Awareness of Cashew Products Potential among Cashew Farmers in Ratnagiri District, Maharashtra, India: A Survey

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Abstract

The Cashew tree is a tropical evergreen tree that produces the cashew seed and the cashew apple. Cashew is one of the most valuable and nutritious food in the global commodity markets and has the potential to generate employment and revenue at national and international level. Cashew has become an important agricultural commodity in its purest industrial sense and though this fact is highly esteemed in many countries the world over, India is yet to tap into the rich potentials of this cash crop which has great benefits for the Cashew Farmers and the country as a whole. Despite the challenges, there are tremendous untapped potentials of Cashew in India's agriculture and agribusiness sector. The study investigated the awareness of Cashew products potentials among Cashew Farmers in Ratnagiri District. Four Hundred respondent Cashew farmers were sampled from Forty Villages in Ratnagiri District, Maharashtra, India. Multi Stage random sampling procedure is adopted in this study. In this study, the data were obtained from a field survey through the use of questionnaires, administered through personal interview to highlight Awareness of Cashew Products Potential among Cashew Farmers in Ratnagiri District, Maharashtra, India. Majority of the Respondent Cashew Farmers were fall in the age group of Thirty to Fifty Nine and Majority of Cashew Farmers are Married, Educated and Above Poverty Line. Awareness of Cashew Products Potential among Cashew Farmers will help to increase cashew farmers Income. It can be provided through training programs, local newspapers, and local magazines to Cashew Farmers in Ratnagiri District. Maharashtra Government should initiate to conduct awareness programs of Cashew Products Potential among Cashew Farmers in Ratnagiri District.

KEYWORDS: Cashew, Cashew Farmers, Ratnagiri District

I) Introduction

The Botanical name for Cashew is "Anacardium Occidentale". It's a "Cash Crop" for most of the farmers around the world. Cashews are loaded with powerful nutrients, promote heart health, digestion, and healthy brain functioning. Cashews Kernels are popular and are used while baking food, as well as while cooking meals. They can be crushed and added to a variety of vegetarian and non-vegetarian dishes, or can just be eaten raw, roasted, and/or with salt. The Cashew fruit is also known as the Cashew Apple it has anti-bacterial uses and can treat ulcers in the stomach and gastritis. Since its juice has high contents of vitamin C, it can be used to prevent scurvy. The other products from Cashew Apple are Cashew Apple Pulp, Cashew Apple Wine and Cashew Apple Prune. The cashew comprises of approximately 30% nut and 70% shell. Cashew shells typically contain: 10.8% water and 2.6% ash. Cashew Nut Shell Liquid (CNSL) is a versatile by-product of the cashew industry. The nut has a shell of about 1/ 8 inch thickness inside which is a soft honey comb structure containing a dark reddish brown viscous liquid.

Biochar (fertilizer) and Fossil Fuel (Combustion, Gasification, Pyrolysis) are other by-products of Cashew.

II) Materials & Methods

1. Area of study

The study was carried out in villages of Ratnagiri District in Maharashtra state, India. Ratnagiri District is one of the leading producers of Cashew in Maharashtra; India is the reason behind the choice of Ratnagiri District for this study. Ratnagiri District is located in the southwestern part of Maharashtra, India. The district is a part of Konkan division of Maharashtra. It is Located at Latitude-16.9, Longitude-73.2. The district is bounded by the Arabian Sea to the west, Sindhudurg district to the south, Raigad district to the north and Satara, Sangli and Kolhapur districts to the east. This district is part of Konkan division. Ratnagiri District occupies an area of approximately 8208 square kilometers. It's in the 72 meters to 12 meters elevation range. This District belongs to Western India. It is a Coastal district and sharing border with Arabian sea. It has an average elevation of 11 meters (36 feet). The Sahyadri Mountains border Ratnagiri to the east. Ratnagiri district is one of the 36 districts of Maharashtra state in Western India. Ratnagiri (city) is the district headquarters of the district. The district is 11.33% urban. It covers an area of 1,18,809 square miles. Climate of Ratnagiri District is Hot in summer. Ratnagiri District summer highest day temperature is in between 30 °C to 39 °C. Average temperatures of January is 26 °C , February is 26 °C , March is 28 °C , April is 28 °C , May is 30 °C. Marathi is the Local Language here. Also People Speaks Daldi

