

CHAPTER I

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CHAPTER I

RESEARCH METHODOLOGY AND REVIEW OF LETERATURE

1. A Research Methodology

1. A.1 Introduction:

Bamboo is actually an evergreen plant and it is an important forest resource in our socio-economic and cultural context. Today, bamboo business has received increasing attention for ecological, economical, and social reasons in many country and various international business organisations. Bamboo, the wonder plant in nature, has many uses which include but not limited to erosion control, watershed protection, soil remediation, environmental greening and medicinal application.

Bamboo is an incredibly sustainable resource, since it is fast-growing and resilient. Bamboo is actually not a wood, it is a grass. Bamboo is a high-yield renewable natural resource: Bamboo is a mystical plant as a symbol of strength, flexibility, tenacity, endurance, luck and compromise. Bamboo is a versatile material. It is versatility can be gauged by the fact that Thomas Edison successfully used a carbonized bamboo filament in his experiment with the first light bulb. This light bulb still burns today in the Smithsonian Museum in Washington DC. He also used a bamboo as rebar for the reinforcement of his swimming pool. To this day, the pool has never leaked. Bamboo has an unrivaled utility. One resource book lists over 5,000 uses including paper, scaffolding, diesel fuel, airplane “skins”, desalination filters, musical instruments, medicine, food, as also Alexander Graham Bell’s first phonograph needle. Amidst death and destruction, bamboo survived the Hiroshima atomic blast closer to ground zero than any other living thing and provided the first re-greening in Hiroshima after the blast in 1945.

Asia is the major bamboo growing area in the world. Throughout Asia, bamboo has been an integral part to religions ceremonies, art, music and daily life for centuries. Bamboo shoots provide nutrition for million of

people worldwide. Many Asian countries overall development policy is to make limited use of natural resources, concentrating on the renewable ones. This policy recognizes the importance of rural activities, such as agriculture, forestry and handicrafts production. Bamboo is involved in all of these. The demand for bamboo is bound to increase over time, particularly for use as fodder and other multipurpose uses. There is plentiful scope for greater bamboo production, especially in the higher areas where communities are widely dispersed and agriculture is less profitable.

However, India is second largest bamboo production country in the world first is china. In many parts of the country the use of bamboo is everywhere. For centuries, communities have put the material to functional yet aesthetic use; their skills having evolved over centuries. Even today, by far the most important uses of bamboo are in the every day lives of people.

Bamboo is being used for multiple purposes almost in every state of India. In Maharashtra, Kolhapur district has largest area of bamboo cultivation, specifically Chandgad and Ajara Talukas have largest forest land and much potential land for cultivating bamboo. Most people living in hilly area have not much economic source which gives them the economic strength. Bamboo has not been cultivated commercially by farmers of selected both talukas, but even then it is an essential crop for this area to upliftment of poor people.

1. A.2 Significance of the Present Study:

Bamboo is known as the poor mans timber. Rural people including farmer and low- income level people depend on bamboo and bamboo based business. Today, bamboo is used along with traditional uses for basket, grain storing, furniture, constructions, paper mill and decorative products etc. However its potential is much more than this. Therefore bamboo business successfully experimented in Chandgad and Ajara talukas of Kolhapur district and the people of both talukas are closely related bamboo and

bamboo business activities. Thus, present study is required to understand bamboo and bamboo business in selective talukas.

1. A.3 Statement of the Problem:

As Kolhapur district is one of the agriculturally more developed districts in Maharashtra state. Some part of the district mostly in the hilly region, there is good scope of cultivation of bamboo which is one of the economic crops to the farmer and forest department.

The present study entitled “An Analytical study of Bamboo Business with special reference to Chandgad and Ajara talukas”. It is focus on the bamboo business and its economic use activities. The study proposed to understand the cultivation, utilisation, bamboo products and market potential of bamboo for bamboo business.

1. A.4 Scope of the Present Study:

The scope of present study is as follow.

1. The scope of study is limited to Chandgad and Ajara talukas in Kolhapur district.
2. The study helps to know the area under cultivation and production of bamboo.
3. The study reveals market potential as well as problem of bamboo business in selected talukas.
4. This study helps to know that how to maintain cost and benefit of bamboo business.
5. This study helps to understand bamboo, bamboo based product and by product.
6. This study revels how to generate employment in selected talukas.
7. This study will offer suggestions from its conclusions.

1. A.5 Objectives of the Present Study:

The following specific objectives are to be set for the purpose of the study.

