1.1. INTRODUCTION

The long time lag or rather failure of the "trickle down effect" of capital formation-industrialisation growth strategy on the lower socio-economic strata of the population and the backward regions in the LDCs in which most of the poor people live has warranted an invigorated stress on rural development and poverty alleviation/elimination through generation of productive employment via rural industrialisation and integrated rural development.

The Nurkse - Lewis and Ranis-Fei unlimited (rural) labour supply models which hinged on capital formation - industrialisation and urbanisation perspective and their concomitant aggregative growth models - Harrod - Domar and their application in Mahalanobis growth model which was the basis of Second Five Year Plan (1956-61) in India known for the establishment of basic and heavy industries - have not been completely jettisoned due to accentuation of poverty and unemployment. But the industrialisation approach has been supplemented by a new development strategy of rural development embracing agricultural transformation, growth of allied activities and rural industrialisation.

The new strategy of integrated rural development which is part and parcel of poverty weighted growth approach has been the outcome of socio-political and academic concerns over negative fall outs of aggregative growth models applied in the 1950s' well articulated in Nobel Laureate Gunnar Myrdal's Asian Drama and the famous Pakistani economist Mehbub Ul Haque's edition, "The Poverty Curtain".
These concerns had reverberating echoes in the bold public policy shift announced in India by the then Prime Minister Indira Gandhi on the 19th July 1969, when Government nationalised 14 commercial banks in order to transform "weaker sectors" of the economy and "weaker sections" of the community.

In the later part of the fifties of the twentieth century, economists addressed themselves to the task of building up of disaggregative analysis for fostering balanced regional growth. Perhaps the foremost among them has been W. Isard of Harvard -MIT fame and his books, Location and Space Economy (MIT Press, 1956) and particularly among his later works, Methods of Regional Analysis (MIT Press, 1960) have started the ball rolling. One, however, should hasten to add that his contributions were preceded by D.C. North's article, "Location Theory and Regional Economic Growth" in the Journal of Political Economy (Vol. LXIII) in June 1955 and that of Gunnar Myrdal's Economic Theory and Underdeveloped Regions published during this period and his popular Asian Drama which had stirred intellectual thinking world over.

Economists in India, notably those working with the Reserve Bank of India and Operations Research Group, Baroda, added new dimensions to regional analysis in the Post-bank nationalisation period in the formulation of District Credit Plan and through critical evaluations of its methodology and impact.

The first District Credit Plan was launched in 1976 which disaggregated the sectors and the financial institutions in adopting unique, realistic and acceptable methodologies for fixing credit flow targets to the
weaker sectors of 4 selected backward districts in India, Viz., Vidisha, Vishakhapatnam, Sambalpur and Koraput, two of them being of Orissa State.

This work is a disaggregative study of Balangir district in the field of rural industrialisation in the sense that it disaggregates the regional economy spatially and intra-sectorally for an in-depth analysis; but it does not ignore the macro picture and purports to shed enough light on the man power and physical resources, infrastructure, soil and climate conditions of this "No Industry" economy for presenting the potential for future growth.

The regional economy or the district has been spatially disaggregated into three sub-divisions, which constitute it such as Balangir, Titilagarh and Patnagarh sub-division and these are divided into blocks. Out of 14 blocks in the district, three blocks such as Loisingha, Saintala and Khaprakhol (one from each sub-division respectively) have been randomly selected for study.

Further the industries of three sample blocks have been disaggregated intra-sectorally into 9 industrial groups (consisting of 35 industries), such as Agro - processing Units, Food and Narcotic Units, Mineral and Quarry Based Units, Forest Based Units, Metal Based Units, Weaving/Spinning Units, Village Artisan Units, Service Units and Other Industrial Units.

"India lives in her villages" (Mahatma Gandhi) and this excellent statement is borne out in the demographic and statistical sense by the decennial census data – 76.29% (1981), 74.30% (1991) and 72.22% (2001) 1. Realisation of the patriots' dream of desired socio-economic development of
the country cannot be achieved and poverty eliminated without the development of these villages and rural households.

