



Research Paper

Major constraints faced by farmers of Sabarkantha district in Gujarat

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Paper History :

Received : 11.05.2017;
Revised : 23.01.2018;
Accepted : 07.02.2018

ABSTRACT : An attempt was made to study the major constraints of farmers of sabarkantha district. Out of 13 block one high productive and one low productive block were selected purposively. Three villages from each block were selected randomly making the sample size of 321. The constraints were worked out by using Garrett's Ranking Technique. The major constraints faced by the farmers were lack of technical advice/know-how, non-availability of farm credit, lack of improved variety suitable to region, lack of irrigation water, high cost of inputs, inadequate/irregular supply of electricity, scarcity of farm labour, social factors (adopting piggery/poultry), and problems of pigs. The major constraints faced by the farmers in the studied area of the district were ranked using Garrett's ranking technique and found that problem of pigs and bluebull (Nilgay) ranked 1st, High cost of input (seed/fertilizer/pesticides. etc) ranked 2nd, Lack of technical advice/know-how ranked 3rd.

KEY WORDS: Farmers, Garrett's ranking technique

HOW TO CITE THIS PAPER : Patel, R.R., Patel, P.K., Patel, R.M. and Patel, K.J. (2018). Major constraints faced by farmers of Sabarkantha district in Gujarat. *Internat. Res. J. Agric. Eco. & Stat.*, **9** (1) : 133-136, DOI : 10.15740/HAS/IRJAES/9.1/133-136.

INTRODUCTION :

In recognition of the importance of agriculture in national economies of majority of the undeveloped and developing countries in the world, thought has been given for formulation and implementation of programmes to increase agricultural production. This is true for country like india, where agriculture is primary occupation engage atleast 68 per cent of working population (Agriculture data base, 2011). Due to rapid growth of population in India, not only per capita land, but also average size of holding has reduced to a great extent since independence. Land being the most limiting factor, the independence. Land being the most limiting factor, the dependence on it has touched its climax these days. Among, the different

farming systems, the important one is mixed farming, where combination of livestock enterprises with farming. Mixed farming in India implies to dovetailing crop production and animal husbandry to the best advantage of farmers. A complimentary use of livestock enables full utilization of crop and their conversion into valuable animal products. Thus, farm yard manure become available and spare time of cultivator and his family is fully utilized.

In India, agriculture is the primary source of employment for both men and women. Agriculture accounts for about 30 per cent of gross domestic product and employs about two third of the labour force. The pressure on the available agriculture land is increasing due to growing urbanization, population explosion and

subsequent fragmentation of land population explosion and subsequent fragmentation of land holding. The study of farming systems, major constraints of farming systems and application of farming systems approaches can bring a ray of hope for the betterment of farmers. Keeping all these factors in mind, the present study was conducted to identify the major constraints in general related to the identified farming systems. Moreover, agriculture and animal husbandry is the main source of livelihood for the rural people of district. The farm is viewed in holistic manner and farmers are subjected to many socio-economic, biophysical, institutional, administrative and technological constraints. Producer farmers face problems of production, protection, marketing, feeding and health management related to integrated farming systems. Therefore, it was also thought worthwhile to identify various constraints of farmers. Hence, the present study which entitled “Major constraints Faced by farmers of Sabarkantha district in Gujarat” was planned with the following specific objective:

–To study the major constraints of farmers in farming.

MATERIALS AND METHODS :

Sabarkantha district was selected purposively. Out of 13 blocks one high productive (Idar) and low productive (Megharaj) blocks were selected randomly. Three villages from each blocks were randomly selected. Proportionally one-third farmers from each category were selected randomly for the study. Total 321 farmers from randomly selected villages were selected for the study keeping view; the objective of the study, the interview schedule was developed. The major constraints in the studied area were identified by discussing with the concerned VLW, DAO and others agricultural experts.

