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Constraints Analysis and Prospects of Cashew Growers in Sindhudurg District (Maharashtra State)

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Abstract

This paper emphasize the importance of cashew crop as cash crop in economy due to spot payment, less investment, export earnings. Through it has been good prospects, need of present era is to increase the productivity of this crop, which would help to earn foreign exchange. Situated in the coastal area, Sindhudurg is benefited by the tropical atmosphere, plenty of dry land and ample hilly area which are very much suitable for horticultural products, preferably cashewnut. There is tremendous growth opportunity for processing cashew along with supplementary business such as Dairy and Poultry. Promotion of this crop would help for industrialization, solve the problem of unemployment. Therefore, such topic had been taken for study

The important finding of the study is-

- More than 67% of the land under the horticulture is occupied by cashewnut plantation, out of which 42% of the plantation is yet to be matured.
- The lack of knowledge about the practice like planting method, fertilizers dose, and government scheme was the main constraint.
- About 64% of the cultivators selling their product as soon as it became available due to the pressing need of money.

Keywords: Constraint, Cultivator, Tropical, Ample

Introduction

Horticulture plays an important role in the development of the district of Sindhudurg. Rice and Raggie are the main crops grown in this district, which fulfill the needs of the cultivators for not more than six months due to their meager production. Cashew, mango, coconut and betel nut are the important cash crops of this district and they help to raise foreign exchange earnings on large scale. Hence, Horticulture department is inevitable and on ultimate for the economic development of this district.

Situated in the coastal area, Sidhudurg district is benefited by the tropical atmosphere, plenty of dry land and ample hilly area, which are very much suitable for horticultural products preferably cashewnut. On the contrary, agricultural products such as sugarcane or tobacco cannot grow here. Likewise, industry could not flourish. Of course, Dairy and Poultry can be supplemented to the agriculture but there are also certain limitations of their progress on account of inadequate transport and storage facilities and reliable marketing channels.

Objectives

- To know the overall trend of cashew production in Sindhudurg district.
- To know the different problems and prospects of cashew growers through primary survey.
- To suggest recommendations to cashew growers.

Hypothesis

- Continuous declining trend in cashew production in Sindhudurg district.
- Area under cashew cultivation and cashew yield are continuously declining.
- Finance, Marketing, Limited guidance, lack of adequate knowledge of market is the main problems of cashew growers.

Literature Review

Review of literature is considered to be one of the significant components in the research process. Reviewing of an existing literature pertaining to the chosen research

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problem assumes an important role in providing and understanding to a researcher about an amount of research work that was already undertaken on the selected research problems. Review of literature will indeed serve two main purposes. Firstly, it enables a researcher to know the research gap in chosen problem area so as to include the relevant on researched areas, which are felt to be relevant and accordingly, relevant objectives can be set for the proposed research topic. Secondly, it will provide a comprehensive knowledge to a researcher about the research process and the various elements involved in it.

- Shaikh (2003): In this study 'An adoption of Custard Apple Technology by the growers' reported that almost all the growers were adopting the technology of soil requirement, spacing and filling of pits, while 50% farmers were adopting the recommended doses of fertilizers, less than 25% growers were adopting the technology of diseases and pest control, transplanting by seedlings in July-August and irrigation practices.
- Sing (2005): Studied 'The economics of production and marketing of banana in Gorakhpur District of Uttar Pradesh'. He examined those two varieties namely local 'Rambhog' and 'Harichal', which are grown in the study area. The local banana intercropped with paddy in Kharif and Wheat or Pea in Rabi but no inter cropping was practiced in Harichal banana. The per hectare gross returns from local banana amounted to Rs. 49,387/- and the net returns Rs. 21,393/-
- Samant (2007): Examined 'Marketing of horticulture products in Sawantwadi Tahsil with reference to cashewnut'. He studied problems and prospects of horticulture in Sawantwadi taluka. He also studied marketing policies; channel wise cost spread analysis of cashew product in Sawantwadi taluka. For this study, the data was collected through different questionnaire for cultivators, traders and processing unit etc.
- R. Venkattakumar (2008): Studied 'The Socio-economic impact of cashew cultivation in Cuddalore District of Tamil Nadu'. Cuddalore district, which has the highest productivity, second largest area under cashew and second highest number of cashew processing industries (20% of the total) in Tamil Nadu, contributes a major share in the cashew economy of the state. He identified major constraints in cashew cultivation such as lack of high yielding verities which perform better than local types, yield reduction, lack of better market price, for raw cashew nuts, lack of irrigation facility, lack of supply of quality planting material (cashew grafts), reduction in nut quality, due to summer or pre-monsoon rains etc.
- The researcher suggested that introduction and popularization of high yielding cashew varieties, supply of quality planting material (cashew grafts), organizing awareness campaign on various improved aspect of cashew cultivation to educate the cashew growers, implementing subsidy scheme on drip irrigation.
- Parab (2010): Studied 'Cashew Production Technology in India'. He had stated requirement of soil, climate and preparation of land, layout and planting, inter cropping of cashew. He studied various methods to control diseases pests on cashews. He also studied various problems faced by cashew growers, traders and processing unit.