The problem of economic stagnation, poverty and unemployment with which rural India is concerned can be seen in an extreme form in the K-B-K (Kalahandi-Balangir-Koraput) region of Orissa. Balangir district of the said region is an extremely low income area requiring special attention in planned economic and social development. Next to Kalahandi this district is known for wrong reasons in the nook and corner of India for sale of girl child, malnutrition and starvation deaths. Therefore this poverty stricken region has been chosen for a micro level study.

1.2 LITERATURE SURVEY

Survey of literature illumines the profile of research in the proposed area. It expands frontier of one's theoretical, historical and empirical knowledge by enhancing both intensive and extensive understanding of the research subject and helps in the formulation of objectives and methodology.

A number of studies have been conducted by the Government agencies as well as individual scholars on rural industry as a means of achieving rural development in India. An attempt has been made to carry out as comprehensive a search as possible to pool reference materials and analyse the contributions of the studies made earlier.

Taking into view the strategic role of the village and small industries sector, the Planning Commission of India 2 1956 set up a separate committee, commonly known as "the Karve Committee" to study the problems and suggest programmes for the development of this vital sector. The committee noted that since a substantial number of the unemployed and
underemployed belong to the village and small industries group, setting up of these industries would provide employment to them in occupations in which they have been traditionally trained and for which they possess equipments. The committee recommended for introducing better techniques in the village industries, so that they can keep pace with the progressively expanding economy and do not become unsuitable for growth in future. However, the improvement in technique can be permitted only so long as it has no 'deleterious effects' on employment.

On the basis of statistical data collected from the "Census of Indian Manufacturers, 1956" and reports prepared by the Perspective Planning Division of the Planning Commission, Dhar and Lydall \(^3\) arrived at the findings that although small scale industries appear to employ less capital per unit of output, most of the modern small scale industries in general make use of modern machinery and employ upto 50 workers. Therefore, they concluded that the issue of choice between large and small industries for the purpose of an employment oriented industrialisation strategy is largely irrelevant and the aim should be to secure the best use of scarce resources in stead of aiming at creating employment for the sake of employment.

With a view to assessing the progress made by Khadi and village industries and to find out possible ways for their expansion and structural changes, a committee under the Chairmanship of Ashok Mehta \(^4\) was formed in 1966. The committee observed that the village industries programme can help in raising the standard of living of the rural poor, if these industries are developed with proper guidance, as they make use of local skills and resources and have considerable development potential.

The committee made two significant recommendations, viz; to constitute a Rural Industries Commission and to set up a Rural Technology
Research Institute. The committee pointed out that it would be useful if a Rural Technology Research Institute for small industries is set up to conduct research into the problems of appropriate technology for rural industries and secondly, to assist and advise the Rural Industries Commission and the State Rural Industries Boards in matters of technological problems.

The Bhagvati Committee, constituted by the Government of India, strongly oppose the fast introduction of mechanisation in industries designed to replace human labour. At the same time, however, the committee recommended the introduction of "sophisticated technology" in certain areas. In order to generate employment in the industrial field, the committee was in favour of reduction in the installed capacity in various industries to the maximum extent possible. It virtually favoured the creation of employment at any cost without going into the economics of the scheme.

The National Committee on Science and Technology (NCST), Government of India made a study on Khadi and Village Industries. Basing on the statistical data on the growth of production and employment in respect of several rural industries, the committee reported that "compounded rates of growth of employment in these industries, as compared to the growth of output, are very meager". Thus it provided a gloomy picture of these industries in the field of employment generation.

We concentrate now on the empirical inquiries conducted by individual scholars.

