



Research Article

CONSTRAINTS FACED BY FARMERS IN ADOPTION OF RECOMMENDED GROUNDNUT PRODUCTION TECHNOLOGIES

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Abstract- Groundnut is the most important crop among the oilseed crops grown in the country. Groundnut is considered as the world's fourth largest source of edible oil and third most important source of vegetable protein. It is also a major oilseed legume crop in India and meets about 30 per cent of the edible oil requirements in the country. The present study was conducted in Junagadh districts of Gujarat state to identify the constraints in adoption of groundnut production technologies. Two villages were selected randomly from each taluka viz. Keshod, Mendarda and Manavadar talukas of this district and 20 respondents were selected randomly from each village. Thus, total 120 respondents were selected as sample. The data were collected through personal interview schedule. These data were tabulated and analyzed. The results were indicated that failure of crop due to heavy rainfall (89.16 per cent), timely unavailability of fertilizers (85.00 per cent), weight and quality loss during storage and transportation (80.00 per cent), inadequate storage facility's (75.00 per cent), lack of marketing infrastructure facilities (71.66 per cent), fluctuation of groundnut price in the market (66.67 per cent) were major constraints faces by groundnut grower in recommended groundnut production technology. The groundnut growers were gave the important suggestions were: remunerative price should be given to groundnut growers got first ranked followed by market facilities should be strengthened and inputs should be made available at subsidized rate got second and third ranked, respectively.

Keywords- Constraints, suggestions, recommended Groundnut Production Technologies.

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Introduction

Groundnut (*Arachis hypogaea* L.), is an important crop grown in worldwide. It is cultivated in more than 100 countries. Groundnut is considered as the world's fourth largest source of edible oil and third most important source of vegetable protein. It is also a major oilseed legume crop in India and meets about 30% of the edible oil requirements in the country. Groundnut is important edible oilseed crop. It is highly nutritious food. Mahatma Gandhi the father of the nation said it "desi badam". Groundnut has a distinct position among the oilseeds as it can be consumed and utilized in diverse ways. It is a rich source of edible oil (44 -55 %), high quality protein (22-32 %) and carbohydrates (8-14 %) and hence, it is valued both for edible oil and confectionery purposes. Groundnut kernels are consumed as raw, roasted, boiled or fried products and also used in a variety of culinary preparations like peanut candies, peanut butter, peanut milk and chocolates [2]. Gujarat is the leading state in groundnut cultivation in both area and production with 1.88 million hectares and 2.66 million tonnes, respectively. In terms of production, Gujarat contributes around 30 per cent to the country's groundnut production. Groundnut cultivation in Gujarat is predominantly concentrated in Saurashtra region. Saurashtra is an oil pouch of the India. Groundnut is cultivated across the region on 1.22 million hectares of land without put of 1.58 million tonnes nut in shell. All India base, share of saurashtra is 23 per cent by area and 25 per cent by production.

Objective

The present study was designed for measuring adoption of recommended groundnut production technologies by the groundnut growers. With a view to understanding the existing circumstances, the study was carried out with following specific objectives:

1. To study constraint faced by groundnut growers in adoption of recommended groundnut production technologies
2. To seek the suggestions from the groundnut growers to overcome the constraints faced by them.

Materials and Methods

The present study was carried out in Junagadh district of South Saurashtra Agro-Climatic Zone of Gujarat State. This study was conducted by adopting an *ex post facto* research design. A multistage random sampling technique was used for the study. The present study was carried out in Keshod, Mendarda and Manavadar Taluka of Junagadh district, in which there is maximum area under groundnut cultivation. The list of villages was sought from the Taluka Panchayats of the selected Talukas and two villages of each selected Taluka were purposively selected based on more area under groundnut cultivation. Thus, total 6 villages were covered under the study. The list of groundnut growers was obtained from the Village Panchayats of the selected villages. A random sampling procedure was followed for the selection of the respondents and accordingly 20 groundnut growers from each of the selected villages were selected as respondents. Ultimately, a total of 120 groundnut growers were selected for the study. The head of the family i.e. major decision maker was considered as

respondent for the study.

Results and Discussion

In the process of agricultural development, the prime mover is considered to be the recommended farming technology. The benefit of such technology is actually derived only when farmers in their local situations efficiently utilize it. The farmers are very much eager to get maximum benefits from the agricultural technology. However, many of them could not do so, because a large number of impediments are coming in that way, creating large adoption gap culminating in low yield of groundnut in the area.

