

Title of research project

An analytical study of agro base industries in Nandurbar district (2003-2013)

The present study of minor research project divided into five chapters. The summary of the research classified as per chapter wise.

Chapter I. Introduction and Research Methodology: First part of this chapter consists of introduction to the 'agro-based industries in Nandurbar districts and its brief of socioeconomic and entrepreneurial relevance to their development. In second part of this chapter description of 'Research Methodology' which has been applied to this research work is given in detail. Towards the end brief scope and significance of research work is given along with its limitations and finally chapter scheme is given.

Significance of the research topic-

The above research work has been helpful for study of agro-based industries and simultaneously the problems of farmer to form these types of industries. This research work will be helpful to government and other funding agencies to implement different financial policies for agro-based industries. While in rural area, the role of agro-based industries will be justify with the above research work. The economic development of rural area with the intervention of ago-based industries will be examined by this study. Nandurbar is tribal and rural and socio-economically backward district. Maximum population is depend on agricultural without agricultural no any income and employment source in the district for the ruralists. So agro business additions with agricultural then help to increase the income and employment in district and will help to reduce the migration of peoples. So to establish the agro business and which ware established agro business, there problems taken consider is very important so considering this view the topic was chosen for the study.

Following objectives was considered for the study.

1. To study the Agro based Industries located in Nandurbar.
2. To study the problem of farmers related to the agro based industries
3. To analyze the problems of agro based industries in present scenario.
4. To study the technological and managerial measures for tackle the problems of agro based industries.

Following hypothesis was considered for the study

1. The agro-based industries in Nandurbar district are good condition.
2. Farmers have to face many problems to set up agro-business.

3. Agriculture-based industries have access to financial capital, raw materials, electricity, skilled labour, markets and support from the government.
4. Agro-based industries have lack of technical and managerial skills.

Limitation of study -

1. The period selected for study is between financial years 2002-03 to 2012-13.
2. As the total numbers of units owned Nandurbar district are very high and scattered, the study of each and every unit is impossible, therefore only 130 units are considered for this study.
3. The study is related to the agro-based industries in Nandurbar district; those are registered and unregistered under various organizations and associations in Nandurbar district.
4. Stipulated time limit within which the study has completed is also one of the limiting factors

Research methodology- the second part of first chapter was research methodology. For the present research had chosen sample random sampling method. For the study from every taluka was collected 30 samples and total (30×6) 130 samples was collected from the district. Then analysis the samples and tabulated as per statistical methods. To finding the hypothesis result used the χ^2 and Z test. To calculation data analysis used MS-Excel and SPSS statistical software.

Chapter II. Review of Literature:

In this chapter, detailed and comprehensive review of earlier studies those are already undertaken by other research scholars especially in this field have been taken in to consideration to find out the status of earlier research work, methodology used by them and to search out research gaps available in this particular study. This chapter also deals with the conceptual frame work for this research study.

1. **Dhana V. Avdhesh Kumar Shukla and Rishab Kumar (2019)**, studies about *Food Processing Industry in India: Challenges and Potential*” has been given the details of demand and opportunities for food processing industries in India which has a backbone of Agro-based Industries. the food processing industry in India needs to gear up to meet the demand by investing in necessary infrastructure. The industry requires a steady flow of raw materials from the producers/farmers meeting specific quality standards and at stable prices. Farmer producer organizations, by bringing

together small farmers and agricultural entrepreneurs, can enhance the opportunity to build more stable supply chain. Besides ensuring steady flow of income to the farmers, greater linkages with industry could also reduce wastages, particularly in perishables.

2. **Dr. C Paramasivan, R Pasupathi (2016)**, explain about agricultural in industries
Agriculture is one of the major raw material providing sector for major industries like paper, sugar, textile, fertilizers, chemical, edible oil, etc., Agro-based industries can play an important role to a large extent in solving the problem of poverty, unemployment and inequality in India and can significantly contribute to the overall development of the economy by efficiently utilizing the local raw materials which consequently may result in increase of gainful employment opportunities to poor people mainly landless, marginal and small farmers.
3. **Dr. Ashish Rajendra Mehta (2010)**, has depicted the various indicator which reflect the investment done in agro-based industries. Agriculture plays a vital role in Indian economy. Over 58% of rural household depends on agriculture as their principal means of lively hood is agriculture. It is an investment plan to set up such an organization which will provide all the agro based facilities & services under one roof. It provides facilities like Land banking, Transportation, communication & Technology, Marketing & Awareness, Banking & Insurance, Testing's of fertilizers & soils etc. Several industries in India get raw material for production from agriculture industry like cotton and jute textile industries, sugar, vanaspati, etc. are directly dependent on agriculture. Handlooms, spinning oil milling, rice thrashing, etc. are various small scale and cottage industries, which are dependent on agriculture sector for their raw material. This highlights the importance of agriculture in industrial development of the nation.
4. **Puja Chadha (2014)** , Agro processing could be defined as set of techno economic activities carried out for conservation and handling of agricultural produce and to make it usable as food, feed, fibre, fuel or industrial raw material. The scope of the agro-processing industry encompasses all operations from the stage of harvest till the material reaches the end users in the desired form, packaging, quantity, quality and price. Primary processing operations involve activities such as crop drying, shelling/threshing, cleaning, grading, and packaging. These activities are mainly carried out at the farm and only transform the commodity into a slightly different form prior to storage, marketing or further processing. Secondary processing

operations entail increasing nutritional or market value of the commodity and the physical form or appearance of the commodity is often totally changed from the original.

Chapter III. Socio-economic Study of Nandurbar District:

This chapter deals with Socio-Economic study of Nandurbar district which has been located in Maharashtra state. The Historical background, Geographical location, climate, demography and economical development of Nandurbar districts have been taken into account.