T.S. Papola, on the basis of a sample survey of 387 rural industrial units in two districts of Uttar Pradesh, made a brilliant analysis of the
alternative approaches to rural industrialisation. He observed that rural areas have much more diversified structure of industries than what is generally presumed. A number of industrial activities, which were not traditionally a part of the rural scene have started playing a significant role in the generation of employment and incomes in rural areas. He pointed out that though the caste-industry identification has been more or less complete in traditional industries, the non-traditional units are able to break this caste-industry nexus and reduce the rigidities of rural social stratifications. Further, most of the rural industries possess a limited capacity for generating even a subsistence income for the people engaged in them. The problem is more acute in traditional industries due to their uneconomical size in terms of volume of output, inevitable constraints of technology and resources used, and low demand for their products. In the light of the findings of his study, Papola emphasised on the adoption of long-term strategy of rural industrialisation. He contended that the protective and promotional measures should aim at increasing their growth potential rather than ensuring their mere survival and increasing their numbers.

Bepin Behari has meticulously examined the problems, possibilities and perspectives of rural industrialisation in India. He has also thrown light on the crisis in Indian villages and the need for a new strategy to develop and diversify the rural industries. After a review in greater details of the policy measures undertaken by the Government of India towards rural industrialisation, he suggested in favour of the selection of suitable technology and fuller utilisation of existing rural resources as an appropriate strategy for rural industrialisation in India.

An empirical study conducted by R.V. Rao with reference to Andhra Pradesh reveals that rural industrialisation on Gandhian lines is the only way out for removing rural poverty, utilising the local manpower,
reducing unemployment and underemployment among the rural masses, and curbing rural exodus. He has further pointed out that since these industries possess sufficient growth potential, with little improved technology, they can make a real contribution to the planned economic development of the country. He suggested that the traditional technology should not be discarded but improved in the shape of intermediate technology.

Bedabati Mohanty 10 also attempted a study of different aspects of small scale industries of Cuttack district of Orissa with 178 sample industrial units. She competently examined the role, nature of working, economic viability and problems of small scale industries. Further, she pointed out that mere establishment of industries will not help the industrialisation process, unless regular post establishment follow up is ensured by the concerned agencies. In the absence of such measures, the industrial units started in haste are likely to languish and become sick.

Basing on a sample survey of 400 tribal workers working in small industries in Khammam District of Andhra Pradesh, Karnati Lingaiah 11 has made a study on the industrialisation in rural tribal areas and thrown light on the strains and stresses of industrial ventures, the problems of migration and ways for creation of new employment opportunities in the tribal belt. He has attempted to study among other things; the impact of industrialisation on employment and income generation that took place in the tribal areas.

Duraid Yawer 12 has attempted to study the theories behind rural industrialisation and analysed its goals and objectives through two case studies of Iraq and Egypt. Both the case studies revealed that rural industrialisation in Iraq and Egypt, as in many other developing countries, would be important not only as means of creating employment for the labour force and raising real income of the nation, but also because it contributes to
the development of agriculture and urban industries. Without rural industrialisation, it would be considerably more difficult to solve the problem of agricultural unemployment. If agriculture were to be developed and its productivity greatly raised, a market within and elsewhere would have to be found for that expanding agricultural product. But this market could be found domestically, if the urban industrial sector as well as the rural industrial sector expands at the same pace as that of the agricultural sector.

A.K. Sinha \(^{13}\) has undertaken a micro level study on the structure, viability, problems and performance of rural industries of Bihar. His study is based on the hypothesis that the process of industrial development of Bihar can be made dynamic by the growth of viable rural industries. His study is based on the primary data collected through a sample survey of 113 rural industries units of Bihar by applying Structural-Functional Method.

Sinha pointed out that these industries are caught in a low-income trap, i.e. they have a low level of income, a low level of investment, a low level of technology and employment, a low level of productivity and again a low level of income. Sinha pointed out that it is the policy makers and the Government who do not appear to think in terms of 'rural industrialisation' are responsible for this sorry states of affairs. He suggested that the aim of the rural industrialisation policy should be to develop modern self-sustaining and economically viable rural industries rather than to protect weak, inefficient and non-viable rural industries.