2. Data collection & Sampling Methods

Primary data were used in this study. The data were obtained from a field survey through the use of questionnaires, administered through personal interview. Marathi Language used to communicate with farmers. The questionnaire was designed to elicit information on Awareness of Cashew Products Potential among Cashew Farmers in Ratnagiri District. The cashew farmers in Ratnagiri District of Maharashtra state constitute the target population for this study. Multi Stage random sampling procedure is adopted in this study. A Three stage simple random sampling method has been used for selecting the units and respondents. Stage 1: Taluka Level: TheTalukas in Ratnagiri District. Ratnagiri (8): Chiplun, Sangameshwar, Khed, Dapoli, Rajapur, Guhagar, Lanja, Mandangad. Stage 2: 5 Villages from Each Taluka were selected for study. 40 Villages from Ratnagiri District were selected. Total 40 villages selected for the study. Stage 3: 10 Farmers randomly selected from each village. Total 400 farmers selected for the study.

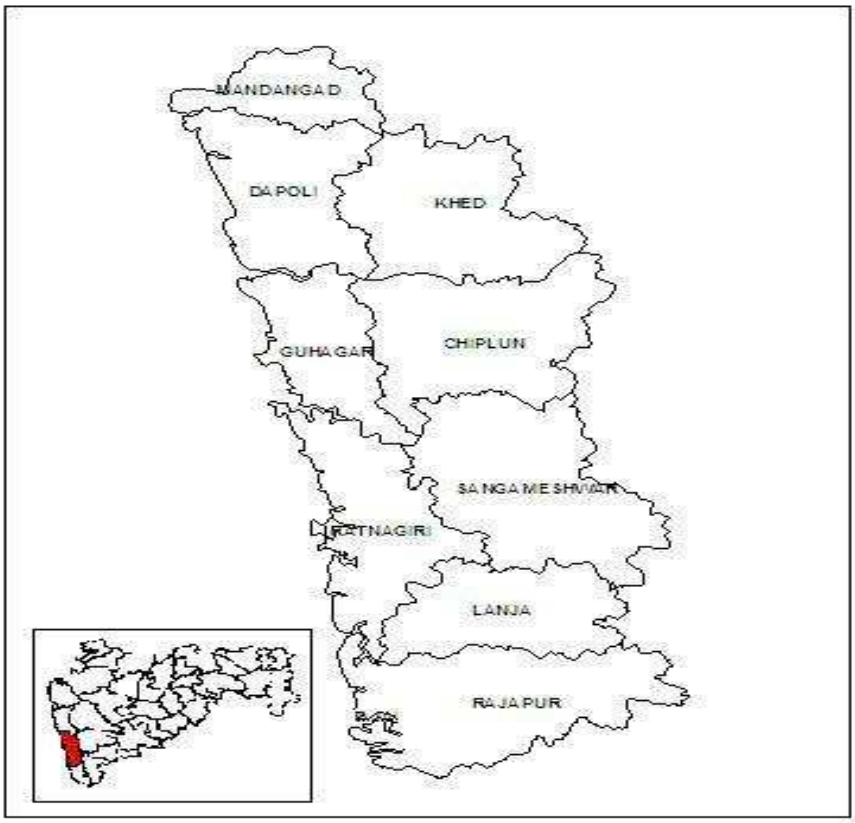

Figure 1: Location Map of study Area
Source: S.S.P. Mishra Superintending Hydrogeologist Government of India, Ministry of Water Resources, Central Ground Water Board (1825/DBR/2014)

3. Analytical Framework

Simple frequency tables and percentages were used to profile the socio-economic characteristics and Awareness of Cashew Products Potential among Cashew Farmers in Ratnagiri District.

