CHAPTER - I
INTRODUCTION
In a country like India about 80 per cent of the population living in rural area and around 70 per cent of the population dependent on agriculture and allied sector, the need for rural industrialization is absolutely necessary. About 50 per cent of the industrial production of India is accounted for by this sector which also contributes substantially to the country’s exports. Gandhiji rightly said, “Village economy can not be complete without essential village cottage industries. All should make it a point of honour to use only village articles whenever and wherever available”. Mr. Biju Pattanaik Ex. Chief Minister of Orissa took a policy decision in 1994 to set up a Sabai Grass Development Corporation in Mayurbhanj District. Thus the importance of village industries in India can never be over-emphasized.

After sixty years of Independence and tenth plan (2002-2007) periods, Orissa still remains one of the poorest states of Indian Union. Orissa’s poverty can be traced back to the famine of 1866 which may be regarded as the epitome of the unsympathetic economic policy pursued by the East India Company’s Government in Orissa. After Orissa became a separate state in 1936, the first Congress Ministry headed by Late Biswannath Das in 1937 made sincere efforts to revive the native industries. The destruction of native industries, ruination of agriculture and decline of maritime trade led to the growth of economic development among the people. About 68 percent of the population in rural areas is concentrated in lower monthly per capita consumer expenditure (MPCE) classes of less than Rs.110 and Rs.110-215 as against 74 percent in urban areas under higher MPCE classes of Rs.215-385 and Rs.385 and above.

The per capita income of Orissa as measured by net state domestic agricultural and forest product per head of population, was about 20 percent lower than the all India per capita income in 2005. It remained as much as 43
percent below that of national average in 2007-08. This long term tendency for average standard of living in Orissa to diverge away from the All India level instead of catching up with the later is certainly the most worrisome feature of the process of economic growth during the last two decades. During World Bank study by Dreze and Srinivasan, 1996, India was divided into 61 agro-climatic regions. Thus it was intended to make all empirical investigation of rural income in Mayurbhanj district of Orissa and to assess the impact of agricultural and forest product marketing programmes initiated by the Government of Orissa over the years.

Immediately after independence the Central Government brought out its Industrial Policy Resolution which recognized the importance of cottage and small scale industries for better utilization of available local resources. The main objects of the policy are

(i) Promotion of living standard of the people by utilizing the existing local resources of the country and;

(ii) Offering greater opportunities for employment.

1.1 Scope of the Study

The sample study covers the district of Mayurbhanj which is located at the northern region of Orissa. It is a land locked district surrounded by Singhbhum district of Jharkhand and Midnapur district of West Bengal and Keonjhar and Balasore district of Orissa. The district is called ‘Mayurbhanj’ after the name of the ex-state which on its merger with Orissa in January 1st, 1949 (not Jan’ I) constituted the entire district covering an area of 10,418 sq. ms. which constitutes 6.69 per cent of the state territory. According to 2001 census, the total population of the district was 22.23 lakhs which accounts for 6.06 per cent of the State’s total population. Density of population in the district is 213 per sq. as against 236 at the state level. It is a rural based district where the rural population constitutes 93.83 per cent as against state average of 86.62 per cent. It is also an agriculture dominated district as more
Relevance of the Study

Economic development involves an increase in the material well being of the society. It means growth which indicates increase in production, income, consumption of food, leisure, better health and more time to than 80 per cent of the working populations are cultivators, forest product collector and agricultural laborers.

Mayurbhanj is also said to be a land of tribal’s. The tribal population of the district constitutes about 60 per cent of its total population. Out of 62 tribal communities of Orissa, 45 communities are found in Mayurbhanj alone. The mountainous and forest inland region of Mayurbhanj has been considered ideal to the tribal inhabitants for centuries.