Similarly, T. Sankaraiah \(^{14}\) has conducted a micro level study of 185 sample industrial units in Chittoor district of Andhra Pradesh. He has examined the employment and income generation in these units and also analysed the structural characteristics of capital of these units. His study
reveals that the employment and income generation in various categories of sample units is not significant.

Satyanarayana's study on large, medium, small scale, cottage and village industries is based on both primary and secondary data on Anantapur district of Andhra Pradesh. He has adopted census method in case of large and medium scale industries and sampling method in case of small, cottage and village industries. On the basis of statistical data, he has calculated inter-industry variation in capital-labour ratios. The positive labour-output relationship observed in case of several small scale, village and cottage industries shows that more labourers can be employed in such industries with the increase in the size of output.

A.V.Arun Kumar in his work examined the policy, technology and employment aspects of rural industries in India with a special reference to Kerala. For the purpose of his study, he has conducted a sample survey of 72 small enterprises in five districts of Kerala. His analysis showed that small scale sector is inefficient (technically) in comparison to large scale sector, as it is evident from the relative production efficiency indicators like labour productivity and capital productivity.

B.L.Agrawal is of the view that spatial concentration of industrial activities in large urban centres is not conducive to an equitable pattern of growth and therefore, emphasis should be laid on diversification of industries. A programme of protecting and developing village industries is essential. He pointed out that a programme of rural industrialisation cannot succeed unless these industries are modernised so as to increase output per worker or marketing outlets are found for their products.
K.M. Rastogi who has made a case study of Madhya Pradesh has viewed in favour of only those small scale and village industries which make optimum use of indigenous resources and technologies. He has pointed out that there are hundreds of items which can be produced in rural and small scale industries more economically than in large sector.

V.A. Pai Panandiker and Arun Sud have jointly conducted an in-depth inquiry into the level of preparedness of the rural areas to translate the plan targets into actual performance in Alwar district of Rajasthan. They have examined the circumstances under which the process of rural industrialisation can be best accelerated, the role of banks and financial institutions in rural industrialisation and the available policy actions. They have pointed out that the rural industrialisation programme faces three major sets of problems: (1) the skill problematique; (2) the Governmental inadequacies; and (3) the institutional incapacities. They have suggested that the programme of rural industrialisation has to be backed by a series of actions that create the conditions in which such a programme can succeed. These conditions include industrial infrastructure including power, transport, communications and above all trained skills.

K. Puttaswamaiah, who has prepared a plan for Chiknaya Kanhalli taluk of Tumkur district of Karnataka to achieve full employment within five years, favoured the establishment of only those industries, which are based on the resources available locally. The study emphasised on the need for creating more opportunities of employment per unit of output and investment.

Through a sample survey of 127 entrepreneurs of six districts belonging to West Bengal, P.K. Biswas investigated into the various modes of organisation prevailing in the rural industries. He made an attempt to
measure the magnitude of surplus generated by different types of small enterprises (petty production units). His study revealed that petty producers usually generate only a low level of surplus and in a number of cases even a negative surplus indicating the subsistence level of operation. His study also showed that the attached petty producers are better placed than the independent petty producers. The former are generally found to generate a relatively higher level of surplus and to employ family members for a longer duration.

Making a comparative study of the development of Eastern and Western Uttar Pradesh, A.K. Singh found that mere dependence on such industries which process the local raw materials or which cater to local or regional demand fail to generate a process of rapid economic development. He thus recommended the establishment of "dynamic or propulsive industries" which cater to the national market and which have been experiencing rapid growth in recent years.

Kamal Taori and Surendra Singh have made modest effort to analyse various aspects of rural industrialisation and the linkages between agriculture and rural industrialisation for sustainable development. They have also provided a future plan for the development of rural industries and specified certain major thrust areas and overall strategy for rural industrialisation.

