### RESEARCH NOTE

# Factors Associated with Extent of Adoption of Niger Production Technology

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## INTRODUCTION

Niger is one of the oilseed crops cultivated predominantly in hilly areas of Dang district of Gujarat. The area and productivity of this crop is static since last decade. The productivity of this crop could be raised if the farmers adopt recommended package of practices. The adoption of technology by the farmers is influenced by some personal, social, economical and situational characteristics. In context to above, the study has been taken up to identify the factors affecting the production of niger crop.

#### **OBJECTIVES**

- To study the extent of adoption of niger production technology by the tribal farmers.
- To explore the association between some selected characteristics of the farmers and their extent of adoption of niger production technology.

#### **METHODOLOGY**

The study was conducted in Dang district of Gujarat. Ten villages, where niger was grown extensively, were selected at random. The list of the niger cultivators collected from the village level worker of the area concerned. From these lists, twenty farmers from each selected villages were chosen at random. Thus, in all, 200 tribal niger cultivators were selected. The data were collected by personal interview method with the help of a schedule prepared for the purpose. The characteristics of the farmers selected for the study were: age, education, size of family, type of family, social participation, size of holding and area under niger cultivation. Socio-economic scale developed by Pareek and Trivedi (1965) was duly adopted to know the status of the respondents. The extent of adoption of an individual farmer was calculated with the help of formula developed by Sengupta (1967).

Table 1. Distribution of the respondents according to their extent of adoption of niger production technology.

Adoption Level	Score	Respondents (N=200)	
		Frequency	Per cent
Low	Below 22.22	97	48.50
Medium	Between 22.22 and 40.38	56	28.00
High	Above 40.38	47	23.50
	Total	200	100.00

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Table 2. Association of socio-economic characteristics and extent of adoption of niger production technology.

Sr. No.	Characteristics	Chi-square values
1.	Age	5.16 NS
2.	Education	23.25 **
3.	Size of family	0.61 NS
4.	Type of family	0.18 NS
5.	Social participation	41.67 **
6.	Size of holding	14.73 **
7.	Area under niger cultivation	13.76 **

NS = Non-significant

## RESULTS AND DISCUSSION

Perusal of the data presented in Table 1 show that nearly half of the respondents (48.50 per cent) were low adopters, whereas 28.00 and 23.50 per cent of them were fall under medium and high adopter's category, respectively. Majority of tribal farmers reported that illiteracy, lack of knowledge lack of technical guidance and lack of financial resources were the major constraints faced by them in adoption of recomm- ended niger production technology to the large extent.

As evident from Table 2, age, size of family and type of family found to have non-significant association with extent of adoption. Thus, it can be inferred that all these three variables and extent of adoption of niger production technology are independent of each other. The variables viz. education, social participation, size of holding and area under niger cultivation depicted significant association with extent of adoption of niger production technology.

The finding was in line with that of Suthar (1989).

It is well known fact that increase in education opens mental ability of an indi-

vidual to grasp, analyse and interpret the facts gets activated, which in turn leads to increase adoption of improved practices. Farmer's participation in social organisation will enable them to obtain necessary information regarding various improved practices. Increase in the size of holding will help the farmers to adopt improved technologies which require specialized farm operation. Thus, it can be concluded that education, social participation, size of holding and area under niger cultivation were the important variables having direct bearing on extent of adoption of niger production technology by the tribal farmers.

## CONCLUSION

It can be concluded from the above study that the variables like education, social participation, size of holding and area under niger cultivation were most crucial to enhance the level of adoption of niger production technology by the tribal farmers.

## **IMPLICATION**

The proper manipulation of significantly associating variables by the extension worker would increase the adoption level of tribal farmers and thereby production of niger crop.

<sup>\*\* =</sup> Significant at 1 per cent level of probability