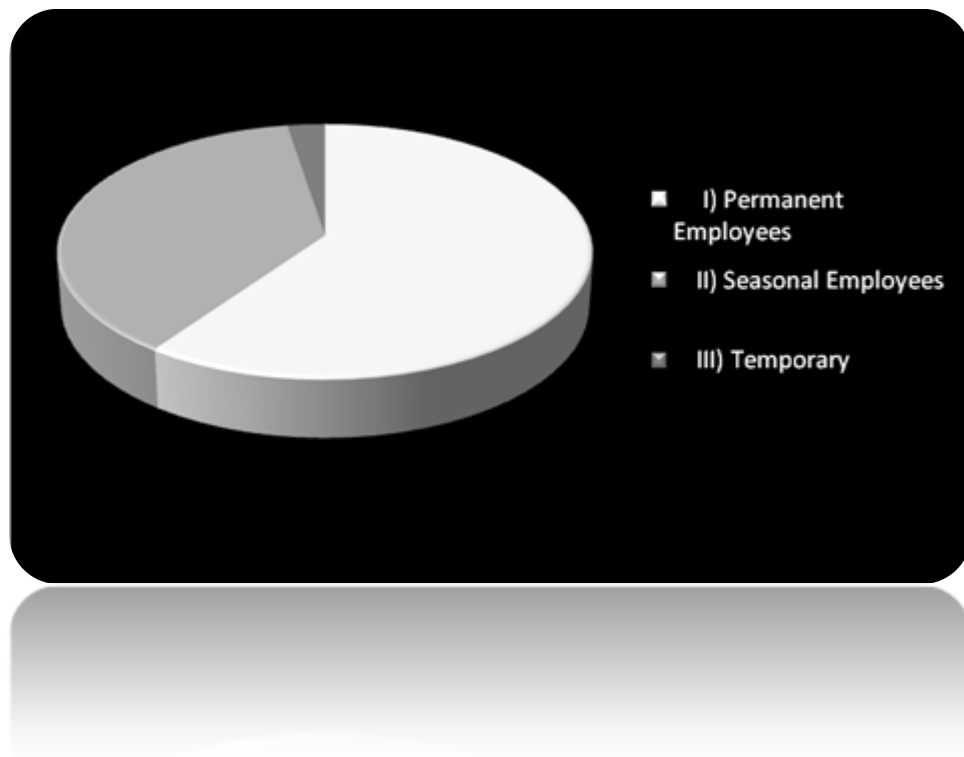
**Direct Employment Generated by Shri Tatyasaheb Kore Warna
Sahakari Sakhar Karkhana Ltd. Warnanagar**

Areas	Male	Female	Sub-Total	%
I) Permanent Employees	815	18	833	60.32
II) Seasonal Employees	513	--	513	37.15
III) Temporary	35	--	35	2.53
Total	1363	18	1381	100.00

(Source: Primary data)

Graph No.5.1

Direct Employment Generated through Warna Karkhana.



From the above table and graph it is clear that due to Warna Sugar factory direct employment generated is 1381, i.e. total 1381 people got an employment directly due to sugar factory. Out of 1381

employees only 18 candidates are from female category and rest of other i.e. 1363 candidates are from male category. The reason behind is that the heavy nature of job as well as the job is on shop floor and is in a shifts. The 18 female candidates are working in the office.

Direct employment generated through karkhana in three category i.e. i) Permanent ii) Seasonal and iii) Temporary

In case of permanent employment total 833 people got an employment. Out of which 815 people from male category and 18 candidates are from female category.

In case of seasonal employment 513 people got an employment, in this area not a single candidate from female category. The reason behind is that the seasonal employment is generated in shop floor and the nature of work is very heavy and is in a three shifts during the season. Considering all these facts the karkhana provides seasonal jobs to the male candidates.

In case of temporary employment total 35 people got an employment. Out of 35 candidates all are from male category. Not a single candidate from female category. The reason behind is that the nature of job. This temporary type jobs are heavy and not convenient for a female candidates.

From the above discussion it is also clear that the jobs in a sugar factory are convenient for male candidates and not for the female candidates except a few jobs. i.e. in office.

5.2.2 Direct Employment Generated by Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

The Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri plays crucial role in the generation of employment in the rural region of Maharashtra. Due to sugar factory economy in the rural areas

becomes very sound. All the area is developed due to sugar factory. It helps to promote the allied businesses also.