P.K. Grover, T.M. Dak, and M.L. Sharma have conducted an empirical study with 200 sample rural industrial units taken from three districts of Haryana. They have found that traditional industries which are hereditary in nature (in most cases) continue to dominate the industrial scene in the rural areas and 81.6 percent of these industries were mostly inherited and the continuance of these industries is a result of economic compulsions.
rather than their viability. Even if change is desired, the rigid caste structure and the stigma attached to certain crafts do not allow any change. They have suggested to modernise the rural industries and to provide the new entrepreneurs a package of services.

The case study of R.B. Singh on the Siwan district of Bihar revealed that the traditional rural industries are declining and facing serious challenges as a consequence of urbanisation and modernisation process. Most of the artisans get employment from 75 to 175 days in a year and remain unemployed for rest of the year. Their incomes are paltry amounts which hardly enable them to make both ends meet.

It is pointed out that the district, which has agricultural economy, requires establishment of viable small industries, which can hasten the pace of development of the rural economy. Further, it is necessary not only to increase agricultural productivity but also to introduce first of all agro-processing and agro-supporting small industries as well as improving the techniques and technologies of the household industries.

In his work on Rural Industrialisation in India, K.K. Sen has attempted to analyse various aspects of rural industries with special reference to Orissa and Tamil Nadu. He was of the view that large scale industries have failed to solve the type of unemployment that we have, because large proportion of idle manpower is concentrated in the rural areas. Further, rural unemployment could not be tackled through the development of agriculture, as it is evident from the effects of Green Revolution where the benefits of new agricultural strategy and agricultural development failed to reach to the entire rural population in India. Rural industrialisation, as he finds, is a remedy against the problem of rural poverty and unemployment.
A sample survey of two villages in Maharastra Deccan conducted by Dandekar and Brahme\textsuperscript{27} revealed that just as the urbanite's preferences lead him to buy imported goods, so also the villager's preferences lead him to buy the products of the city. Therefore, with growing integration of the rural-urban economy, the traditional industries are on the decline. There is either not enough surplus income in the village to allow the industry to thrive or whatever surplus is there, is already largely flowing to cities. Therefore rural industry fails to develop many forward and backward linkages with the villages around it. What is necessary for the success of a rural industry is that it (rural industry) has to latch itself to the urban economy and make a profit from urban markets.

T.K. Moulik and P. Purushotham\textsuperscript{28} have worked on the issue of technological improvement and transfer of technology for the growth and development of decentralised rural industries in India. They have investigated and evaluated the implementation process of science and technology development policies and technology transfer programmes. Their study is largely empirical and the implementation process of technology transfer as well as the formulation of policies have been studied through case studies. The case studies are made from the typically decentralised cottage as well as small scale industries of a number of states like Gujrat, Bihar, Uttar Pradesh, Tamil Nadu, Maharastra, Karnataka and Kerala. They have observed that some of the newly developed technologies have shown a strong potential in reducing production costs and at the same time enhancing the product quality. These technologies have gone ahead in increasing the value addition in the process. Due to inappropriateness of methodologies of technologies transfer, development programmes through technology transfer could not enhance the workers' productivity. They have identified the factors that have been responsible for the poor pace of technology transfer in decentralised sector. They are: (i) lack of suitable market support provision for the
entrepreneurs; (ii) Poor feedback role played by Government agencies; (iii) myriad paper procedures and too much red tape, etc.

V.S. Ganesamurthy and S. Manickam have conducted a study on the growth of small-scale industry in India during the post-GLP (Globalisation – Liberalisation – Privatisation) era. They have attempted to analyse the trends, growth, and problems of small-scale industries through time series data. Their study revealed that with the increase in output in these industries, employment increases significantly. Further, they have pointed out that the small-scale industries in India are now facing major threats for their survival due to the practice of open market policy of India since 1991. Integration of Indian market with the world market results in severe competition from MNCs (Multi National Corporations) for local industries. Secondly, being one of the signatories of WTO, India has to adopt free imports of many consumer goods which, in turn, affects the small industrial units, as these goods are exclusively reserved for the small-scale sector.

