

## **A STUDY ON THE IMPACT OF ICT IN SUGARCANE FARMER IN BLOCK PANDARIYA, CHHATTISGARH**

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**Abstract:** *The paper is investigated use of ICT (Information Communication Technology) for sugarcane farmers of district Kabirdham state Chhattisgarh, India. ICT help the farmers to identify the sources of information and how to access those information in selected areas for better cultivation of sugarcane. There are Govt. Running two sugar factory Bhoramdeo Sahakari Shakkar Karkhana Maryadit Kawardha and second is Iron Man Sardar Vallabh Bhai Patel Cooperative Sugar Factory Limited, Pandariya and more than 100 plus private jaggery (Gud) Factory. Register Shareholder farmers in both sugar factory 23717 other famers sell sugarcane in Gud Factories. sugarcane production depending on new technologies and innovation continuously the young farmers are more active and adopting new technology of farming to change for the better than the older the major problem to affecting the sugarcane production inadequate credit facilities, extension of support the problem of pests, diseases attacks, low price, labour shortage. The major source of information for the farmer is ICT. It is recommended the resources use inputs information are effectively utilized.*

**Key Word :** *Sugarcan farmer production, Use of ICT in Agriculture, Challenges, ICT, Marketing,*

**Introduction:** India has the second largest population in the world. According to the Census 2011 more than 70% population living in the villages and the main occupation of the peoples is agriculture for living life, employment etc. Agriculture of major contribution in Indian GDP as compare to other fields. Indian farmer having different type of cropping which many one of is sugarcane farming. The Chhattisgarh state of major sugarcane production having in the dist Kabirdham. The Geographical location of dist Kabirdham Latitude 21.32 to 21.35 North and Longitude 80.48 to 81.28 East. The total population of dist is 8,22,526 and 80% people living in rural area small villages and the literacy rate of district is 50.33%. peoples are mostly dependent in the agriculture. The rural area farmer belong to small land holder farmers. The farmer have maximum 2 to 5 hacter land. The Raining session started from 14 jun to till october end the distrtict average rainfall 885.80mm. The Chhattisgarh state of main cropping is paddy farming it is Kabirdham district also but last 8 to 12 years paddy farming are decreased and sugarcane farming are incresed. The Govt. running two sugar factory there are registered shareholder farmers 23717 unregistered farmer sell sugarcane in private jaggery (Gud) Factory. Govt buy sugarcane from farmer per hectare 400 quintals Govt of India decided the price of par quintals sugarcane every year, for season 2023-2024 is Rs. 400.

Bhoramdeo Sahakari Shakkar Karkhana Maryadit is situated at Ramhepur, Kawardha Tal-Bodla, dist-Kabirdham (Chhattisgarh). The factory started Cooperative its operation from season 2002-2003. The crushing capacity was 2500 Metric Ton Per day, after expanded crushing capacity is 3500 Metric Ton Per day and 6MW power pant installed in the premises of factory. The sugar factory

started every year for sugar production in month of November to March. Department of the factory is Engineering, Manufacturing, Cane, Purchase, Sales, Store Finance & Account etc.

Iron Man Sardar Vallabh Bhai Patel Cooperative Sugar Factory Limited, Pandariya, Kabirdham C.G. This is the fourth sugar factory of Chhattisgarh state, In the session 2016-17 it was constructed and started from 21 January 2017. The crushing capacity of the factory is 2500TCD and also 14 MW co-generation power plant is installed in the factory. There are 11881 share holder farmers, the factory stood first in the entire India with a recovery of 13.12% crushing season 2021-22.

### ***Objective of the Study***

The objective of the study to examine Sugarcane farmers Efficiency of the Block Pandariya area of Chhattisgarh State.

- i. Agriculture information center established in each villages.
- ii. Identify the constraints to sugarcane production of the sugarcane farmers.
- iii. Determine sources of information of sugarcane farmers.
- iv. Each crop Extension and advisory service available on day to day operation.

### ***Justification of the study***

This study will also expose the potentiality of the region in term of sugarcane production capabilities aimed at attracting local and international investors. It will help the farmers discover new technology involved in sugarcane farming and production. Also the study will be useful to policy makers in the formulation of policy to boost sugarcane production in the region. The study will also contribute to literature and add to the body of knowledge by providing data on sugarcane production in the area to researchers and students to conduct similar study on the topic. [1]

### ***Scope of the study***

The study will cover sugarcane small scale farmers in Block Pandaria state Chhattisgarh India. with emphasis on new technology and efficient use of various practices in farming sugarcane as well as constraints to sugarcane production. [1]

### ***Source of data***

Data for the study were collected mainly from the primary and secondary source. This was achieved through the administration questionnaire which was designed and distributed to the respondents. The questionnaire will also be backed up with personal visit and oral interviews to the farmers on farm household production activities of sugarcane during 2022/2023 cropping season.