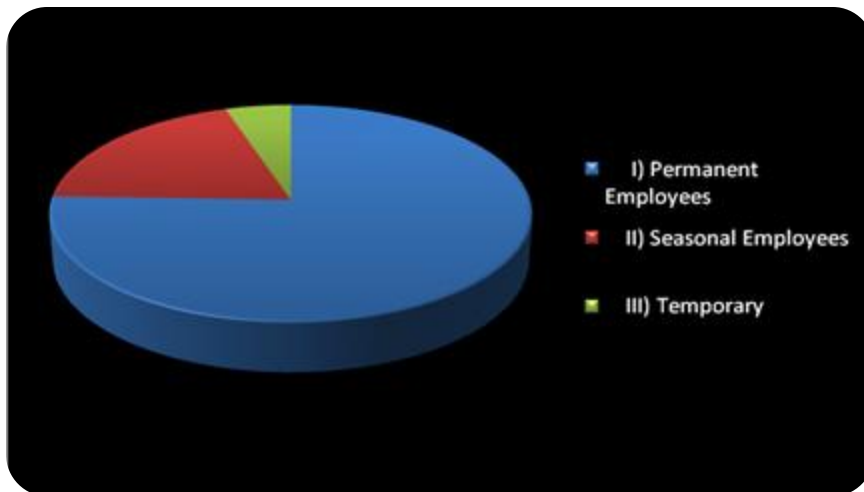
Table No. 5.2 Direct Employment Generated by Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

Areas	Male	Female	Sub-Total	%
I) Permanent Employees	457	02	459	75.49
II) Seasonal Employees	118	01	119	19.57
III) Temporary	30	--	30	4.94
Total	605	03	608	100.00

(Source: Primary Data)

Graph No. 5.2

Direct Employment Generated through Bidri Karkhana.



From the above table and graph it is clear that due to Bidri Sugar factory direct employment generated is 608, i.e. total 608 people got an employment directly due to sugar factory. Out of 608

employees only 03 candidates are from female category and rest of other i.e. 605 candidates are from male category. The reason behind is that the heavy nature of job as well as the job is on shop floor and is in a shifts. The 03 female candidates are working in the office.

Direct employment generated through karkhana in three category i.e. i) Permanent ii) Seasonal and iii) Temporary

In case of permanent employment total 459 people got an employment. Out of which 459 people from male category and 02 candidates are from female category.

In case of seasonal employment 119 people got an employment, in this area only a single candidate from female category. The reason behind is that the seasonal employment is generated in shop floor and the nature of work is very heavy and is in a three shifts during the season. Considering all these facts the karkhana provides seasonal jobs to the male candidates.

In case of temporary employment total 30 people got an employment. Out of 30 candidates all are from male category. Not a single candidate from female category. The reason behind is that the nature of job. This temporary type jobs are heavy and not convenient for a female candidates.

From the above discussion it is also clear that the jobs in a sugar factory are convenient for male candidates and not for the female candidates except a few jobs i.e. in office.

CHAPTER NO.6.

ANALYSIS AND INTERPRETATION OF DATA-INDIRECT EMPLOYMENT.

CONTENTS

Sr.No.	Title
6.1	Introduction.
6.2	Indirect Employment Generation through Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar.
6.3	Total Employment Generated by Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

6.1 INTRODUCTION.

This chapter analyzes and interprets the primary data collected from the allied areas from the region of Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar as well as by Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

Researcher find out the indirect employment generated through the karkhanas in their region.

Table No. 6.1
Indirect Employment Generated by Shri Tatyasaheb Kore Warana Sahakari
Sakhar Karkhana Ltd. Warnanagar.

Areas	Male	Female	Sub-Total	Total
A) INDIRECT EMPLOYMENT				
<i>f) In Warna group:</i>				
xiv) Warna Shikshan Mandal:				
Teaching:				
Permanent	224	87	311	
Temporary	110	37	147	
Non-Teaching:				
Permanent	218	20	238	
Temporary	128	06	134	830
xv) Warna Bazar:				
Permanent	346	83	429	
Temporary	90	138	228	657
xvi) Warna Dudh Sangh (including dairy)				
Permanent	1727	17	1744	
Temporary	240	10	250	1994
xvii) Lijjat PApad Kendra				
Permanent	01	05	06	
Temporary	--	450	450	456
xviii) Bhagini Mandal				
Permanent	05	05	10	
Temporary	--	55	55	65
xix) Savitri Mahila Sanstha				
Permanent	46	24	70	
Temporary	01	05	06	76
xx) Warna Transportation				
Permanent	23	--	23	
Temporary	--	--	--	23
xxi) Warna Agro				
Permanent	120	05	125	
Temporary	40	10	50	175
xxii) Warna Mahila Bank				
Permanent	22	07	29	
Temporary	04	01	05	34
xxiii) Amrut Sevak Pat Sanstha				
Permanent	16	04	20	
Temporary	03	01	04	24
xxiv) Warna Coop Bank				