With the help of a sample survey of 130 units of two blocks in the state of Kerala, Mridul Eapen has examined various aspects of rural industries and its rural linkages in the generation of rural employment and income. He found that the rural industry as a sub-sector of the main stream industrial sector displays considerable links with the rural sector.

Om Prakash, P. Purushotham, R.P. Slator, and J.R. Watson, have attempted to analyse the potential of the rural non-farm sector to generate maximum employment. Through a field investigation in the Udaipur district of Rajasthan, they have come out with evidences that most of the enterprises are using traditional, low productive and inherited technologies and skills and are self-employment generating in character. Most of the enterprises have borrowed little or no resources from the financial institutions. The smaller the
size of enterprise, the larger has been the dependence on own funds. The infrastructural support and facilities are inadequate and the forward and backward linkages are very weak and non-existent in case of many industrial units. They have suggested that any intervention to enhance the employment and earning potential of these industrial units should aim at improving their technology factor so that their products are accepted by non-traditional markets in the local area and external markets too.

Prabin Baishya attempted to focus on the functioning and problems of small and cottage industries operating in rural and semi-urban areas of Assam. He observed that although there are many independent cottage enterprises, a large proportion of them are dependent. These dependent units are to rely on intermediaries for supply of raw-materials and marketing of their products. The independent enterprises suffer from dearth of working capital and marketing channels for their products. Taking together, income of these industries varies from unit to unit according to the nature of employment, i.e., full time and part-time occupation. The most prominent problem faced by these units is the outdated technique of production.

S.N. Mishra and Kushal Sharma have evaluated and examined the organisational arrangements and other facilities made available for the development of village and small scale industries in the Alwar district of Rajasthan. They have pointed out that the most important problem faced by these industries is that the persons who install such industries are not aware of the know-how of the industry concerned. There are no such Government institutions easily available to provide him the know-how.

The research paper of Shrinivas Y. Thakur on rural industrialisation in India makes out a strong case for rural industrialisation
and suggests a strategy for development. He is of the view that in the face of growing unemployment and underemployment in rural areas, rural industrialisation seems to be the only way to absorb the massive additions to labour. Rural industrialisation is also dictated by the imperative need to break the dual economy and to pave the way for socio-economic transformation of rural areas.

P. Purushotham and V.M. Rao have examined the employment generation potential of rural and cottage industries for the rural labour force, particularly for the women. They have also assessed the contribution of these industries to total household income and the impact on income distribution. For this, they have conducted a sample survey on two states: Maharastra and Orissa. They found that the family labour accounted for 76 percent in cottage enterprises, whereas it is 26 percent in rural small enterprises. The proportion of female labour has been more in rural small industries than in cottage industries. However, no distinction could be observed between the cottage and rural small industry sector in respect of the magnitude of income generation, as the modes of production and labour intensity are almost the same in both the sectors.

Ian Shanon's work explains the causal factors responsible for rapidly changing rural product prices and the reasons for the remarkable shifts in both the wages and availability of rural labour in the Australian economy from the early 1930s to the post war boom years. Shanon has also studied the impact of Government Policies like tariffs and markets on rural industries in Australia.

Sigurdson has made a case study of rural industrialisation in China. He found that rural industries, as a component of overall strategy of
employment - oriented industrialisation have miserably failed to satisfy the employment aspirations of the people.

M.M. Mehta 38 has made a detailed study of the industrialisation pattern of India and South Asian Countries. In the light of inter-regional, inter-country and inter-industry analysis, he has argued in favour of rapid expansion and promotion of technically sound and economically viable small scale and cottage industries that could secure simultaneous increase in output, employment, savings and investment. He has favoured the application of economically sound labour intensive techniques of production.

