

Impediments faced by the groundnut growers in adoption of recommended *kharif* groundnut production technology

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ABSTRACT

Groundnut being one of the important oilseed crop in Banaskantha district. The area under *kharif* groundnut is increasing year by year, but the production is not increasing. The average yield of farm level is always lower than yield obtained in FLDs. There is a wide gap between the farmer yield and FLD yield. This means that the groundnut crop has still potentiality to increase the productivity. This comparatively low productivity of *kharif* groundnut crop may be governed by many factors including adoption as well as many hindrances in the farmer's field situation. The present study was undertaken in Banaskantha district as having large area and more production under *kharif* groundnut in North Gujarat. Three talukas viz., Deesa, Dhanera and Dantiwada were selected purposively having higher area under *kharif* groundnut cultivation in the district. Five villages from each selected talukas and 10 farmers from each village were selected randomly. Hence final sample consists of 150 farmers. The major constraints faced by the groundnut growers in adoption of recommended *kharif* groundnut production technology were; high cost of input (96.67%), high wages of labour (92.00%), high cost of seed (85.33%) and lack of pure and good quality seed (80.00%). The suggestions offered by the groundnut growers to overcome the constraints faced by them in adoption of recommended *kharif* groundnut production technology were; certified seeds should be freely available from the market and co-operative society (94.67%), reasonable price should be given to agricultural produce (82.00%) and price of inputs should be minimized (65.33%).

Key words : Adoption, constraints, groundnut

Agriculture forms the backbone of Indian economy. Since last three decades, visible changes have been brought in agriculture in form of green and white revolution. This become possible mainly through coordinated research efforts, extension activities and irrigation facilities created. As a result, the country has achieved self-sufficiency in food grain production (green revolution) and milk production (white revolution) while, we are about to attain self-sufficiency in oil seeds production (yellow revolution).

Being agriculture based economy of the country, different crops like, cereal crops, fibre crops, oil seed crops, legume crops, fruits and vegetables crops etc. are grown in our country. Among all these crops, oil seed crops have a specific place in Indian agriculture. Oilseed crops comprising groundnut, sunflower,

rapeseed and mustard, safflower, sesamum, niger, linseed, soybean, castor etc., are important on global basis which play a pivotal role in agriculture, industry and export trade of India. Oilseed crops occupy an important place in Indian economy next to food grains. India occupies a premier position in the world oilseed scenario accounting 19.00 per cent of oilseeds areas with 9.00 per cent of production. Among the oilseed crops, groundnut is an important edible oilseed crop and ranks first in the world in respect of area, production and productivity of groundnut. Gujarat is one of the leading groundnut growing states of the country. The average area under ground nut crop was 14,54,000 ha and productivity of groundnut was 1398 kg/ha in Gujarat. (Anonymus, 2012b)

Groundnut is going to be the important oilseed crop in Banaskantha district. The average yield of Banaskantha district was 1319 kg/ha. The area under *kharif* groundnut in this district was 39,425 ha. during

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2012-13 (Anonymous, 2013). But the harvested yield of groundnut crop in the FLD was recorded as 2400 kg/ha. (Anonymous (2012a). This means that the groundnut crop has still potentiality to increase the productivity. This comparatively low productivity of *kharif* groundnut crop may be governed by many factors including adoption as well as many hindrances in the farmer's field situation. The study was conducted with the following objectives :

- [1] To identify the constraints faced by the groundnut growers in adoption of recommended *kharif* groundnut production technology.
- [2] To seek the suggestion from the groundnut growers to overcome the constraints faced by them in adoption of recommended *kharif* groundnut production technology.

METHODOLOGY

Ex-post facto research design was used for the study (Kerlinger, 1976). Banaskantha district of Gujarat state was selected purposively as groundnut crop has covered large cultivation area in the district and is increasing year by year. Three talukas viz., Deesa (19,725 ha.), Dhanera (10,000 ha.) and Dantiwada (4,000 ha.) were selected purposively from district as these talukas were having higher area under *kharif* groundnut cultivation. Five villages were selected randomly from the list of groundnut growing villages from each taluka under *kharif* groundnut cultivation. Thus, total fifteen villages were selected. From each selected villages, ten groundnut growers were selected randomly. Hence, the final sample size was 150 groundnut growers from 15 villages.

Based on an extensive review of literature, consultation with extension personnel and experts of the subject, some important variables viz., age, education, family size, social participation, land holding, annual income, extension participation, sources of information, cropping pattern, yield index and farm mechanization were selected as independent variables. They were measured with the help of the scales and indices developed by past researchers as well as structured schedules/tests which were framed for the purpose. Constraints were measured by asking to the groundnut growers to state the constraints faced in adoption of recommended *kharif* groundnut production technology. The frequency and percentage for all the constraints were calculated and then ranked accordingly. At the same time, the suggestions were collected from the groundnut growers to overcome the constraints they faced in adoption of recommended

kharif groundnut production technology. Information collected was tabulated based on frequency and percentage and ranks were assigned to them.