1. To study the area under cultivation of bamboo and its production in the selected talukas.
2. To study the method and cost of cultivation in selected talukas.
3. To study the problem of bamboo business and its potential in the economic development of selected talukas.
4. To study the market potential of bamboo.
5. To suggest appropriate suggestion.

1. A.6 Hypotheses of the study:

The hypotheses for the present study are.

1. Chandgad and Ajara talukas have potential for bamboo cultivation in the district.
2. Bamboo is economic crop to the farmers and has good potential for bamboo business in both talukas.

1. A.7 Methodology of the study:

The present study is a case study method of research. The deep investigation is made of bamboo business in Chandgad and Ajara taluka of Kolhapur from all aspects.

1. A.7.1 Sample Procedure:

The researcher has used different techniques to collect the relevant data. As per the requirement researcher has implemented the sampling techniques. By using purposive sampling method researcher has selected two Talukas since this Talukas are dealing in bamboo business in large quantity. While selecting the sample respondent researcher as used purposive convenient sampling method since researcher is belonging from Chandgad Taluka. The total numbers of sample respondents are 128. Out of 128 sample respondents 80 are belonging from cultivator's category, 34

sample respondents are belonging from craftsmen and remaining 14 sample respondents are belonging from purchasers respectively. The further sample selection as per Taluka wise is as follows in table 1.1

Table 1.1 Sample Selections:

Sr. No.	Talukas	Engaged individuals in bamboo business			Total Respondent
		Bamboo cultivators	Bamboo Craftsman's	Bamboo Purchasers	
1	Chandgad	50	22	8	80
2	Ajara	30	12	6	48
3	Total	80	34	14	128

Thus selection was made on the basis of personal judgments from these respondents. In all 128 respondents the sample for the study as the selection was mostly deliberate choice of researchers.

1. A.7.2 Procedure of Data collections:

The present procedure implemented by the researcher to collect the data for the purpose of investigation is through primary and secondary data.

1. A.7.2.i Primary Data:

The researcher has used purposive convenient sampling method while selecting 128 respondents to collect the primary data. Informal interview was conducted by researcher wherever necessary to collect the primary data. For 128 respondents pre-tested structured questionnaire was prepared further as per categories of respondents (i.e. cultivators, Purchasers, Artisans). The questionnaire was distributed to the respondents gather the primary information. The other sources to collect primary data where used such as.

- a. Personal observation by the researcher.
- b. Pilot study by the researcher.
- c. Home visit of known respondents.
- d. Interaction with government representative.
- e. Oral Discussion and Personal interview during survey.
- f. Indirect oral investigation.

1. A.7.2.ii Secondary Data:

Secondary data collected from the Books, Gazettes, Journals, Articles, Magazines, handbooks, News paper, primary report from various government and semi government department and institution, use reference books available in Balasaheb Kharadekar Library Shivaji University Kolhapur. Similarly use Internet and various website relating to bamboo and bamboo trade.

1. A.7.3 Tools and Techniques used for Data Analysis:

The collected data was exposed in different statistical technique like classification, tabulation, percentage, diagrams, charts, and graphs for presentation of the data which is collected directly from respondents. The computer application such as Microsoft word, excel are mostly used to represent the data for systematic and accurate result.

1. A.8 Limitations of the Study:

The study has following limitations.

1. A.8.1 Geographical limitation:

The present study is related to the bamboo business in selected Chandgad and Ajara talukas of Kolhapur district.

1. A.8.2 Time limitation:

The period of the study is limited to last five year.

1. A.8.3 Methodology:

The study mostly depends upon primary data with supporting of secondary data.

1. A.8.4 Technical area:

The study will not cover the technical factors of bamboo cultivation.

1. A.8.5 Data availability:

The research will be based on collected data form various available sources.

1. A.9 Chapter Scheme:

The chapter scheme of the topic “An analytical study of Bamboo Business with special reference to Chandgad and Ajara talukas of Kolhapur district is as follows.

Chapter-I: Research Methodology and Review of literature: In this chapter the researcher covered the research design and methodology including introduction, scope, and objective of the study and limitation of the study as well as consider review of literature based on present study.

Chapter-II: Theoretical Background: This chapter covers the theoretical background of bamboo, bamboo recourses, bamboo environments, cultivation of bamboo, and utilisations of bamboo, market potential of bamboo and problem potential of bamboo business.