Permanent	465	27	492	
Temporary	70	12	82	574
xxv) Warna Hospital				
Permanent	08	02	10	
Temporary	90	73	163	
Doctors	20	03	23	196
xxvi) Irrigation				
Permanent	--	--	--	
Temporary	67	--	67	67
g) In Command Areas				
Sugar factory related	4456	443	4899	
Warna group related	13347	2126	15473	20372
h) Seasonal Employees:				
v) Sugarcane cutters	5908	1413	7321	
vi) Seasonal self employment	243	38	281	
vii) Transportation	640	--	640	
viii) Private contract	214	08	222	8464
i) Employment generation in self-employment units (allied areas)	4415	464	4879	4879
j) Dairy distributors	496	44	540	540
TOTAL	33803	5623		39426

(Source: Primary Data)

From the above table it is clear that the Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar having huge potentiality to generate employability in the field of indirect employment.

a) In Warana Group:

Warna sugar factory has established in the year 1956 in the hilly and remote area. With the vision of the founder of sugar factory, the Warna group came into existence and numbers of units were started within the region of Panhala taluka, especially in a Warna basin. There are total thirteen different units run through the Warna group viz. Warna Shikshan Mandal, Warna Bazar, Warna Dudh Sangh, Lijjat Papad, Bhagini Mandal, Savitri Mahila Sanstha, Warna Transport, Warna Agro, Warna Mahila Bank, Amrut Sevak Co-op Pat Sanstha, Warna co-op bank, Warna Hospital and Irrigation.

These units are come under the management of Warana group and these units were starts due to the vision of founder of the karkhana Late Shri Tatyasaheb Kore. Therefore, the employment generated in these units are considered as the employment generated due to sugar factory and is considered as indirect employment generated due to sugar factory.

It is observed that, through Warana Shikshan Mandal, total 830 people got an employment, out of which total 458 engaged in teaching field and other 372 engaged in on-teaching activities. Out of 830 people, 150 are from female category as it is a educational complex, good number of female employees are engaged.

In case of Warana Bazar total 657 people got an employment. Out of which 429 are permanent and remaining 228 people working on daily wages. It gives a lot of employment to the people of rural areas.

Warana Dudh Sangh is one of the leading and reputed dudh sangh in a Maharashtra. It plays crucial role in providing milk and milk products as well as generating employment. Through the sangh 1994 people got an employment, out of which 1744 people got the permanent employment within the region. In case of permanent employment i.e. out of 1744 employees only 17 employees are from female category. It is because of heavy nature of job.

Along with this, it provides temporary employments to the 250 people, out of which 240 are male and remaining 10, be from female category.

In a campus of Warana group they started the unit of Lijjat Papad Center having the objectives of to provide jobs to the female candidates especially housewives after completing their domestic work to increase their income level. Through this center,

total 456 candidates got an employment. As this unit has established for the women, the maximum candidates employed in this unit are female. Only one candidate is male. Through this unit, the employment provided is on temporary basis. Out of 456 candidates, only 06 candidates are on permanent basis and others on temporary basis.

Another unit related to female candidates in the Warana group is 'Bhagini Mandal'. Through this unit, total 65 candidates got an employment. Out of which 60 candidates are female and rest of 05 are from male category. This unit provides permanent employment to 10 candidates, out of which 05 are male and 05 are female.

One special unit run by the Warana group named as 'Savitri Mahila Sanstha'. The main feature of this unit is, it provides a job to those female candidates who are widow (whose spouse was working in a Warana group). This unit has run by the legends of Warana group with a specific goal i.e. for the survival of family of the worker gave the services to the Warana group and he is no more in the world. This unit is a supporting unit for the other units. Through this unit, total 76 candidates got an employment. Out of which 70 candidates working on permanent basis and remaining 06 is on temporary basis. Out of 76 candidates, 47 candidates are from male category and remaining 29 candidates are from female category.