Mayurbhanj is one of the richest districts in Orissa so far as forest and mineral wealth are concerned. It has also the highest percentage of hard working people. In spite of rich natural and human resources it is a poor district more than 48 per cent of the rural area people live below the poverty line. Though majority of population are dependent on primary sector, the agriculture is undeveloped because the district is lacking in irrigation facilities. In agricultural sector there is hardly any marketable surplus production in the district except for Sabai grass. The district is also lacking modern industries except a few age old cottage and forest based industries such as cotton, Tasar, Hosiery, Oil, Bamboo works, Stone carving, Wood works and Sabai grass products etc. Due to increasing population and sluggishness in agricultural and industrial production the rate of growth appears to be in diminishing order. In 2007-2008, the per capita income of Mayurbhanj is worked out to Rs.2,000/- per annum as against Rs.3,000/- for Orissa and Rs.8,500/- for the other states. While analysing the economic development profile of the district, the study focused on the area and population distribution, labor force, land holding and occupation. Information from the sample-households is also collected regarding their income from sabai grass, occupational pattern, land holding, land utilisation and asset holding.

1.2 Relevance of the Study

Economic development involves an increase in the material well being of the society. It means growth which indicates increase in production, income, consumption of food, leisure, better health and more time to
contemplate a decent life style. Consequently a successful programme for
economic development requires a close link between agriculture and
industries with a view to attaining the above objectives, it is not only
necessary to increase agricultural output but also necessary to create
employment opportunities in the agro based micro processing unit so that a
close linkage between agriculture, rural, small industries and modern
industries is possible.

It is interesting to know that the economy of Mayurbhanj district in
Orissa centers around the trade of a grass called 'Sabai'. Sabai grass is
practically considered to be "The Money Plant" which ensures cash receipt
throughout the year. It is a labour intensive village industry which requires
small investment. It provides gainful employment to the poor, under employed
and unemployed persons of rural areas. It has tremendous scope to improve
the standard of living of the poor, small and marginal farmers. Each member
of their families has a role in the income earning process which results in the
growth of their economic standard.

Sabai grass industry plays a predominant role in shaping the economic
destiny of the rural people in the district. As an agro-based cottage industry, it
suits very well to the rural structure, where agriculture continues to be the
main occupation. The industry is associated with various activities of raising
production of grass and processing of consumer goods such as ropes, mats,
carpets, sofa sets, wall hangings and other sophisticated fashionable articles.
Both hand made and mechanized system of production of these articles give
it the status of a cottage and small scale industry. The importance of this
industry can be viewed further from the following points:

(a) It is easy to set up a sabai grass industry with comparatively less
investment. Such industries usually make use of local skills and
resources to generate income in rural areas.
(b) The sabai grass industry has tremendous export potential. Artistic designing sabai products are very popular in foreign countries which earn precious foreign exchange for the country.

(c) The industry helps in the growth of entrepreneurship amongst the villagers. This ensures economic development through modernization and innovation of the industrial culture in rural areas.

1.3 Objectives of the Study

The research studies have been persuaded to accomplish the following objectives:

1. To review the present growth of sabai grass industry scenario of Orissa in comparison to other states in India;

2. To find out the innovative schemes and analyse the role of sabai grass industry for the economic developments of growers of the district;

3. To examine the various State Government plans, programmes and their implementation in the agricultural development of sabai grass;

4. To identify the marketing opportunities and problems faced by the sabai grass industries and to suggest suitable measures for solving them;

5. To explore the involvement of existing agencies (NGO, Bank and Cooperative Society) for development by the way of education, training and their support in financing for improving the sabai grass products and processes.
1.4 Hypothesis

Based on the aforesaid objectives, answers have been sought on the following hypothesis:

1. The various sabai grass finished product development programmes have no significant impact in reducing the number of poor households below poverty line.

2. The growth of per capita income in sabai grass differs widely as compared to the growth of per capita income from other sources over the years.

1.5 Methodological Foundation

The first step of methodological foundation is to define the problem chosen for investigation. The precise definition of the problem helps in determining the techniques to be used and the extent of information to be collected etc. This step is very significant one since it is said that “a problem well define is half solved”.