Research Methodology

Profile of Sindhudurg District

Location

The extreme southern pattern of the western coast of Maharashtra is known as Sindhudurg district. Formerly, it was a part of the unbifurcated Ratnagiri district, came into existence as a separate administrative district from 1st May 1981. Geographically, it is one of the smallest but beautiful districts, in the state of Maharashtra. The name 'Sindhudurg' is a derivative of the fort 'Sindhudurg' which was built during the regime of the great king 'Chhatrapati Shivaji'. On island near Malvan coast.

The region is a coastal strip running north to south along the western coast of Maharashtra and Sahyadri, till ranges and lies between 15° 37' to 16° 40' north latitude and 73° 19' and 74° 13' east longitude. The district has a North South length of about 145 kilometers and an average width of East West 64 kilometers. The district enjoys a coast line of the Arabian Sea of about 121 kilometers. The

area of district is 5087.5 square kilometers. Ratnagiri and Kolhapur district of Maharashtra state are situated on the north and the east respectively whereas Belgaum district of Karnataka state is situated on the east and the beautiful state Goa is situated to the south of this district.

Topography

The district has 8 tehsils, these are Sawantwadi, Dodamarg, Vengurla, Kudal, Malvan, Kankavli, Deodgad and Vaibhavwadi. The district can be divided into 4 parts viz. hilly areas of Sahyadri and its offshoots, the plateau-surfaced area used for crops and coastal plains where coconut, cashewnut and fishing are the main source of livelihood. There are mainly four ghats in this district i.e. Amboli, Phonda, Ramghat, and Rajapurghati. Amboli is a tourist center where the Maharashtra Tourism Development Corporation has built well equipped suits.

Rainfall

The district is under the influence of the westernize monsoon winds and experiences heavy rainfall from 2750mm to 3000mm every year.

Climate

As a coastal area, the climate of the district is humid. Particularly, in the rainy season, it seems to be foggy in hilly areas. Also, being a coastal strip, variation is temperature ranges between 17˚.3 centigrade to 33˚.5 centigrade.

Hills and Rivers

Most of the land surface of Sindhudurg is hilly. Terekhol, Waghotan, deogad, Karli, Gad, Achara and Mochemad are some important rivers.

Agriculture and Horticulture

Agriculture is the main source of income in the district. But the fertility of land is very low as compared to the land of upper region. At least 70% of the population relies upon agriculture. Heavy rain, sandy soil, rocks and sudden ups and downs of the land are some of the reasons of the low yield. The government of Maharashtra to make the land more fertile along with some minor irrigation schemes has introduced advanced agro-technology.

Horticulture is the main hope of the district. Due to long gestation period, people are reluctant to take up horticulture on a large scale. In the district, main crops are coconut, cashew, mango, betel nut.

Industry

Due to coastal and topographical area, there is a lack of various industries in the district as compared to other districts of the state. The district is industrially backward because-

- There are no basic raw materials.
- There is a drain of entrepreneurship to Mumbai, Kolhapur and Pune.
- Prohibitory cost of transportation.
- Lack of skilled and enthusiastic labor force.
- Frequent power failures.
- The district offers a good scope for the development cottage industries such as carpentry, bamboo-work.

Fisheries

Maharashtra is the second largest fishing state in India after Kerala. The district's fishing area is about 16,000 sq. km. On the coast line, there are 76 villages having nearly 4118 active fishermen.

Data Source

The data sources used for this study were both primary and secondary.

Primary Data

The primary data was collected from the cashew growers of Sindhudurg district. The data related to profile of the cashew growers, their cropping pattern, selling pattern, interest in the plantation, problems about assembling, selling and financing of cashewnuts, etc. was collected through a well-structured questionnaire cum interview schedules from the sample cashew growers. The questionnaire was designed by keeping in mind the objectives of study. The primary data was collected from 160 cashew growers from Sindhudurg district.

Secondary data

The secondary data was vital in developing a theoretical framework and to get deep knowledge about cashew production technology.