Chapter-III: Information at Glance: Under this chapter collect information regarding world bamboo business, Indian bamboo business, Maharashtra bamboo business, and Kolhapur bamboo business also collect information of the selected talukas profile, introduction of Bamboo Business in both talukas, information of bamboo and bamboo utilisation of both talukas.

Chapter-IV: Analysis and Interpretation of data: This chapter cover the data analysis and interpretation.

Chapter-V: Conclusion and Suggestions: This chapter cover the conclusion and suggestions.

1. A.10 Conclusion:

Bamboo as a fast growing plant on the earth, it is renewable resources with short gestation. This is new perspective of bamboo is needed a big change. In order to realize the full potential of bamboo, various technical, Financial and entrepreneurial interventions are needed in the field of forestry, land use; propagation technology for it is cultivation and sustainable use. Thus, there is need to understand bamboo and various related aspect of bamboo business in selected talukas.

1. B Review of literature:

The review of literature has been collected from various books, research papers and articles. Many more studies have been done on bamboo business and its related activity. Some of the important literatures among are considered herewith.

1. Shrikant Thate (1995) in his books "*Bamboo Van Sethi*" (Marathi) has given useful information of bamboo i.e. historical background, climate and soil requirement for bamboo cultivation, various species in India, bamboo agro forestry, bamboo crops and use of bamboo, economical important. He has also given information about harvesting method of bamboo, storage of bamboo, cost of production, selling and future prospective of bamboo cultivation. In his book researcher not only intend to inform about bamboo but also mentioned the cultivation of Manvel (*Dendrocalumas strictus*) is beneficial to the farmers compare to the any other crops.

2. The handbook entitled "*Bamboo Hirv sona – National Bamboo Mission Maharashtra*" (Marathi) edited by P.G. Thosare (2008) in this hand book collect various information regarding bamboo and focus on various aspect of bamboo such as reproduction, contribution of bamboo cultivation, various species of bamboo, important of bamboo and bamboo craft, various craft equipment, also researcher examined the new market potential, use of bamboo. In this book researcher discuss on bamboo house, bamboo solar system etc. According to his statement "for development to necessary bamboo development" also given detailed information of various organization which is activate in bamboo promotion and development.

3. A book "*The Bamboo - A Fresh Perspective*" F.A. Mc Clure (1966) is classified in three parts, in first part author has given detailed information about bamboo plant, in second parts he discussed on elite bamboo and propagations method and in third part he classified bamboo flowering,

fruiting behaviour in bamboo of different genera and species and also points out taxonomy of bamboo. The book is not only containing mass information of bamboo but also given detailed valuable insight of bamboo.

4. S. C. Nagpure, D. P. Wahile, and Anita G. Rangire(2008) articles "***Economic of Bamboo Production in Maharashtra State***" open with the remark that bamboo has been potential of providing ecological and livelihood security to million of poor in the world tapping , the vast economic potential for bamboo its cause researcher study the production of bamboo on forest as well as non forest land. Hence the researcher study aims attempt to estimate the cost and returns from bamboo production in Maharashtra state and evaluate the economic feasibility of bamboo production. Eight forest circles available in Maharashtra state out of that researcher purposively select Nagpur circle an availability input - output data for complete crop cycle of bamboo production for 35 years. Researcher adopted multi stage sampling design for study the data where collected by cost accounting methods from seven forest ranges in four division of Nagpur forest circle. The data where analyzed by employing simple statistical tools for testing economic availability.

In conclusion the researcher remark that it is need to be encouraged bamboo plantation on waste land as well as agriculture lands for economic upliftment of the private stake holders.

5. Sangeeta Prasad Mehra and L.K. Mehra (2007) "***Bamboo Cultivation - Potential and Prospect***" in this Articles focused on market potential of bamboo cultivation such as availability of land, technology, market, credit potential, detail break up of the unit cost and economic of bamboo plantation including site composition, planting technique, harvesting practices also discuss projection demand and supply (Estimated Planning commission 2003) and limitation. Finally researcher conclude that bamboo market is growing and offer new opportunities for formation of bamboo as alternative

to wood as well as other product. This is a golden opportunity for the farmer, entrepreneurs, industries, and banks as also government agencies to tap the potential under the sectors for economics, ecological and social gain.