This research design is based on the (a) Marketing Model Dynamics and (b) Computer based Statistical Empirical analysis to study the role of sabai grass industry in economic development. A research design is the arrangement of condition & analysis of data in manner that aim to combine relevance to the research purpose with economy in procedure. The research design specifies the method of data collection and data analysis.

The sample data collected from 210 selected respondents of eighteen villages under three blocks of Mayurbhanj District. The data analysis and interpretation is undertaken mostly with the help of marketing model dynamics and computer based statistical empirical analysis.
1.6 Sampling Design and Methods of Data Collection

There are two sources of data collection. They are:

1. Primary Data Source
2. Secondary Data Source

The secondary data are those, which have already been collected by someone else thorough Books, Internet, Television, journals, Magazines, etc. On the other hand primary data does not exist here. Primary data has been collected here by questionnaire method. As the Mayurbhanj district in Orissa has been selected for the sample study, primary data have been collected from the selected village and block area by conducting a statistical sample questionnaire survey.

There are 210 questionnaires used for this study. Each questionnaire consists of 22 questions. Mayurbhanj is a tribal dominated district having 26 blocks. The villages are selected on the basis of agricultural production of sabai grass. The data required for the study is based upon the primary sources. The primary data have been collected from the field sources by direct observation and interview to the persons associated with sabai grass industry such as growers, processors, rope makers, entrepreneurs, traders and other intermediaries.
Based on the above sampling design, the data have been collected from the households using structured schedules. The questions are related to information regarding the size of the households and characteristic of household members such as age, sex, education, economic status and activities, income source and expenditure pattern, landed property, Government and NGOs support, marketing, packaging and transportation facility available etc. A house to house survey was conducted with the help of the questionnaire covering 210 households in 18 selected villages of Mayurbhanj district of Orissa. The period of study is mainly confined to the years from 1999 to 2008.

The secondary data have been collected from various published sources of the Central and State Government such as the Census of India volumes, statistical abstract, selected socio-economic statistics, per capita Net State Domestic Product of States, Economic Survey etc. (Central Government Publications) and District Statistical Handbooks, Indian Council of Marketing Research journals and several other national and international journals.

### 1.7 Marketing Model Dynamics

The marketing model dynamics includes:

1. The planning of organization for marketing of sabai grass products;
2. Diagnosis of the area sample formation in the Mayurbhanj district;
3. Participative analysis of market chains;
4. Creating and Implementing the concept of Sabai grass enterprise option;
5. Identification of supply, demand and gaps in the local business development services by designing the strategy to strength the market decision and communication as shown in the model for enterprise development in the sample area of Mayurbhanj district.
A marketing model based information system is a continuing and interacting structure of people, equipment, and procedures to collect, sort, analyze, evaluate and distribute pertinent, timely and accurate information. It is used by marketing decision makers for their improvement in planning, implementation and control. The Product Prices are a key positioning factor and must be decided in relation to the target market.
The marketing model is extensively used to determine the sabai grass product marketing demand in national and international market so as to develop the economic status of the cultivators.

1.8 Computer Based Statistical Empirical Analysis Techniques

The Computer based statistical analysis has been carried out to identify the various economic factors impacting the sabai grass production by applying the various statistical tools like Coefficient Variation, Correlation coefficient, Regression analysis, Analysis of Variance (ANOVA) and t-test that is used for testing of hypothesis.

The analysis is based on multiple regression technique.
Where Y = Income from Sabai grass and Total Income

<table>
<thead>
<tr>
<th>Factor</th>
<th>Coefficient</th>
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<tbody>
<tr>
<td>Sale</td>
<td>X_1</td>
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<td>Market Trend</td>
<td>X_2</td>
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<tr>
<td>Landholding</td>
<td>X_3</td>
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<td>Transportation</td>
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<td>Age</td>
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<td>Family size</td>
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<td>Education</td>
<td>X_7</td>
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<tr>
<td>Occupation</td>
<td>X_8</td>
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The form of equation fitted for production is given below linear model

\[ Y = C_0 + C_1X_1 + C_2X_2 + C_3X_3 + C_4X_4 + C_5X_5 + C_6X_6 + C_7X_7 + C_8X_8 \]

