

## KNOWLEDGE OF RATOON MANAGEMENT PRACTICES BY THE SUGARCANE GROWERS

S. S. Patel<sup>1</sup> and V. P. Vejapara<sup>2</sup>

<sup>1</sup> Postgraduate Student

<sup>2</sup> Programme Organizer, Sardar Smruti Kendra, NAU, Navsari - 396450

Email : vinubhai.vejpara@gmail.com

### ABSTRACT

*The knowledge of any technology is a key factor for its adoption. Being major sugarcane growing district of South Gujarat, Navsari district was randomly selected for the present investigation. The District comprises of six Talukas, among which Jalalpor, Gandevi and Chikhali talukas were randomly selected for the study. From each selected taluka two villages were selected randomly with maximum number of sugarcane growers. In each of the selected villages farmers were selected according to simple random sampling to form 60 respondents as a sample size for the study. This study was found that majority of the respondents had medium knowledge regarding ratoon management in sugarcane and characteristics such as age were negative and significant association between respondents level of knowledge. Education was positive and highly significant association between respondents level of knowledge. Annual income, mass media exposure, farming experience and social participation were positive and significant association between respondents level of knowledge about ratoon management in sugarcane.*

**Keywords :** knowledge, ratoon management practices, sugarcane growers

### INTRODUCTION

Sugarcane (*Saccharum officinarum* L.) is an important commercial crop of the world and is cultivated in about seventy five countries, the leading countries being India, Brazil, Cuba, Mexico and Thailand. The sugar industry plays an important role in the agricultural economy of India. India occupies the second rank in production of sugarcane in the world. The area under sugarcane in India is 5.06 million hectares during the year 2013-14 and cane production of 342.20 million tonnes and productivity is 69.37 Metric tonnes per ha. Sugar production 2013-2014 year is estimated to be around 26.6 million tonnes. India's annual consumption of sugar is around 28.00 million tonnes. As per the latest data from the ministry of agriculture, sugarcane has already been planted in around 4.9 million hectares of land. (Directorate of Economics and Statistics, Department of Agriculture and Co-operation, GOI 2014-2015). Ratooning of cane is very essential for increasing the benefit to the farmer. Ratooning saves expenses as land preparation, planting material cost, seed treatment cost and planting expenses. For this proper management of ratoon crop is necessary. Therefore, it was felt necessary to study the knowledge of ratoon management practices by the sugarcane growers of Navsari district of Gujarat state.

### OBJECTIVE

To know the knowledge of ratoon management practices by the sugarcane growers

### METHODOLOGY

Being major sugarcane growing district of South Gujarat, Navsari district was randomly selected for the present investigation. The District comprises of six Talukas, among which Jalalpor, Gandevi and Chikhali talukas were randomly selected for the study. From each selected taluka two villages were selected randomly with maximum number of sugarcane growers. In each of the selected villages farmers were selected according to simple random sampling to form 60 respondents as a sample size for the study. For the purpose of measuring of knowledge level structural scale was developed. To find out the relationship between independents and dependents variables, Correlation of coefficient (r) test was applied.

### RESULTS AND DISCUSSION

#### Level of knowledge

Knowledge is the cognitive behavior of an

individual. The body of knowledge is the product of learning process. Once the knowledge is acquired, it produces changes in thinking process of an individual, which would lead to further changes in rational decisions, that is prerequisite for the adoption of any innovation. Keeping in this view, an attempt was made to determine the knowledge of ratoon management practices by the sugarcane growers. The data collected and analyzed in this regard are presented in Table-1.

**Table-1: Distribution of respondents according to their level of knowledge about ratoon management practices in sugarcane**

n=60

Sr. No.	Knowledge level	Frequency	Percent
1	Low	10	16.66
2	Medium	36	60.00
3	High	14	23.33

The data indicate that majority of the (60.00 per cent) Sugarcane growers were possessed medium level of knowledge about ratoon management practices in sugarcane, whereas 23.33 per cent and 16.66 per cent of sugarcane growers possessed high and low level of knowledge, respectively. The result is pointed out that majority (60.00 per cent) of the sugarcane growers had medium level of knowledge about ratoon management practices in sugarcane.

**Relationship between profile of the sugarcane growers and their knowledge about ratoon management practices in sugarcane**

The association between the selected characteristics of sugarcane growers viz, age, education, land holding, size of family, annual income, mass media exposure, social participation and farming experience and knowledge level were worked out with help of coefficient of correlation. The findings were present in Table-2.

The data manifested in Table-2 revealed that characteristics such as age (-0.220\*) was negative and significant association between respondents level of knowledge. Characteristics such as Size of land holding (0.0831) and Size of family (0.0925) there was non-significant relationship between respondents level of knowledge.

Education was positive and highly significant (0.708\*\*) association between respondents level of knowledge. Annual income (0.247\*) mass media exposure (0.266\*), Farming Experience (0.221\*) and Social participation (0.223\*) were positive and significant association between respondents level of knowledge about ratoon management in sugarcane.

**Table-2: Relationship between selected characteristics and level of knowledge**

n=60

Sr. No.	Independent Variables	Correlation-Coefficient ('r' value)
X <sub>1</sub>	Age	-0.220*
X <sub>2</sub>	Education	0.708**
X <sub>3</sub>	Land holding	0.0831 NS
X <sub>4</sub>	Size of the family	0.0925 NS
X <sub>5</sub>	Annual income	0.247*
X <sub>6</sub>	Mass media exposure	0.266*
X <sub>7</sub>	Social participation	0.223*
X <sub>8</sub>	Farming experience	0.221*

NS= non-significant

\* = significant at 0.05 level

\*\*=significant at 0.01 level

**CONCLUSION**

Majority of the sugarcane growers were possessing medium level of knowledge about ratoon management practices in sugarcane and characteristics such as age were negative and significant association between respondents level of knowledge. Education was positive and highly significant association between respondents level of knowledge. Annual income, mass media exposure, farming experience and social participation were positive and significant association between respondents level of knowledge about ratoon management in sugarcane.

**REFERENCES**

Pandya, C. D. (2010). A critical analysis of socio-economic status of organic farming followers of South Gujarat. Ph.D. (Agri.) thesis (unpub.), N.A.U., Navsari

Robinson, W. P. (1976). The achievement motive, Academic success and intelligence test scores. *Bri. J. Clin. Psy.*, 4: 98-103