RESULTS AND DISCUSSION

Constraints faced by groundnut growers in adoption of recommended kharif groundnut production technology

The groundnut growers might be facing certain problems in adoption of recommended *kharif* groundnut production technology. Due to such constraints, they cannot be adopt all the technology and hence could not make the groundnut crop profitable. The constraints in adoption of new technology never end. Hence, it was felt imperative to identify the constraints faced by the groundnut growers in adoption of recommended *kharif* groundnut production technology.

The respondents asked to give the constraints faced by them in adoption of recommended *kharif* groundnut production technology. The information was collected, tabulated and frequency and percentage for each constraint was calculated. Then, the ranks were assigned to the constraints and the data are presented in Table 1.

Data in Table 1 indicated that the major constraints faced by the groundnut growers in adoption of recommended *kharif* groundnut production technology were; high cost of inputs (96.67%), high wages of labour (92.00%), high cost of seed (85.33%), lack of pure and good quality seed/certified seed (80.00%), non-availability of sufficient labour in time (72.00%) and lack of use of improved implements (70.00%) and which were ranked one to six, respectively. The probable reasons of above constraints might be the groundnut crop require more quantity of seed and other inputs with high their rates, involves high labour requirements in agronomic practice and harvesting and farmers were not using improved implements.

Whereas non-remunerative price (64.67%), inadequate credit (56.67%), lack of storage facility (44.67%) and lack of timely and appropriate extension services (41.33%) were ranked seven to ten, respectively. While, lack of knowledge about recommended groundnut production technology (33.33%), lack of knowledge about storage (10.00%) and lack of knowledge about selling (5.33%) which were ranked eleven to thirteen, respectively. It can be inferred from the above results that high cost of inputs, high wages of labour, irregularity in crop production price, high cost of seed, lack of pure and good quality

seed/certified seed, were the main constraints. These findings are in agreement with the findings of Patel (2005) and Desai 2013.

Suggestions from the groundnut growers to overcome the constraints faced by them in adoption of recommended kharif groundnut production technology
An attempt was made in this study to seek the suggestions from the groundnut growers to overcome

the constraints faced by them in adoption of recommended *kharif* groundnut production technology. The respondents were asked to suggest possible solution to overcome the constraints, the information received was tabulated and frequency and percentage for each suggestion were calculated. Then, the suggestions were ranked accordingly and presented in Table 2.

Table 1 Constraints faced by groundnut growers in adoption of recommended groundnut production technology (n=150)

Sr. No.	Constraints	Frequency	Per cent	Rank
1.	High cost of inputs (fertilizer, insecticides, pesticides, herbicide etc.)	145	96.67	I
2.	High wages of labour	138	92.00	II
3.	High cost of seed	128	85.33	III
4.	Lack of pure and good quality seed/certified seed	120	80.00	IV
5.	Non-availability of sufficient labour in time	108	72.00	V
6.	Lack of improved implements	105	70.00	VI
7.	Non-remunerative price	97	64.67	VII
8.	Inadequate credit	85	56.67	VIII
9.	Lack of storage facility	67	44.66	IX
10.	Lack of timely and appropriate extension services	62	41.33	X
11.	Lack of knowledge about recommended groundnut production technology	50	33.33	XI
12.	Lack of knowledge about storage	15	10.00	XII
13.	Lack of knowledge about selling	8	5.33	XIII

Table 2 indicated that the suggestions expressed by groundnut growers to overcome the constraints faced by them in adoption of recommended *kharif* groundnut production technology. These were; certified seed should be freely available from market and co-operative society (94.67%), remunerative

market price should be given for the produce (82.00%), price of inputs should be minimised (65.33%), timely technical guidance should be provided (49.33%) and crop loan should be provided enough to meet the increased cost of cultivation (46.00%) which were ranked as one to five,

Table 2 Suggestions of the groundnut growers to overcome the constraints faced by them in extent of adoption (n = 150)

Sr. No.	Constraints	Frequency	Per cent	Rank
1.	Pure and good quality certified seed should be easily available from market and co-operative society	142	94.67	I
2.	Reasonable price should be given to agricultural produce	123	82.00	II
3.	Price of inputs should be minimised	98	65.33	III
4.	Timely technical guidance should be provided	74	49.33	IV
5.	Adequate crop loan should be provided to the farmer	69	46.00	V

respectively. From the above results, the important suggestions expressed by the groundnut growers were; certified seeds should be easily available from market and co-operative society, reasonable price should be given to agricultural produce and price of crop should be reasonable.

CONCLUSION

The major constraints faced by the groundnut growers in adoption of recommended *kharif* groundnut production technology were; high cost of input (96.67%), high wages of labour (92.00 %), high cost of seed (85.33 %), lack of pure and good quality seed/certified seed (80.00%), non-availability of sufficient labour in time (72.00%), lack of improved implements (70.00%) according to the order of importance. The suggestions given by the groundnut growers to overcome the constraints faced in adoption of recommended *kharif* groundnut production technology were; certified seed should be easily available from co-operative society and market (94.67%), reasonable price should be given for produce (82.00%), price of inputs should be minimized (65.33%) which were ranked accordingly.

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