The t-statistic for testing of hypothesis is computed for each \( C_i \)

\[ t = \frac{\hat{C}_i - C_i}{S.E.(\hat{C}_i)} \]

The null hypothesis is \( C_i = 0 \)

This follows t-distribution with (n-1) degrees of freedom. The greater the value of \( t \), the stronger the evidence that the value of \( C_i \) is statistically significant.
The analysis of variance type of table for analysis is computed as

\[ F = \frac{\text{Mean sum of square of explained sum square}}{\text{Mean sum of square of residual sum square}} = \frac{\sum y_i^2}{k - 1} \frac{\sum e_i^2}{n - k} \]

Multiple discriminant analysis (MDA) is an extension of discriminant analysis and a cousin of multiple analysis of variance (MANOVA), sharing many of the same assumptions and tests. MDA is used to classify a categorical dependent, which has more than two categories, using as predictors a number of interval or dummy independent variables of the research study.

A statistical discriminant function is a function of the form

\[ T = k_1X_1 + k_2X_2 + \ldots + knX_n, \]

Where \( X_1 \ldots X_n \) are the differences between the two groups on the \( i \)th independent variable, \( k_1 \ldots kn \) are the logistic coefficients, and \( T \) is a function which classes the case into group 0 or group 1. The discriminant function arrives at coefficients, which set the highest possible ratio of between-group to within-groups variance (similar to the ANOVA, F-test, except that in DA the group variable is the dependent rather than the independent). This method is called logistic discriminant function analysis.

The collected data have been classified and tabulated according to their specific characteristics relevant for the study. Comparative method and experimental method of analysis are also to be adopted in this study by taking interviews from the various persons involved with the sabai grass production industry. Studying inter-block differentials in terms of level of development, growth and disparity through measures of per capita block domestic product (BDP)/ state income has a long history of research and intensive investigation.
for this district. However, a meaningful and valid study has been made based on the statistical reliable collected data.

The software like Statistical Package for Social Science / Study SPSS version-13.0, MS-Excel, database(Dbase-IV) for data organization, processing and generating the graphs are used in this study.

1.9 Chapter Plan

The entire study has been broadly divided into seven chapters:

The first chapter is introductory in nature. It briefly describes the scope and relevance of the topic for "The role of sabai grass industry in the economic development of Mayurbhanj district" in Orissa. It also outlines the objective, sources of data method of analysis and interpretation, chapter plan and limitation of the study.

The second chapter made focus on the review of literature i.e. geographical, economical and industrial profile of Orissa and Mayurbhanj District.

The third chapter analyses the Sabai grass production, processing and marketing in general with reference to South Asian countries, India, Orissa and Mayurbhanj District.

The fourth chapter makes the theoretical framework containing the implementation of rural marketing model dynamics and statistical methodologies applied to the Sabai grass processing and marketing industries.

The fifth chapter deals with the marketing analysis of sabai grass industry in Mayurbhanj district and the opportunities and problems faced in marketing in national and international level.
The sixth chapter brings out the computer based statistical empirical analysis of sabai grass industry in Mayurbhanj district. The testing of the hypothesis is adopted, for analysing the different factors that influences the economic development.

The seventh chapter presents the summary of findings and conclusion.

1.10 Limitations

The present work is concerned with studying dimensions of sabai grass production and processing industry in the state of Orissa with a particular reference to the Mayurbhanj district. The various measures are based on income in grass products in sampled villages.

The most of the villages are not accessible because of the poor road communication and hill areas of gigantic Similipal Range,

Due to time and resource constraints, the primary data were limited to only few villages selected from the 18 sample blocks of the district.

However, as the main emphasis was focused on the marketing, income and other determinants of sabai grass. Such a sample was thought to be reasonable for the purpose in order to arrive at a general conclusion close to reality.
REFERENCES