The parts of constraints were kept open ended in the questionnaire. The responses were recorded in the schedule itself. The frequency was calculated for each constraint and converted in to percentage and rank was given. The higher ranks indicated higher perception of the respondents for that constraint and vice versa. The data collected from the respondents were compiled and arranged in light of the stated objectives. The findings are as follows

Table-1 Constraints faced by the groundnut growers in adoption of recommended groundnut production technology. (n=120)

Sr. No	Constraints	Frequency	Percent	Rank
1	Insufficient availability of quality seed	52	43.33	XII
2	Inadequate storage facilities	90	75.00	IV
3	Lack of marketing infrastructure facilities	86	71.66	V
4	Insufficient plant protection measures	78	65.00	VII
5	Weight and quality loss during storage and transportation	96	80.00	III
6	High wages of labour	46	38.33	XLLL
7	High price of fertilizers	69	57.50	IX
8	Inadequate guidance by extension personnel	59	49.17	XI
9	Failure of crop due to heavy rainfall	107	89.16	I
10	High cost of weedicides	73	60.83	VIII
11	High cost of pesticides	61	50.83	X

Table-2 Suggestions of the respondents to overcome the constraints in adoption of recommended groundnut production technology (n=120)

Sr. No.	Suggestions	Frequency	Percent	Rank
1	Inputs should be made available at subsidized rate	96	80.00	III
2	Sufficient and timely credit facility should be made available	79	65.83	IV
3	Remunerative price should be given to groundnut growers	117	97.50	I
4	market facilities should be strengthened	115	95.83	II
5	Effective soil moisture conservation technology should be developed	57	47.50	VI
6	Agriculture literature should be provided	46	38.33	VII
7	Training should be imparted to the groundnut growers	64	53.33	V

The comparatively less important suggestions as expressed by the groundnut growers were; training should be imparted to the groundnut growers (53.33 per cent), effective soil moisture conservation technology should be developed (47.50 per cent), and agriculture literature should be provided (38.33 per cent).

It can be concluded that important suggestions offered by more than 65.00 per cent of groundnut growers were; remunerative price should be given to groundnut growers (rank first), market facilities should be strengthened (rank second), inputs should be made available at subsidized rate (rank third) and sufficient and timely credit facility should be made available (rank fourth)

It is clear from the [Table-2] about the suggestions made by the majority of the farmers that these suggestions are based on the facilities have been availed but are not sufficient and satisfied up to the extent of their expectations.

Thus, it can be concluded from the facts mentioned above that the facilities to the groundnut growers' are already being provided by the human resources or by natural resources needs to be strengthened and tailored according to the requirements of groundnut growers. The other suggestions offered by the farmers need to be looked in to account very carefully by the appropriate agencies to improve the productivity of groundnut crop.

12	Lack of training at village level	42	35.00	XIV
13	Fluctuation of groundnut price in the market	80	66.67	VI
14	Unavailability of fertilizers in time	102	85.00	II
15	Less Availability of FYM	39	32.50	XV

The highest percentage observed in constraints were; failure of crop due to heavy rainfall (rank first), unavailability of fertilizers in time (rank second), weight and quality loss during storage and transportation (rank third), inadequate storage facilities (rank fourth), lack of marketing infrastructure facilities (rank fifth), fluctuation of groundnut price in the market (rank sixth).

The moderate percentage observed in constraints were; insufficient plant protection measures (rank seventh), high cost of weedicides (rank eighth), high price of fertilizers (rank ninth), high cost of pesticides (rank tenth).

The probable reason for the above facts might be that the economic conditions of the farmers inhibit them to purchase high cost of farm inputs.

Less important constraints faced by the farmers were; inadequate guidance by extension personnel (rank eleventh) followed by insufficient availability of quality seed, high wages of labour, lack of training at village level, less availability of FYM.

It can be concluded that the most important problems as expressed by most of the respondents were; failure of crop due to heavy rainfall, unavailability of fertilizers in time and weight and quality loss during storage and transportation.

To overcome the constraints, which hindering the groundnut growers in adoption of recommended groundnut production technology. The suggestions from respondents were invited. The open ended question was asked to collect the suggestions. The frequency was calculated for each suggestion and converted in to percentage and rank was given.

The most important suggestions offered by the groundnut growers to overcome the constraints in adoption of recommended groundnut production technology were; remunerative price should be given to groundnut growers (97.50 per cent), market facilities should be strengthened (95.83 per cent), inputs should be made available at subsidized rate (80.00 per cent), sufficient and timely credit facility should be made available (65.83 per cent).

Conclusion

It can be concluded that the most important constraints faced by groundnut growers were: failure of crop due to heavy rainfall, Unavailability of fertilizers in time, weight and quality loss during storage and transportation, inadequate storage facilities, lack of marketing infrastructure facilities, fluctuation of groundnut price in the market and insufficient plant protection measures. Whereas, most important suggestions expressed by groundnut growers were: remunerative price should be given to groundnut growers, market facilities should be strengthened and inputs should be made available at subsidized rate.

Conflict of Interest: None declared

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