### ***Sampling procedure and sample size***

Three (3) blocks major sugarcane producing area Pandaria, Bodala, Kabirdham, will be selected, 3 wards were selected from each LGAs to make up a total of 9 village in the local government area that were purposively selected. Because the sugarcane farmers are not much, the researcher will sample all (75) of them and that will mean 100% sample proportion. The sample size will be 75 respondents who will be administered with a well-structured questionnaire.

### ***Performance Evaluation***

Functions of the Information Communication Technology Group.

- i. Establishing farmer's information and advisory center at each sugar mill.
- ii. Creating farmer advisory committees consisting of farmer relating to Sugarcane.
- iii. To prepare strategic search extension plan of each sugar mill zone.
- iv. Supply of information to the farmers for of sugarcane by establishing procurement Computer System using Internet.

- v. To arrange exposure visit to the Farm Organization / Commodities Association with in each sugar mill zone of India for providing them the validating and refining technology to increase their income
- vi. Encouragement of Private sector in technology Transfer to the farmer. [2]

### **Precision of sugarcane management**

sugarcane production is undertaken in an environmentally socially and economically sustainable manner with the following objectives

- i. Create and maintain a forum to identify and share information about trends in sugarcane production and primary processing;
- ii. Challenge assumptions and foster understanding globally
- iii. Ensure open and transparent dissemination of information;
- iv. Agree on key impacts of sugarcane production and primary processing;
- v. Agree on principles of “Better Sugarcane”;
- vi. Agree on principles of stakeholder engagement and communications;
- vi Establish priorities for solution-oriented research and technological innovation;

### **In order to increase sugarcane productivity in a cost effective manner, it is important to:**

- a. Bring vibrancy to the rural economy.
- b. Make sugarcane remunerative even to small and marginal farmers by doubling the income of farmer, reducing the cost of cultivation, enhancing yields, and increasing prices receivable by farmers.
- c. Double the rate of growth of public and private investment in agriculture.
- d. Increase the access of our farmers to markets, to competitive sources of finance, and to knowledge that allows them to compete in a global economy.
- e. Increase value addition and reduce wastage at every stage linking the farmer to the sugar mill, so that both benefit. [3]

### ***Weather Information***

Weather forecasting, modeling, and research are advancing rapidly with the advent of high performance computing and communications systems. Use of computer-generated model guidance by meteorologists has steadily increased that will help the farmers to take right decision in timely manner.

### ***Market Information***

The useful information is essential for sugarcane farmers to increase their farm yields. Information such as price details of seeds, fertilizers, pesticides and availability of these products gives the farmer to take decision in choosing right seed, fertilizer and pesticide required for the better cropping. The vital information, such as fixation of sugarcane procurement price, procurement targets etc are also most important. [4]

### ***Results and Discussion***

Physical properties of sugarcane crop at the time of harvest were studied for the harvesting. The various physical parameters such as length, diameter of cane, cane, row to row and plant to plant distance were studied in Kawardha (Kabirdham) district, (C.G.). [4]

### ***Diameter of the cane***

The lengths of sugarcane, five different varieties of sugarcane locally grown in the Kawardha district were measured from the field (Table 1). It was observed that average length of sugarcane varieties

was found to be Co- 80036, Co-86032, COVSI-9805, Co-8014 and COM-0265 was 206, 159.7, 174.4 176 and 202.2 cm respectively. The range of the millable cane variety of Co-86032 was found to be 132 cm to 200 cm which was lowest and 140 to 300 was highest among observed varieties. [4]

### **Conclusion**

The major source of information of the farmers is ICT which includes television, radio, hand set (phone), hand flyers etc. The structure of the ADP is not really strong in the area anymore because of government bureaucracy. Low price, lack of market, credit facilities, labor, and other basic amenities are major problems facing sugarcane farmers in the study area.

### **Recommendations**

Based on the results of the finding, the following recommendations were drawn:

1. The ADPs and Research institute in the country should liaise with the farmers to ensuring the supply of improved sugarcane planting materials at a subsidized price

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