Secondary data has been collected from books, journals.

Selection Procedure

Population Size

There are 8 talukas in Sindhudurg District. The total number of cashew growers is 1580 in Sindhudurg District.

Sampling Unit

Cashew growers of Sindhudurg district are selected for analyzing their problems, related with finance, production and marketing etc.

Sample Size

There are 1580 cashew growers in the district. In order to seek the opinions of cashew growers with regard to their problems, 10% of the sampling unit i.e. 160 cashew growers are randomly selected.

Sampling Technique

For the present study, a stratified sampling technique was employed. The data was collected from 160 respondents who were clustered into 8 different segments based on talukas i.e. Sawantwadi, Dodamarg, Vengurla, Kudal, Kankavli, Vaibhavwadi, Deogad, Malvan at the first stage.

At the second stage, which were further divided into 2 villages in each taluka namely Banda and Degve from Sawantwadi, Usap and Pikule from Dodamarg, Math and Shiroda from Vengurla, Oros and Tersebambarde from Kudal, Achara and Kumbhar math from Malvan, Mond and Vaghotan from Deogad, Kokisare and Sherpe from Vaibhavwadi. And at the third stage, which are further divided into 10 cashew growers respondents each in those 2 villages.

Analysis and Discussion

The objective of the research is to study overall trend of cashew production in Sindhudurg district, Area under cashew production, problems and prospects of cashew growers in Sindhudurg District. The same has been analyzed and discussed in this chapter.

Table 1: Analysis of Area under Cashew Nut Production and Productivity of Sindhudurg District

Year	*Total Area(HA)*	*%*	*Productive Area(HA)*	*%*	*Productivity (kilo per HA)*	*%*	*Production (in Quintal)*	*%*
2013-14	57258	19.47	38851	19.42	7708	19.20	386895.68	18.69
2014-15	58009	19.72	39197	19.59	8035	20.01	403602.58	19.5
2015-16	59009	20.06	39680	19.83	8146	20.29	403403.30	19.49
2016-17	59540	20.26	40289	20.13	8147	20.29	431054.86	20.84
2017-18	60212	20.49	42089	21.03	8111	20.21	444450.70	21.48
	294028	100.00	200106	100.00	40147	100.00	2069407.12	100.00

Source: Agriculture Department, Sindhudurg.

Table 1 indicates that up to 2017-18 in Sindhudurg District, total area is 60,212 hectares, for this area about 42089 hectares are under cashew production. It means that about 18,123 hectares of land is still uncultivated, according to the land record of Agriculture department, Sindhudurg if this land is brought under cashew plantation, further 36, 24,600trees (200 plants per hectare) can be planted which could produce about 36,246 tons of cashew nuts and will fetch Rs. 10,87,380crores per year at the minimum current market rate Rs. 30/- per kg.

In 2017-18, production of Sindhudurg district is 4,44,450.70 quintals. It increased by 0.64% as compared to 2016-17. If uncultivated land is brought under cashew plantation, the cashew production will be increased.

Table 2: Analysis of Problems of Cashew Growers

Sr. No.	Problems	No. of Respondents (out of 160)	%
1	Planting and Maintaining	120	75
2	Assembly of cashew kernels	90	56.25
3	Storing	80	50
4	Selling	140	87.50
5	Collecting information	110	68.75
6	Finance	100	62.50

Source: Primary Survey

Table 2 indicates the problems of cashew growers. The problems are about planting and maintaining, assembly of cashew kernels, storing, selling, and collecting information and finance.

According to primary survey, 75% of the respondents were found to have facing the problem of cultivation. About 56.25% are facing the problems of assembly of cashew kernels. About 50% of the respondents have facing the problem of storage. About 87.50% of the respondents have facing the problem of selling. About 62.50% of the respondents have facing the problem of finance.

The problem of plant protection and its up keeping of plants is the basic problem. The problem of plant protection mainly arises in summer season. Pedestrians passing by put a fire by smoking and dry grass catch the fire immediately and spread over the fire immediately and spread over the planted area and all plants burnt out by that fire. Thus the fire protection is also the serious problem. Further the plants are to be protected from wild animals as pigs or cattle. They used to destroy the small plants in search of their food. Further the plants are to be protected from various diseases of plants or various warms as t-Mosquito, Truck Warms etc.