Another unit run under the Warana group is Warana Transportation, through which total 23 people got an employment and all they are from male category. The reason behind is that the heavy nature of job.

Warna group started a unit of Warna Agro to produce agricultural packaged products in the region. Due to this unit, total 175 people got an employment, out of which 125 people got an

permanent employment and rest of 50 people got an seasonal employment. Among all the employment total 15 candidates, are from female category and others are from male category.

The Warana group has also started the unit of Warana Mahila Bank in the region. Due to this bank, total 34 people got an employment. Out of 34, 29 seats were recruited on permanent basis and other 05 seats are on daily wages basis. Total seven candidates are from female category out of 34 candidates and rest of are from male category.

Another unit started by the Warana group, which relates to banking sector is Amrut Sevak Cooperative Pat Sanstha in the Warana region. In this unit total 24 seats are recruited. Out of which 20 seats are recruited on permanent basis and rest of are on daily wages. In this unit total 05 candidates are recruited from female category.

Another unit started by the Warana group is Warana Cooperative Bank. In this unit, total 574 candidates are recruited. Out of which, 492 candidates are recruited on permanent basis and 82 candidates are recruited on daily wages. Out of 574 candidates, 39 candidates are from female category.

For the purpose of good health and to rescue from the major deceases the Warana Group started Multi-Specialty Hospital in the region. It gives the concessional facility to the patient within the region Warana basin. Due to this hospital, total 196 people got an employment. In this unit, total 10 candidates recruited on permanent basis and other 163 candidates are recruited on temporary basis. Some doctors are recruited on permanent basis and others are on visiting basis. Out of 196 candidates, 78 candidates are from female category and rest of from male category.

Warna factory has also started an irrigation department for the purpose of water supply to the agriculture. In this unit, total 67 people got an employment and all of them are in male category and on temporary basis. The reason behind is that the nature of job is very heavy and is of seasonal.

b) In command areas:

Self-employment: One another part of employment generation is 'Command Area' of sugar factory. Command area means the area from which the sugar factory collect the raw material i.e. sugar cane. In command area the employment generated by two ways i.e. i) sugar factory related employment and ii) Warna group related employment.

Through sugar factory, total 4899 people got an employment in the command areas. Out of which, 4456 are from male category and rest of 443 are from female category.

Through warana group, total 15473 people got an employment opportunity in their command area. Out of 15473, total 13347 candidates are from male category and rests of 2126 candidates are from female category. This is a tremendous employment generated by the karkhana. These people are engaged in self-employed units and they are in a position to provide an employment to the others also.

c) Seasonal Self-Employment: Due to sugar factory the seasonal employment is generated by four ways i.e. sugarcane cutters, seasonal self-employment, in the area of transportation (for sugarcane), and in private contracts.

In the season researcher observed that in the command area of warna sugar factory and for the warna sugar factory, total

7321 sugarcane cutters were engaged in sugarcane cutting. Out of 7321 sugarcane cutters 1413 were from female category and rest of 5908 candidates was from male category. It is also observed that generally these people came from Marathwada and Vidarbha and they were stayed for the season and after completion of the season they were go back to their proper native places. These people came in a team and in every team, there is one leader called as '*Mukadam*'.

In case of seasonal self-employment, it is found that there were 281 people engaged. Researcher observed that during the season the sugar factory run 24x7 and therefore, to meet the needs of the employees, visitors and others some kind of shops were established e.g. grocery, hotels etc. In seasonal self-employment out of 281 people, 243 were from male category and rests of 38 were from female category.

In the area of transportation i.e. for carry sugarcane from farm to the sugar factory, it requires bullock cart, tractors, and trucks. In this area, total 640 people got an employment. In this area, all the male candidates were involved in the employment. The reason behind is that the nature and timing of job is very heavy and risky and inconvenient for the females.