6. In the article entitle “*Indian Bamboo Industry market overview and outlook*” researcher Nirvan Jyoti Bhattacharjee and kalian chakravarthy G. K. D. it it introduce bamboo plant and emphasis on global market scenario, bamboo product and global trade, similarly discuss on Indian bamboo market scenario, bamboo market prospective present and future, production, harvesting and storage, processing and marketing of bamboo also. In this articles researcher recommended that strong industry linkage essential same as research and development essential for product as well as productivity, therefore investment require for infrastructure across the board covering all area from availability of quality planting material, farming and harvesting technologies, storage facilities to strong linkage with the user industries in order to make the industries growth in size and profitability.

7. In Article entitled “*Bamboo cultivation in home gardens of Kerala, India*” researchers U. M. Chandrashekara, C. N. Krishnankutty and R. Ranamaharam pointed out that home garden agro forestry system, including the study of bamboo species in Kerala homesteads, Management of home garden bamboo, benefit cost ratio of bamboo in homesteads system, additional benefits of home garden bamboo, marketing of bamboo form home garden.

In their Article researchers it is observed that Bamboo is one of the plant components in homesteads agro forestry system of Kerala Bamboosa Bamboo, B.Vulgaris, and Dendrocalumas Stricts are common bamboo species cultivated in a homesteaded boundary. Also researchers point out that clump are managed by traditional method like mounding of soil and organic manure around the clump, detopping clump to reduce , shading of other crops and trending around the clump to restrict the

horizontal spread of bamboo root to the remaining parts of homesteads even for a minimal average annual cost , the estimated benefit cost ratio for bamboo is significantly higher than for perennial cash crops, seasonal and annual crop and tree component in home gardens of the state . Home gardens bamboo also provide several other tangibles and intangibles benefits to the home garden and can be regarded as one of the major components with high social value in a complex system of rural relationship.

Finally researchers conclude that in recent year homesteads bamboo cultivation, management and sustainable utilization are neglected. Bamboo wealth in the home garden system may be developed with more research back up, policy support, technical input and judicious, selection of species to meet the demand of the growers and consumers.

8. Ajay kumar (2008) in his articles ***“Investment Potential and Marketing in Bamboo Sectors”*** it is discussed on properties and use of bamboo, bamboo based product and initiatives of national bamboo mission and application for bamboo promoting.

9. The articles entitled ***“Investment opportunity for bank in channelising credit for raising bamboo plantation on north forest land”*** prepared by K. G. Karmkar, M.S. Haque, and Suman Kumar these expert intend on bamboo potential and NABARD initiative in bamboo promotion. Researchers discuss on three plantation models for bamboo cultivation which is prepared by NABARD IN 2005. Also researchers evaluate harvesting yield, financial availability and repayment period. In this articles researchers observed that green market are growing and offer new opportunity for promotion of bamboo as far as alternative goods thus investing in bamboo plantation will definitely help the farmer on one hand and provide investment opportunity to bank. The income from the produce of bamboo plantation would add to the livelihoods of the rural people and will help in making the demand of raw material of existing bamboo based industries also these plantation will

open various investment and employment opportunity in term of setting up of new generation bamboo based industries.

10. B.G. Sosola Banda and F. M. Johnssen (2005) in there research paper entitled "*Rural livelihoods on bamboo handicraft making and clump vending in Maverera, Dawa District Malawi*" researchers studied the bamboo enterprises involving handicraft making and clump vending in Maverera and Dawa District. Malawi where studied from October to December 2003. The aim of the researchers where to find out the contribution of bamboo enterprises to household income and management practices of the bamboo handicraft makers, bamboo collectors and the activities of bamboo stakeholders in the bamboo industries in Maverera. For the studied purpose researchers selected randomly 80 respondents from the bamboo clump vending communities for questionnaire survey and stratified random sampling was used to select 74 respondents from bamboo handicraft making village. Therefore focus group discussion on issue of bamboo enterprises where conducted in each of the five village selected. Hence perceived stakeholder where consulted to examined their role in bamboo enterprises. In this paper researchers observed that all respondents indicate that the income from bamboo enterprises was mainly for household petty cash i.e. hand to mouth consumption and there is no significant management practice were carried out by the entrepreneurs.

1. C Need of the study

The present studies are "*Analytical study of bamboo business with special reference of Chandgad and Ajara talukas*". It is necessary to further evident from the fact of bamboo business and its livelihood activities in both talukas, other hand bamboo business has been huge prospective in 21st century as well as future market and sustainable development. Hence there is arising a need to explain the various aspect of bamboo business and its potentials. For this reason present study an attempt has been made to

study the various aspects with special reference Chandgad and Ajara talukas and it is find out suitable strategy to increase bamboo business market potential as well as understand bamboo business activity in both talukas.

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