III) Results & Discussion

1. Socio-economic Characteristics of the Respondents

This study found that a sizeable proportion of female were also involved in Cashew farming. Table 1 revealed that 52.50% Male and 47.50% Female Respondents. Most of the cashew farmer (36.25%) fell into the age bracket of 45-59 and (33.75%) fell into the age bracket of 30-44 years. It shows that majority of the cashew farmers fell into the age of 30-59 years. Majority of Respondents were married (64.50%). This indicates that farmers with family are more intended in cashew farming. Undergraduates (60%) are more involved in Cashew farming compare to Graduates (19%). Farmers above poverty line (89%) were more involved than farmer below poverty line (11%). It shows that majority of Cashew nut farmers are not poor farmers.

Table 1: Socio-Economic Characteristics of the Respondents		
Variables	**Frequency**	**Percentage**
Gender		
Male	210	52.50%
Female	190	47.50%
Age (Years)		
15-29	60	15.00%
30-44	135	33.75%
45-59	145	36.25%
60-74	45	11.25%
75-89	15	3.75%
Marital Status		
Single	84	21.00%
Married	258	64.50%
Divorced	12	3.00%
Widowed	46	11.50%
Education		
Illiterate	60	15.00%
Undergraduates	240	60.00%
Graduate	76	19.00%
Post Graduate	24	6.00%
Income		
Below Poverty Line	44	11.00%
Above Poverty Line	356	89.00%
Source: Field Survey 2018		

Table 2 shows the Awareness of Cashew Products Potential among Cashew Farmers in Ratnagiri District, Maharashtra, India. All (100%) farmers aware about Cashew Nut Kernels and Cashew Apple Juice. 86% farmers aware of Cashew Apple Pulp. 80% farmers aware about Cashew Apple Wine. Only 27% Cashew farmers aware about Cashew Apple Prunes. Very few farmers (5%) are aware about (CNSL) Cashew Nut Shell Liquid. Only 12% Farmers Know about Biochar (fertilizer). Only 2% farmers are aware about Fossil Fuel (Combustion, Gasification, Pyrolysis).

Table 2: Awareness of Cashew Products Potential among Cashew Farmers in Ratnagiri District, Maharashtra, India

Variables	Frequency	Percentage
Kernel from Cashew Nuts	400	100%
Cashew Apple Juice	400	100%
Cashew Apple Pulp	344	86%
Cashew Apple Wine	320	80%
Cashew Apple Prunes	108	27%
CNSL (Cashew Nut Shell Liquid)	20	5%
Biochar (fertilizer)	48	12%
Fossil Fuel (Combustion, Gasification, Pyrolysis)	8	2%

Source: Field Survey 2018

IV) Conclusion

This study examined the Awareness of Cashew Products Potential among Cashew Farmers in Ratnagiri District, Maharashtra, India. The survey shows that Male and female contribution is almost equal in Cashew Farming as Male contributes 52.50% and 47.50% are females. Education and income level of Cashew nut farmers are pretty high as compare to other farmers of Maharashtra. 85% Cashew Farmers are educated and 89% farmers are above poverty line. The farmers are aware about Cashew Nut Kernel, Cashew Apple Wine, Cashew Apple Juice, and Cashew Apple Pulp. There is a need of Awareness among Cashew Farmers about Cashew Apple Prunes, CNSL (Cashew Nut Shell Liquid), Biochar (fertilizer) and Fossil Fuel (Combustion, Gasification, Pyrolysis). Awareness of Cashew Products Potential among Cashew Farmers will help to increase Cashew farmers Income. This awareness can be provided through training programs, local newspapers, and local magazines to Cashew Farmers in Ratnagiri District. Such awareness can be provided in School and colleges as most of the Cashew farmers are educated. Maharashtra Government should initiate to conduct awareness programs of Cashew Products Potential among Cashew Farmers in Ratnagiri District.

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