The other area of seasonal self-employment is that the private contracts. In sugar factory in some areas the tenders may given to the private contractors e.g. bagas, molasses' etc. In this area, total 222 people got an employment through contractor. Out of 222 people 214 people from male category and rest of 08 were from female category.

d) Employment Generation in Self-employed units (in allied areas):

In the study period researcher observed that there were 36 different economic activities viz. General stores, Pan shop, Bakery, Hotels, Tea stall, Cloth center, Ladies Shop, Flour mill, NET café, Medical, Steel center, Hardware, Carpenter, Masson, Black smith, Foot ware, Shoemaker, Potter, Gents saloon, Beauty parlor, Cycle repairs, Garage, Motor repairs, General repairs, Electrician, Decorators, Fabrication, Fertilizers, Photo studio, Paper agent, Xerox center, Saw mill, Brick maker, Tractors, Trucks, Tailor, Private dairy etc. in which the indirect employment is generated in the allied areas or command area of the sugar factory. It is also observed that, in that areas total 4879 people were engaged as self-employed person or employees. Out of 4879 people 4415 people from male category and rest of 464 from female category. It is an achievement of any unit that due to that particular unit that much employment is generated.

e) Dairy products distributors:

Under Warana group Warana dairy is included, therefore, researcher considered that the employment generated due to warana dairy is the indirect employment generated by the sugar factory. Due to this distributorship total 540 people got an opportunity to earn money by doing self-employment. Out of 540 people, 496 from male category and rest of 44 were from female category.

Conclusion:

In this way it is clear that the total indirect employment generated by the Warana cooperative sugar factory is 39426. Out of 39426 people, 33803 people from male category and rest of 5623 from female category. It indicates that sugar factory plays a crucial role in the

area of indirect employment generation in their command area. It has the direct impact on the earning level of people, living standard of people/society, purchasing power of people. It means it directly influenced on the economy.

Table No. 6.2

**Indirect Employment Generated by Shri Dudhganga Vedganga Sahakari
Sakhar Karkhana Ltd. Bidri.**

Areas	Male	Female	Sub-Total	Total
INDIRECT EMPLOYMENT				
A. i) Senior College:				
Teaching:				
Permanent	29	01	30	
Temporary	10	07	17	47
Non-Teaching:				
Permanent	14	--	14	
Temporary	05	01	06	20
ii) Junior College				
Teaching:				
Permanent	10	02	12	
Temporary	--	--	--	12
Non-Teaching:				
Permanent	05	01	06	
Temporary	--	--	--	06
iii) Sainik Shala				
Teaching:				
Permanent	05	03	08	
Temporary	01	01	02	10
Non-Teaching:				
Permanent	02	01	03	
Temporary	01	01	02	05
B) In Command Area	3650	356	4983	4983
C) Seasonal Employees:				
v) Sugarcane cutters	3940	1043	4983	4983
vi) Seasonal self employment	257	31	288	288
vii) Transportation	540	--	540	540
viii) Private contract	18	--	18	18
D) Employment generation in self-employment units (allied areas)				
	4012	423	4435	4435
TOTAL	12499	1871	14370	10972

(Source: Primary Data)

From the above table it is clear that, indirect employment generated by Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri is 14370. The researcher found the various areas where the employment has generated due to sugar factory. Broadly there are three areas in which the employment has been generated due to sugar factory these areas are –i) educational campus ii) seasonal employment and iii) employment generated in self employed units (in allied areas).

i) Under the management of Karkhana one Senior College one Junior college and one Sainik shala (high school) has run.

In senior college, total 67 people have been recruited. Out of which 44 people are working on permanent basis and remaining 23 are working on temporary basis. As far as gender wise bifurcation is made, only 09 candidates are from female category and other 58 are from male category.

In of junior college total 18 people have recruited and all are working on permanent basis. Out of 18 candidates, 15 candidates are from male category and rests of 03 candidates are from male category.

In sainiki shala (high school) total 15 people have recruited. Among these people, 11 people are working on permanent basis and other four are on temporary basis. As far as gender wise bifurcation is

made, six candidates are from female category and rests of nine are from male category.

ii) Seasonal indirect employment:

In this segment by four ways the employment is generated i.e. sugarcane cutters, seasonal self-employment, transportation and private contracts.

In the season researcher observed that in the command area of Warna sugar factory and for the Warna sugar factory, total 4983 sugarcane cutters were engaged for sugarcane cutting. Out of 4983 sugarcane cutters 1043 were from female category and rest of 3940 candidates were from male category. It is also observed that generally these people came from Marathwada and Vidarbha and they were stayed for the season and after completion of the season they were go back to their proper native places. These people came in a team and in every team, there is one leader called as '*Mukadam*'.

Due to sugar factory in their command area there may be an employment opportunities for the people. The researcher found that thirty-seven different areas where the employment is generated. In these particular areas total 4006 people got an employment, out of which 3650 are from male category and others are from female category. It is a tremendous achievement of any type of business.

