



A STUDY OF ADOPTION OF IMPROVED SUGARCANE TECHNOLOGY BETWEEN GROWER'S OF GOVERNMENT AND PRIVATE SUGARCANE FACTORIES IN MEERUT DISTT

Ajay Kumar and B.D. Tyagi

Department of Extension, C.S.S.S. (P.G.) College Machhara, Meerut (U.P.)

ABSTRACT

The Present study has been conducted to know the adoptability of improved Package of Practices between sugarcane growers of government and private factories of Meerut District of Uttar Pradesh during the year 2013-14. Two sugarcane factories Mohiddinpur (government) and Nanglamal (private) were randomly selected from Meerut in western U.P. Six villages i.e. three from each sugarcane factory were chosen randomly. The farmers were selected on the basis on size of land holding and categorized in to marginal (up to 1.0 ha), small (1-2ha) and above (medium & large) (above 2.0 ha). In each category about 10% sugarcane growers were randomly selected as respondents for study. In this study, A sample of 150 respondents (75 respondents of each sugar factory) were randomly selected from the both government and private sugar factories. The data were collected from the respondents by using a well structured schedule. The adoption level was observed 46.44, 54.67 and 66.54 percent in Government factory and it was also observed 52.67, 61.20 and 68.39 percent among marginal, small and above (medium & large) farmers categories respectively of private factory. The overall adoption level of sugarcane growers of government and private sugar factory was observed only 52.23 and 58.72 Percent.

Key Words : **Adoption, Sugarcane, Technology**

Sugarcane is one of the major commercial cash crop in India and plays a pivotal role in many countries for agricultural and industrial economy. In many parts of India sugarcane crop is the base of rural socio-economic development. In national economy, after textiles sugar industry is the second largest Agro-based Industry.

But an average sugarcane yield and recovery of sugar has shown a decline for last years. Keeping these

views in consideration a study was made of understand the adoptability of sugarcane production technology with the objective of specific factors for the law sugarcane yield and sugar recovery between government and private sugar factories.

MATERIALS AND METHODS

The Present study was conducted in Meerut district of Uttar Pradesh during the year 2013-14, where

sugarcane is being cultivated as a major crop. Meerut district is situated between 29° North Latitude and 77°43' East Longitude and altitude of 224 meter above the sea level. The topography of this district is almost of plain in general. There are sandy and sandy loam soil type in this district.

This district has six sugarcane factories (two government and four private) in working condition. These are Mohiddinpur, Sakoti, Daurala, Mawana, Kinauni and Nanglamal. In study two sugar factories Mohiddinpur and Nanglamal were selected randomly from government and private categories, respectively.

In both these sugar factories, total six villages i.e. three villages from each, were randomly selected. The farmers of these six selected villages were categorized into three categories marginal (<1ha), small (1-2ha) and above (medium & large) (>2ha) on basis of land holdings. From each category about 10% sugarcane growers were again randomly selected as respondents for study purpose. Thus, A sample of total of 150

respondents (75 respondents of each sugar factory) were randomly selected from the both government and private sugarcane factories. The data were collected through direct personal interview of respondents with the help of well structured and well tested questionnaire and schedules.

Results emerging from the study are presented in Table No. 1 and 2. The comparative analysis of results from both tables is presented in Figure 1.

RESULTS AND DISCUSSION

The pooled data (Table 1 & 2) indicated that the improved package of practices categorized in to seven sub-practices i.e. Recommended Varieties, Planting operations, Fertilizers management, Irrigation management, Plant Protection, Earthing & Binding, and Harvesting & Marketing were observed adoption level in cane growers of government factory area 49.00, 53.31, 70.33 45.33 55.56, 29.33 and 37.50 percent

Table 1 : Extent adoption of improved package of practices in sugarcane in Government sugarcane factory respondents

S. No.	Package of practices	Categories of farmers						Total Adoption Percentage
		Marginal		Small		Above		
		Adop %	Rank	Adop %	Rank	Adop %	Rank	
1.	Recommended varieties	36.58	4	58.33	2	73.07	3	49.00
2.	Planting operations	50.87	3	53.04	5	61.40	5	53.31
3.	Fertilizers Management	66.67	1	73.81	1	76.28	1	70.33
4.	Irrigation Management	30.48	5	55.95	3	75.00	2	45.33
5.	Plant Protection	53.45	2	56.34	4	60.90	6	55.56
6.	Earthing & Binding	18.29	7	31.55	7	60.58	7	29.33
7.	Harvesting & Marketing	29.88	6	36.31	6	63.46	4	37.50

Table 2 : Extent adoption of improved package of practices in sugarcane cultivation in Private sugarcane factory respondents