The main occupation of the residents of the district is agriculture. Nandurbar is most famous for world-class quality chilli production and the world's largest wind farm with an output of 1000 MW which is about 30 kms from Nandurbar city. The district is rich in producing cotton and hence has various textile industrial clusters, especially in the Navapur tehsil. Small and medium enterprises (SMEs) in the district produce mostly agro-based or forest-based products with few demand based industries such as solar and plastic. In 2006 the Ministry of Panchayati Raj named Nandurbar one of the country's 250 most backward districts (out of a total of 640). It is one of the twelve districts in Maharashtra currently receiving funds from the Backward Regions Grant Fund Programme (BRGF). Nandurbar District been selected as one of the Aspirational district in the country by NITI Aayog. The total area under the forest is 104 Thousand hectares which is 20.78% of the total geographical area of the district. Nandurbar district is industrially backward. Only small industries are here. Agro based industries are registered in large scale but their condition is not good. So many agro businesses cannot develop self. But in the district have chance to development the of agro business. District got 20.78 % forest area with Satpuda Mountain. In this area naturally are various types of medicinal plants it can develop and increase the Ayurved medicinal agro business plant in rural area. In this area we can increase the orchards of various fruits such as mango, custard apple, ber, Guava, and can develop on juice processing agro base industries.

Chapter IV. Tabulation and data Analysis

This chapter consists of data analysis and interpretation of agro-based industries in Nandurbar district. Also this chapter consists of data analysis and interpretation related to various information collected through structured interview schedule. This chapter also deals with major problems faced by owner of agro-based industries. This chapter ends with hypothesis testing and mentioning further scope of research in this topic. Data has tabulated

as per questionnaires questions with various forms as per their information in the research work. Then data analysis and used the χ^2 test and Z test. The significance level at ($P < 0.05$) fixed for finding the conclusion systemically.

Data collection and Analysis

1. The study is depending on primary data.
2. All the data is collected by principle investigator.
3. Researcher collected data about agro based industries of total 130.
4. Data tabulated an analysis with respective form.

Chapter V. Conclusion, Finding and Suggestions

This chapter starts with major observations and findings related to all the data analyzed in this research work, major suggestions and recommendations to the various stakeholders of economic development and ends with the conclusion.

Summarization of Hypothesis tests.

Hypothesis Sr. No	Null hypothesis	Alternative hypothesis	Statistical test	Finding
1	statistically it is not appropriate that, average of observe options is not more than 2	statistically it is appropriate that, average of observe options is more than 2	Z test	Accepted the null hypothesis.
2	statistically it is not appropriate that, average of observe options is not more than 1.5	statistically it is appropriate that, average of observe options is more than 1.5	Z test	Rejected the null hypothesis.
3	it is not appropriate that, average of observe options is not more than 1.5	statistically it is appropriate that, average of observe options is more than 1.5	Z test	Accepted the null hypothesis.
4	statistically it is not appropriate that classify as per the technical problems face by agro business	Statistically it is appropriate that classify as per the technical problems face by agro business.	χ^2 test	Rejected the null hypothesis

Result of hypothesis testing was founded following-

1. Accept the null hypothesis means 'The agro-based industries in Nandurbar district are good condition'
2. Reject the null hypothesis means 'Farmers have to face many problems to set up agro-business.'
3. Accept the null hypothesis means 'Agriculture-based industries have not access to financial capital, raw materials, electricity, skilled labour, markets and support from the government'
4. Reject the null hypothesis means 'Agro-based industries have lack of technical and managerial skills.'

Following some importance suggestions ware recommended

1. In Nandurbar district agro based industries are not good conditions so provide the basic facilities and should be solve their problems from ground levels.
2. . Farmers have to face many problems at time of set of agro-business so solve these systems and make very easy process for application and registration of agro business. For this should be Establish taluka level offices for solving the problems and guidance to farmers.
3. Government should be assess of agro business and help them about capital, raw material, electricity and support for selling the product in national and international market from established date to next four years.
4. Agro-based industries have lack of technical and managerial skills so every agro business proprietors give the training of basic technology, computer software for handling smooth of technical part of business and give the managerial knowledge to proprietors for good business management.
5. Government should Advertisement of agro business scheme in local language through posters on chavadi area in the village.
6. Government should inspire young farmers and rural youth to establish the agro business in rural area.
7. Government provides the scheme as per availability of raw material in the locality and balance to them. Therefore will not excess unit of agro business and maintain them. So they can run smoothly and will be available employment in the every village level.
8. Governments establish rural industries in village level and provide them all benefits for well run the agro business as per SEZ rules.
9. To balance the socio and economical of villager people, provide the special scheme for SC/ST farmers and encourage them to establishes the agro business in village.

10. Organized business audit through respective agencies and evaluate their strength and weakness and guidance them for future development.
11. Agriculture plays a vital role in Indian economy. Over 58% of rural household depends on agriculture as their principal means of livelihood is agriculture. It is an investment plan to set up such an organization which will provide all the agro based facilities & services under one roof.
12. There is scope of establishment of taluka wise agro based industries such as in Dhadagaon Taluka Medicinal plant & forestry based agro based industries, In Akkalkuva Taluka Mango and Strawberry juice and other products, In Taloda Taluka Sugar based, Banana and Cotton based agro industries, In Shada Taluka Papaya, Banana, wheat, cotton and Sugar based industries, In Nandurbar Taluka Chilly, Sugar and textile project and Navapur taluka Poly form, Cotton, rice based industries have scope for developing as agro based industries.

DR. GAUTAM MADAN MOREY

(Principal Investigator)

M. Com., SET. Ph.D

C. H. C. Arts, S. G. P. Commerce &

B. B. J. P. Science College, Taloda,

Dist. Nandurbar (Maharashtra) – 425413