1.3 THE PRESENT STUDY

The foregoing review of literature covering the studies at regional, national and international level provides some insight into their objective sets, methodological aspects and findings. They also show that the micro level studies are scanty and no firm generalisations can be made. In a vast country like India with varied resource base and socio-economic conditions, such micro-level studies may not throw much light on the problems of all regions.

The Expert Group of the United Nations Centre for Regional Development 39 has stated that adequate research has not been done on various aspects of rural industrialisation and its role in regional and national development. Also social scientists have not taken enough interest in it, thereby leaving considerable gaps in knowledge.

Further, in the Trend Report on Survey of Research on Industrial Economy of India, prepared for ICSSR, New Delhi, Prof. J.C. Sandesara 40, a well known figure in the field of industrial economics states that "it is
necessary to have intensive studies of the underdeveloped areas, their deficiencies and problems of growth, the available natural and other resources and market potential so that integrated development plan for the agricultural and industrial developments of these areas are well formulated”.

Therefore micro-level studies for each region are necessary for understanding the problems and prospects of rural industries in different regions of our country. The present study conducted in Balangir district of Orissa, one of the three chronically starvation death prone districts (K-B-K Districts of Orissa), is a modest attempt in this direction, which throws much light on the nature, working, problems and prospects of rural industries at the districts level.

(A) OBJECTIVES OF THE STUDY

This study addresses itself to the following objectives:

(a) To examine the present status of rural industries in the Balangir district of Orissa (India);

(b) To examine finance, employment and profit aspects of these industries;

(c) To find out the interrelation between various inputs and also between inputs and output of these industries;

(d) To estimate the effects of inputs such as capital, labour and raw material on output;

(e) To examine the backward (resource base) and forward (output use) linkage effects of these industries;

(f) To study the problems faced by the rural entrepreneurs;

(g) To suggest corrective measures; and

(h) To project a future profile of industrial growth in rural Balangir.
(B) METHODOLOGY

With a view to achieving the above noted objectives, the study adopts (a) theoretical (b) historical and (c) empirical methodologies.

The rural industries suffer from lack of regular book/report keeping. Nor are there any systematic surveys in India on these industries operating in the country. In the absence of sufficient secondary data on these industries, the study makes use of both primary and secondary data. Therefore an attempt has been made to make an empirical study for which primary data are collected through a structured questionnaire embracing various questions on various aspects of rural industries in the district and also on the entrepreneurial households of these industries. For this, the study makes use of multistage stratified random sampling method for the selection of sample industrial units. The rural industries of Balangir district constitute the population of this study.

The field survey of the sample industrial units has been made by the scholar himself and every respondent entrepreneur/ experienced worker (in case of non-availability of the entrepreneur) of the unit interviewed. The primary data so generated enable us to record the findings and test the hypotheses.

For analysis of data, the study makes use of various statistical techniques and tools such as: averages, weighted averages, percentages, standard deviations, correlation, regression analysis, t-test and others. To measure the effects of various inputs such as capital, labour and raw material on output, the Cobb-Douglas Production Function has been applied.
(C) HYPOTHESES

In order to meet the above noted objectives, the study proposes to test the following hypotheses:

1. Output of the rural industrial units is significantly influenced by fixed capital.
2. In comparison to fixed capital, labour employment has a more dominant effect on value added in these industries.
3. In comparison to capital and labour, raw material has larger influence in the quantum of output in rural industries.
4. Increase in total capital would lead to increase in employment.
5. Value added per worker is positively correlated with the volume of output and inversely with the size of total capital and labour.
6. Capital efficiency in rural industries is correlated positively with labour intensity and negatively with capital intensity of these industries.

(D) CHAPTERS

The dissertation has the following chapters:

1. Introduction.
3. Socio-Economic Profile of the Regional Economy.
4. Rural Industries in Balangir District of Orissa : Macro Status, Organisational Base and Development Programmes.
5. Sample Survey-I : Methodology and Findings.
8. Summary and Conclusion.
REFERENCES