In case of seasonal self-employment, it is found that there were 288 people engaged. Researcher observed that during the season the sugar factory run 24x7 and therefore, to meet the needs of the employees, visitors and others some kind of shops were established e.g. grocery, hotels etc. In seasonal self-employment out

of 288 people, 257 were from male category and rests of 31 were from female category.

In the area of transportation i.e. for carry sugarcane from farm to the sugar factory, it requires bullock cart, tractors, and trucks. In this area, total 540 people got an employment. in this area, all the male candidates were involved in the employment. The reason behind is that the nature and timing of job is very heavy and risky, also inconvenient for the females.

The other area of seasonal self-employment is that the private contracts. In sugar factory in some areas the tenders may given to the private contractors e.g. bagas, molasses' etc. In this area, total 18 people got an employment through contractor and all are from male category.

d) Employment Generation in Self-employed units (in allied areas):

In the study period researcher observed that there were 36 different economic activities viz. General stores, Pan shop, Bakery, Hotels, Tea stall, Cloth center, Ladies Shop, Flour mill, NET café, Medical, Steel center, Hardware, Carpenter, Masson, Black smith, Foot ware, Shoemaker, Potter, Gents saloon, Beauty parlor, Cycle repairs, Garage, Motor repairs, General repairs, Electrician, Decorators, Fabrication, Fertilizers, Photo studio, Paper agent, Xerox center, Saw mill, Brick maker, Tractors, Trucks, Tailor, Private dairy etc. in which the indirect employment is generated in the allied areas or command area of the sugar factory. It is also observed that, in that areas total 4435 people were engaged as self-employed person or employees. Out of 4435 people, 4012 people from male category and rest of 423 from female category. It is an achievement of any unit that due to that particular unit that much employment is generated.

Conclusion:

In this way, it is clear that the total indirect employment generated by the Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri is 10,972. i.e. total 10,972 people got an employment due to this factory. Out of 10,972, people 9454 people from male category and rest of 1518 from female category. It indicates that sugar factory plays a crucial role in the area of indirect employment generation in their command area. It has the direct impact on the earning level of people, living standard of people/society, purchasing power of people. It means it directly influenced on the economy.

CHAPTER NO. 7

FINDINGS, CONCLUSIONS AND SUGGESTIONS

7.1 FINDINGS AND CONCLUSIONS:

7.1.1 INTRODUCTION.

The present study is relates to employment generation by two sugar factories in Kolhapur District. Employment generation is concerned both employment generated in the form of jobs inside the factory (permanent employees as well as seasonal employees) and the employment generated in the form of self-employment in command area of the factories are considered.

Like any other co-operative sugar factory Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar and Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri have played very important role in the development of rural human resources. Manpower in rural areas badly requires the appropriate course of action to develop their knowledge based skills and caliber. Majority of the people are engaged in agriculture. Most of them are either illiterate or less educated. Both the factories have made humble attempts to develop the manpower in terms of their knowledge, skills by way of various schemes. The human resources coming from the rural areas are made aware and exposed to new and non-traditional avenues of employment. This is really the development of sons of the soil. The researcher has attempted below to pin-point some of the important conclusions regarding employment generation.

7.1.2 Conclusions relating to Shri Tatyasaheb Kore Warana Sahakari Sakhar Karkhana Ltd. Warnanagar.

7.1.2.1 TOTAL EMPLOYMENT GENERATED BY SHRI TATYASAHEB KORE WARANA SAHAKARI SAKHAR KARKHANA LTD. WARNANAGAR.

Due to said sugar factory under study, total 40827 people get an employment, which includes direct employment and indirect employment.

7.1.2.2 Direct Employment:

Direct employment is divided into three areas i.e. Permanent employment, Seasonal employment and Temporary employment.

In case of Direct Employment total 1381 people get an employment which includes, permanent (833) and seasonal (513) and temporary 35 employees. In the sugar factory 833 people get an employment out of which 815 person are from male category and remaining 18 are in female category.

It is observed by the researcher that in sugar factory very less number of female candidates get employment opportunities and all the female candidates are got an employment in office only. All other employees those who are engaged in seasonal and temporary employment are from male category.