S. No.	Package of practices	Categories of farmers						Total Adoption Percentage
		Marginal		Small		Above		
		Adop %	Rank	Adop%	Rank	Adop %	Rank	
1.	Recommended varieties	56.76	4	72.50	2	81.94	3	67.00
2.	Planting operations	46.35	5	56.47	5	60.30	6	55.98
3.	Fertilizers Management	77.25	1	81.67	1	87.50	1	80.89
4.	Irrigation Management	58.11	3	70.00	4	83.33	2	67.33
5.	Plant Protection	60.58	2	71.67	3	71.76	5	66.22
6.	Earthing & Binding	32.09	7	53.12	6	57.64	7	43.83
7.	Harvesting & Marketing	43.58	6	46.87	7	75.69	4	52.17

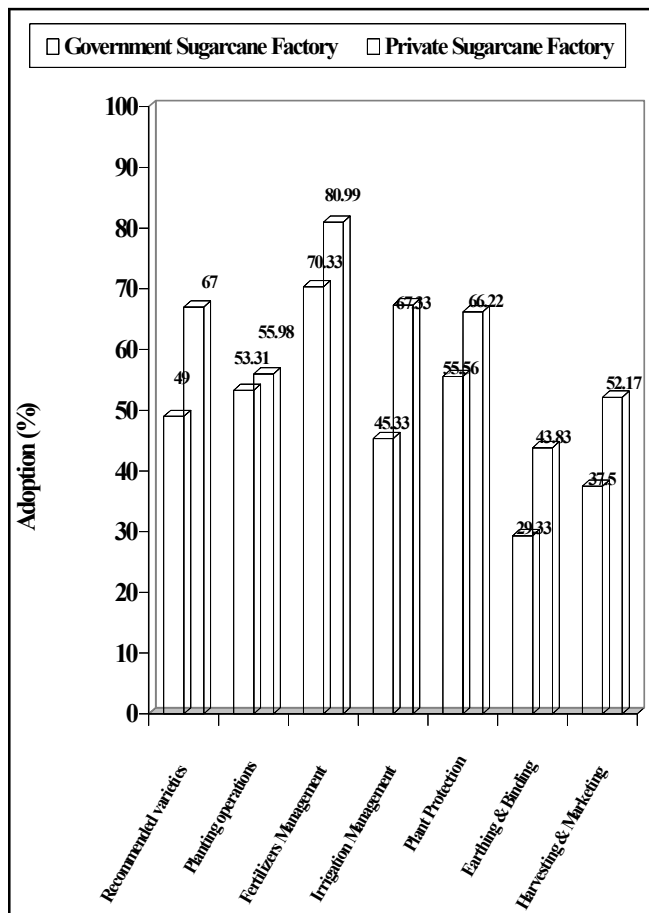


Fig. 1: Extent adoption of improved package of practices in sugarcane in Government and Private Factory respondents

respectively and Private factory area's farmer's adoption level was observed 67.00, 55.98, 80.89 67.33, 66.22, 43.83 and 52.17 percent respectively. Poswal (2006) reported adoption of sugarcane package of Practices i.e. recommended varieties 35.68%, planting operation 32.93 %, fertilizer application 55.56%, plant protection 42.95%, earthing and binding 44.00% and harvesting 47.13% only.

However, the adoption of overall practices by marginal, small and above (medium & large) categories of farmers in government factory area were found 46.44, 54.67 and 66.54 percent, respectively and in the private factory area observed 52.67, 61.20 and 38.39 percent, respectively. Chouhan et. al (2002) reported more than 60% sugarcane farmers do not

adopt the scientific technology properly. Poswal (2004) reported that marginal farmers (<1.0ha) had adoption level (39.47%), small (1-2 ha) and other farmers (>2.0 ha) having adoption level 50.36 and 58.83 percent, respectively.

The overall adoption level of package of practices of government and private factory cane growers were found to be 52.23 and 58.72 percent respectively. Shankaraiah et al (2006) observed an overall adoption only 46.45% in improved Package of Practices in sugarcane cultivation. Wilkening (1953) reported that low adoption of improved practices was due to less contacts with extension agencies.

Hence, it may be concluded that only 52.00 to 58.00 percent farmers adopted the new technology of sugarcane. The improved package of practices in sugarcane cultivation, which is the main cause of lowering yield and quality of sugarcane. Therefore special emphasis of improved Package of Practices is essentially needful to achieve the tough target of cane yield and quality.

REFERENCES

- Chouhan BRS, Singh AK, Singh RP, Lal K and Singh SB (2002).** Adoptability of Sugarcane Production technology. Abs U.P.C.S.R., Shahjahanpur, No. 18-102.
- Poswal CS (2004).** Adoption of Improved Sugarcane Technology in Western Uttar Pradesh. An unpublished, Ph.d. Thesis, C.C.S. University, Meerut, U.P. (INDIA).
- Poswal CS, Mathur GP and Tyagi BD (2006).** Adoption of Improved Production Technology in sugarcane. *Cooperative sugar*; **37**(11):31-34.
- Shankaraiah C and Kalyan Murthy KN (2006).** Some Agro techniques for substance of Soil Health and Sugarcane Production. *Cooperative sugar*; **37**(4), 55-61.
- Wilkening (1953):** Adoption of Improved Practices Madison Agricultural Experiment Station Research Bulletin, 183.