The sample farmers enquired individually regarding the various constraints faced by them in farming with the help of questionnaire which comprised by the constraints of the area from the discussion. The collected data was analyzed by adopting Garrett's ranking technique (Garrett, 1952). The data were transferred into percentage by using Garrett's ranking technique and analysed by using Garrett's for more accuracy and in order to make findings meaningful. The major advantage of this technique, compared to simple frequency distribution is that the constraints are arranged based on their importance from the point of view of respondents. Garrett's formula for converting ranks into per cent was given by Garrett.

$$\text{Garrett's formulae} = 100(R_{ij} - 0.50) / N_j$$

where, R_{ij} - Rank given for the i^{th} factor by the j^{th} individual

N_j - Number of factors ranked by the j^{th} individual. Given by Garrett, 1952. For each factors, the scores of individual respondents were added together and divided by the total number of the respondents for whom scores were added. These mean scores for all the factors were arranged in descending order, rank were given and most important factors were identified. The similar method to identified constraints was used by Hosmath (2012) and Singh and Burark in their study during year 2012 and 2016, respectively.

RESULTS AND DATA ANALYSIS :

Constraints in adoption of new technology never end. However, they can be minimized if known to policy makers and planners. Farmers of different categories were asked to indicate the constraints faced by them in adoption of improved agricultural technology in terms of, lack of technical advice/know-high, non-availability of

Table 1: Major constraints in existing farming systems on sample farms (Overall)

Constraints	Garret's mean score	Rank
Problem of pigs and bluebull (<i>Nilgay</i>)	79.62	I
High cost of input (seed/fertilizer/pesticides.etc)	70.38	II
Lack of technical advice/know-how	58.79	III
Lack of irrigation water	54.65	IV
Scarcity of farm labour	51.33	V
Non-availability of farm credit	42.56	VI
Lack of improved variety used	41.47	VII
Inadequate and/or irregular supply of electricity	28.24	VIII
Social factors (in adopting piggery,poultry,goatry etc)	22.96	IX

Table 2 : Major constraints in existing farming systems on sample farms (Category wise)

Constraints	Marginal	Small	Medium	Large
Problem of pigs and blue bull (<i>Nilgay</i>)	1 st	1 st	1 st	1 st
High cost of input (seed/fertilizer/pesticides.etc)	2 nd	2 nd	2 nd	2 nd
Lack of technical advice/know-how	3 rd	4 th	3 rd	3 rd
Lack of irrigation water	4 th	3 rd	5 th	5 th
Scarcity of farm labour	5 th	5 th	4 th	4 th
Non-availability of farm credit	7 th	6 th	6 th	6 th
Lack of improved variety used	6 th	7 th	7 th	7 th
Inadequate and/or irregular supply of electricity	8 th	8 th	8 th	8 th
Social factors (in adopting piggery, poultry, goatry etc)	9 th	9 th	9 th	9 th

farm credit, lack of improved variety suitable to region, lack of irrigation water, high cost of inputs, inadequate/irregular supply of electricity, scarcity of farm labour, social factors (adopting piggery/ poultry), problems of pigs and rank was assigned 1, 2, 3 and so on.... respectively. By using the Garret's Ranking Technique total score and mean score of each item was computed and rank was assigned on the basis of mean score.

The data presented in Table 1 reveal that out of nine item of constraints faced by the farmers of district in adoption of improved agricultural technology had assigned first rank to problems of pigs and bluebull (*Nilgay*) (79.62), second rank to high cost of inputs (70.38), third rank to lack of technical advice/ know how (58.79), fourth rank to lack of irrigation water (54.65), fifth rank to scarcity of farm labour (51.33), sixth rank to Non availability of farm credit (42.56), seventh rank to lack of improved variety to suitable region (41.47), eighth rank to inadequate and/or irregular supply of electricity (28.24), and ninth rank to social factors (in adopting piggery and poultry etc) (22.96). The results of previous study taken by Patel *et al.* (2013) coincide with this results.

Further, looking about constraints category-wise the data are presented in Table 2 reveal that all categories farmer are giving priority commonly to constraint of pigs and bluebull (*Nilgay*) and high cost of inputs with ranking Ist & IInd, respectively. This results are in line with the earlier study conducted by Patel *et al.* (2013); Baria *et al.* (2013); Chaudhary and Chauhan (2016) and Dharandel *et al* (2011).

Similar work related to the present investigation was also conducted by Prajapati *et al.* (2016) and Reddy and Reddy (2017).

Conclusion:

It is concluded that majority of farmers were suffering from constraints like problems of pigs and bluebull (*Nilgay*), High cost of input (seed/fertilizer/pesticides.etc), Lack of technical advice/know-how, Lack of irrigation water and Scarcity of farm labour.

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