In Sindhudurg, many respondent cultivators have their cashew plantations in forest area or hilly area. Therefore, they have been suffering in serious problem of assembly of cashew kernels. The proper ways of collecting the cashew kernels is to collect them after falling down the tree naturally and separate the cashew apples attached to it. But the cattle and wild animals as pig etc. are used to eat the cashew apples and thereby cashew nuts attached to it are either broken or lost into the fallen leaves or bushes under the tree. This wastage is to be suffered by the cultivators. Any one steals the fallen cashew kernels easily. Thus cultivators also suffer a loss of theft.

In order to avoid these losses, the cultivators prefer to get the produce pre-matured. The cashew apples are pulled out from the bunch with help of long bamboo stick. While pulling out the ripe cashew apples, the un-matured cashew kernels from the bunch they are to be falling down and cause a great loss.

Table 3: Analysis of Prospects of Cashew Business According to Cashew Growers

Sr. No.	Prospects	No. Of Respondents	%
a.	Yes	160	
b.	No		
	Reasons:-		
1	Good cash crop	160	100
2	Spot Payment	140	87.5
3	Less Investment	130	81.25
4	Less Expose to Natural Calamities	100	62.50
5	Export Earnings	100	100

Source: Primary Survey

Table 3 shows, the analysis of prospects of cashew according to cashew growers. According to 100% respondents of Sindhudurg, cashew nut product has glorious prospects though there are various problems to be faced, at the different steps, by different functionaries.

According to 87.5% respondents, cashew product has better future because of spot payment earned by this crop. According to 81.25% respondents, cashew crop has good prospects because of less investment required. Other agriculture crop requires more investment than cashew. According to 62.50% respondent, cashew has good prospects because of less expose to natural calamities as compare to other crops. According to 100% respondents, cashew has good prospects because it is export oriented crop.

Conclusions and Suggestions

The need of present era is to increase the productivity of each and every field crop, which would help to feeding the ever increasing population of our country. This ever

increasing population has been creating many problems. Our country faces the very critical problem of earning the foreign exchange. The foreign exchange is needed to balance the trade with other countries. Thus, it is essential to produce the commodities having potential of marketing abroad. Cashew nut is one such commodity and occupies an important place among India's export commodities.

The following conclusions have been emerged under the study and some recommendations to grab a prominent position to market.

- More than 67% of the land under the horticulture is occupied by cashew nut plantations, out of which 42% of the plantation is yet to be matured.
- Thus, there is a wide scope to increase the plantation in the existing land available for cashew plantation.
- Existing output per tree, per year is very low i.e. 5 kg per tree per year. The old trees grown from the seeds or seedlings hence have low yield and poor quality due to old age and absence of upkeep, treating them a wild crop.
- The new technology should be encouraged. The propagation of cashew through seeds and seedlings should be discouraged. The program should be set up for transfer of scientific technology to framing community by way of farmer's training.
- In the study, it was also found that the lack of knowledge about practice like planting method, fertilizers dose, Government Scheme were the major constraints.
- The extension organization in the area needs to organize practical oriented training to the needy farmers about the improved technologies of cashew nut cultivation.
- The cultivators looking at this crop as a supplementary to their agriculture. Shortly, it may turn into a primary occupational activity. Cashew nut should be given importance in view of its potential as a productive and cash crop.
- More than 80% of the cultivators favoring the existence of co-operative societies for fair dealings. But still they prefer the local traders due to home services rendered by them. The cultivators need home services for the lack of transport facilities. The efforts should be made to improve the communication and transport system.
- About 64% of the cultivators selling their product as soon as it became available due to the pressing the need of money.
- The facility of advance payment against the crop may make available through co-operative societies to the cultivators to protect their interest.
- The cultivators are satisfied with whatever they get and not aware of the efforts to be made for increasing the productivity of plant, improve the market relations. In order to increase their earnings, training at firm's level is necessary.

All transactions are in terms of cash hence the functionaries involved, has to face the finance problems. Government should help for easy financial assistance.

Testing of Hypothesis

- Continuous declining trends in cashew production in Sindhudurg.

  Findings of the study showed an overall increasing trend of cashew production during the study period, the hypothesis has been disproved.
- Area under cashew cultivation and cashew yield are continuously declining.

  Findings of the study have not justified. This hypothesis reveals a continuous increasing trend in the area under cashew cultivation and cashew yield.
- Finance, Marketing and limited guidance are the main problems of cashew growers.

  Findings of the study have justified this hypothesis as finance, marketing and limited guidance are the main problems of cashew growers.

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Website

www.wikipedia.org/wiki/cashew

www.cashewexport.com

Appendix

A Study of constraints analysis and prospects of Cashew Growers in Sindhudurg District (Maharashtra State)

Questionnaire

Name:-

Age:-

Address:-