7.1.2.3 Indirect Employment:

Indirect Employment is also divided into four sectors-

7.1.2.3.1 Indirect employment generated in Warana Group.

7.1.2.3.2 In command areas

7.1.2.3.3 Seasonal employment

7.1.2.3.4 Employment generated in self-employed units.

In case of indirect employment total 39,426 people got an employment. Out of which 33,803 are from male category and remaining 5623 are from female category. As mentioned above the indirect employment is generated in four areas. The Warana group is very large group in Western Maharashtra and it starts with the Warana Sugar Factory and it grows very fast and started various units under Warana Group. Therefore, the researcher considered that the employment generated in those units is indirect employment generated due to sugar factory.

7.1.2.3.1 Indirect employment generated in Warana Group:

Warana group plays a crucial role in employment generation. Through Warana group total 6552 people got an employment through thirteen units. Out of which 5447 are from male category and remaining 1105 are from female category. It shows that the 83.13% male and 16.87% female are engaged in the

employment. It indicates the importance of the Warana group in the rural area.

7.1.2.3.2 In command areas:

In command area total 20372 people got an employment. The employment is generated by two ways i.e. related to sugar factory and related to Warana group.

In sugar factory related employment total 4899 people got an employment, out of which, 4456 are from male category and rest of 443 are in female category. It indicates 90.96% male and 9.04% female are got an employment. The huge gap in the male and female percentage is due to the heavy nature of job.

In Warana group related employment, total 15473 people got an employment.

7.1.2.3.3 Seasonal employment:

Due to sugar factory the number of people gets an employment during the season also. During the season the employment is generated by four ways i.e. sugarcane cutters, seasonal self-employment, transportation and in private contracts. Inclusively total 8464 people got an employment. It is observed that the self-employment people were from around the areas and some of from different districts and some of from different state also.

7.1.2.3.4 Employment generated in self-employed units:

It is observed by the researcher that due to sugar factory number of people started their own business. The researcher found from the command areas that in total 37 economic activities the self-employment is generated. As per the findings total 5419 people got an employment in self-employed units.

7.1.3 Conclusions relating to Shri Dudhganga Vedganga Sahakari Sakhar Karkhana Ltd. Bidri.

7.1.3.1 TOTAL EMPLOYMENT GENERATED BY SHRI DUDHGANGA VEDGANGA SAHAKARI SAKHAR KARKHANA LTD. BIDRI.

Due to said sugar factory under study, total 10972 people get an employment, which includes direct employment and indirect employment.

7.1.3.2 Direct Employment:

Due to said sugar factory total 608 people got a direct employment. In sugar factory direct employment is generated in three areas i.e. permanent, seasonal and temporary.

In case of permanent employment total 459 people got an employment out of which 457 are from male category and only 02 are from female category. Researcher observed that in sugar

factory the nature of work is very heavy and it is not suitable to the female candidates.

In case of seasonal employment total 119 people got an employment. Out of which, 118 are from male category and only one is from female category. The reason is same as stated above i.e. heavy nature of job.

In case of temporary employment total 30 people got an employment and all are from male category. The researcher find out the reason is that generally the temporary jobs are given in the areas such bagas, molasses, etc. and these type of jobs are very much inconvenient for females.

7.1.3.3 Indirect Employment:

Indirect Employment is also divided into four sectors-

7.1.3.3.1 Indirect employment generated in Bidri Group.

7.1.3.3.2 In command areas

7.1.3.3.3 Seasonal employment

7.1.3.3.4 Employment generated in self-employed units.

In case of indirect employment total 14370 people got an employment. Out of which 12499 are from male category and remaining 1871 are from female category. As mentioned above the indirect employment is generated in four areas. The Warana group is

very large group in Western Maharashtra and it starts with the Warana Sugar Factory and it grows very fast and started various units under Warana Group. Therefore, the researcher considered that the employment generated in those units is indirect employment generated due to sugar factory.

7.1.3.3.1 Indirect employment generated in Bidri Group.

Due to sugar factory the Bidri group is established and under the supervision of the Karkhana management the educational complex is run. Under educational complex three different units are working viz, senior college, junior college and sainiki shala.

In educational complex total 100 people got an employment, out of which 82 are from male category and 18 are from female category.

7.1.3.3.2 In command areas:

Due to sugar factory, in the command area of said factory total 4006 people got an employment. Researcher found thirty seven different areas where the employment has been generated due to sugar factory in the command areas. Out of 4006 people 3650 were from male category and remaining 356 were from female category. It is a great achievement of any business activity that due to themselves the employment is generated in the command areas.

7.1.3.3.3 Seasonal employment:

Due to sugar factory the number of people gets an employment during the season also. During the season the employment is generated by four ways i.e. sugarcane cutters, seasonal self-employment, transportation and in private contracts. Inclusive total 5829 people got an employment. Out of which 4755 were from male category and remaining 1074 were from female category. It is observed that the self-employment people were from around the areas and some of from different districts and some of from different state also.

7.1.3.3.4 Employment generated in self-employed units:

It is observed by the researcher that due to sugar factory number of people started their own business. The researcher found from the command areas that in total 37 economic activities the self-employment is generated. As per the findings total 4435 people got an employment in self-employed units. Out of which 4012 were from male category and remaining 423 were from female category.

7.2 SUGGESTIONS:

7.2.1 Suggestions Relating to Direct Employment

Generation.

- 1)** As a principle of co-operatives, “the co-operation provides employment opportunities to the rural people”. The sugar co-operatives may give work to the people by installing new units like Cattle feed, Cardboard, Bio-diesel etc.

- 2)** Researcher suggests that there is a scope/opportunity for female candidates in sugar factory in the departments like General Administration, Accounts department, Hospital and Sanitation department etc.

- 3)** Researcher observed that due to sugar factory the people from around the area i.e. from command area have been recruited and it is good policy of both the factories. Therefore, researcher suggests that this policy should be continuing while recruiting the employees in future also by both the factories.

7.2.2 Suggestions Relating to Indirect Employment Generation.

- 4) Sugar co-operative may provide a technological knowledge to young entrepreneurs in command area of the factory for those who are interested in establishing self-employment ventures or business. In some economic activities, there is a greater scope for human resource development and employment generation. Therefore, sugar co-operative may take initiative, promote self-employment in command area, and may arrange training for such activities.

- 5) The ratio of female candidates is negligible in the area of self-employment. There is a very wide scope for women in self-employment. For this purpose, the education level of female should be increased. Ladies oriented business like *papad udhyog*, *chatni and masala udhyog*, chocolate making, biscuit making, *shewai* making, ladies tailoring, dairy *udhyog* etc. may be promoted in the region by sugar co-operative. For this, purpose sugar co-operative may provide training and development programme as well as financial support to the interested female candidates.

- 6)** If sugar co-operative arranges a training and development program for develop the skill of the self-employed persons and rural youth, those, who are interesting in developing new ideas, techniques and strategies for business. It would be an important aspect of human resource development. Therefore, researcher suggests that sugar co-operative may arrange the training and development programme for self-employed and for new candidates as a part of social responsibility. It will helps to generate self-employment in the region.
- 7)** The educational level of sugarcane cutters needs to be improved. The Sugar co-operative can play an important role in this direction as under:
- i) Arrange education awareness programme for sugarcane harvester (labour)-
 - ii) Arrange adult education scheme
 - iii) Motivate the people for taking education by giving awards, free dress for kids, free lunch, free books to them.
 - iv) Give support for infrastructure development for education in the region, for giving education to sugarcane cutters and their kids.
 - v) Arrange enlightening lectures.

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**“EMPLOYMENT GENERATION IN RURAL AREA THROUGH
SUGAR CO-OPERATIVES: A STUDY OF SELECTED
CO-OPERATIVE SUGAR FACTORIES IN KOLHAPUR DISTRICT”**

Interview Schedule

INDIRECT EMPLOYMENT

- | | SEASONAL / | PERMANENT |
|---|------------|-----------|
| 1. NAME | : | SEX: M/F |
| 2. AGE | : | |
| 3. ADDRESS | : | |
| 4. EDUCATION | : | |
| 5. PROFESSION | : | |
| 6. When you started your profession? | | |
| Year: | | |
| 7. Investment in profession in Rs. | | |
| 8. Yearly returns from profession in Rs. | | |
| 9. a) Whether employment is created by your profession? | | |
| 1) Yes / 0) No | | |
| b) If yes, how many? | | |
| 10. a) Do you have a land? | | |
| 1) Yes / 0) No | | |
| b) If yes, how many acres? | | |
| 11. a) Do you take a crop of sugar cane? | | |
| 1) Yes / 0) No | | |
| b) If yes, in how many acres? | | |
| 12. How many tones of sugar cane you have yield per acre? | | |
| 13. What is a period required for concerned yield? | | |
| 14. What is your total income per year? | | |