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Constraints identified in production and marketing of farm produce in Prayagraj district of Uttar Pradesh

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Abstract
The present study was conducted in Prayagraj district of Uttar Pradesh to identify the constraints faced by farmers in cultivation and sale of farm produce. A total 12 villages were selected from two blocks of Prayagraj district. Ten percent from each village were randomly selected and 240 farmers were selected for investigation randomly. On the basis of review a list of 12 constrains was prepared and data were gathered on each one. Finding of the study show that Lack of knowledge about diseases of insect and pest of crop, High cost of pesticides, and Uncertainty of weather ranked Ist, IInd, and IIIrd respectively during cultivation of major crop, and after cultivation Not getting the satisfactory price identified Ist rank followed by Price fluctuation of Agri. Produce, Middle man involved detected IInd, IIIrd ranked for sale of their Agri Produce among many problems respectively.

Keywords: Constraints, cultivation, farm produce, Garrett ranking technique

Introduction
"India lives in villages" claimed by our father of the Nation Mahatma Gandhi. The primary occupation in the villages is that of agricultural farming. It is important to make this occupation profitable so that India is better in every respect. Farming continues to be the backbone of the socio-economic structure of the Nation. Besides its contribution of a sizeable quarter of the economic security to the two-thirds of the India's population, it has a prime role of stability of the equilibrium of supply and demand of farm commodities. This issue of equilibrium of supply and demand in itself is as complex as the diversified and dynamic domain of crop and livestock production. The consumers as well as producers through the costs directly feel the result that they have to pay for meeting their demand and getting remuneration for their efforts respectively. (Sujit *et al*. 2002) [1]. Agriculture is not only the way of life for people of India, but also a tradition which for centuries has shaped the outlook, the thought, the culture and economic life. Agriculture is the single largest production sector contributing more than 15 percent of GDP for India economy. Therefore, agriculture is key sector for all strategic planning for socio-economic development of our country. Speedy growth of agriculture is necessary not only to achieve self-reliance at country level but also for household food security and to bring about equity in distribution of wealth and income resulting in quick reduction in poverty line (Shrivastava *et al.* 2010) [2]. In the study area farm community facing various constraints related to cultivation and marketing of farm produce of different crops. This study is in the continuation of some earlier investigation carried out by researches in some another area like Lakhwinder Singh *et al*. (2020) [3] was found result from their study that most of the unorganised and organised seed producers faced the problems in marketing of potato seed crop. Price fluctuations of produce, non-availability of regulated markets and lack of demand were the major problems faced by them.

Objective
To identify constraints faced by the farmers during cultivation and sale of farm produce in Prayagraj district of Uttar Pradesh.

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Research Methodology

The present study was conducted in Prayagraj district of Uttar Pradesh during 2019-20. Ex-post facto research design was followed for carrying out the study. The simple random sampling was used for selection of block, village, and respondent. Prayagraj district comprises of 20 blocks. Among these blocks, Jasra and Soraon block is selected purposively for the present study. Five percent villages from each block was randomly selected for the study. Thus, total 12 villages were selected for the study. A total of 240 respondent were randomly selected. Two list of 12 constrains was prepared and data were gathered on each one. The primary data were collected by personal contact method with the help of structured pre-tested interview schedule and collected data were coded, classified, tabulated and analyzed in light of objectives and in order to make the findings meaningful interpretation.

Henry Garrett's ranking technique

This technique was used to evaluate the constraints faced by the researchers. The orders of merit given by the respondents were converted in to rank by using the formula. To find out the most significant factor which influences the respondent, Garrett's ranking technique was used. As per this method, respondents have been asked to assign the rank for all factors and the outcomes of such ranking have been converted into score value with the help of the following formula.

$$\text{Percent position} = \frac{100(R_{ij} - 0.5)}{N_j}$$

Where,

R_{ij} - Rank given for the ith variable by the jth respondents
N_j - Number of variable ranked by jth respondents

With the help of Garrett's Table, the percent position estimated was converted into scores. Then for each factor, the scores of each individual were added and then total value of scores and mean values of score was calculated. The factors having highest mean value was considered to be the most important factor Dhanavandan S. (2016) [4].

Results and Discussion

1. Personal profile of the respondent

The personal characteristics like age, education and land holding of the respondents were presented in Table 1 (Fig. 1, 2, 3), the result showed the minimum age of the respondents as 18 years while the maximum age was 60 years. The data shows that majority of 57.08 percent of the farmers were in the middle age group, followed by 17.50 percent and 25.41 percent of them were in old age group and young age group, respectively. The responded having good education, results shows that 41.66 percent of the farmers had High school education, followed by 30.41 percent of them had education up to Graduation level. Among the farmers, 21.66 percent were Intermediate and 06.25 percent of the farmers were having education up to Primary level. In the study area 58.34 percent of farmers are holding Marginal Land Holding (< 1 hectare). 25.00 percent of farmers have Small (>1 to < 2 hectares), 10.41 percent of farmers holding Semi Medium (> 2 to < 4 hectares), rest of 06.25 percent of farmers having Medium (> 4 to < 10 hectares), *M.B. Shanabhoga et al.* (2021) [5] also finding the same trends of personal characteristics in his study.

Table 1: Distribution of respondent according to their personal characteristics

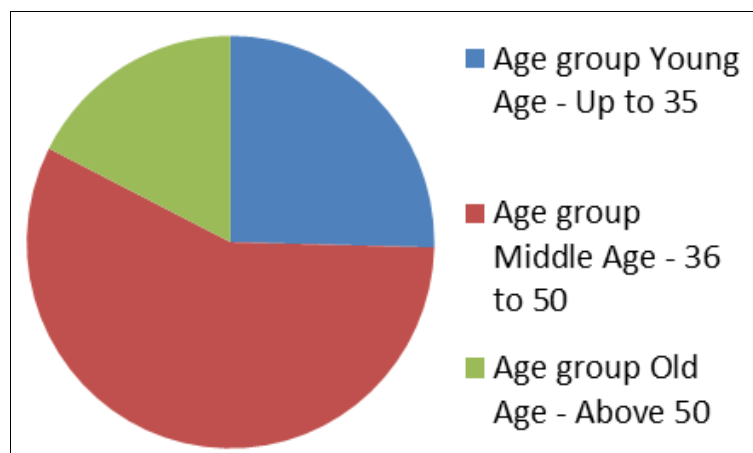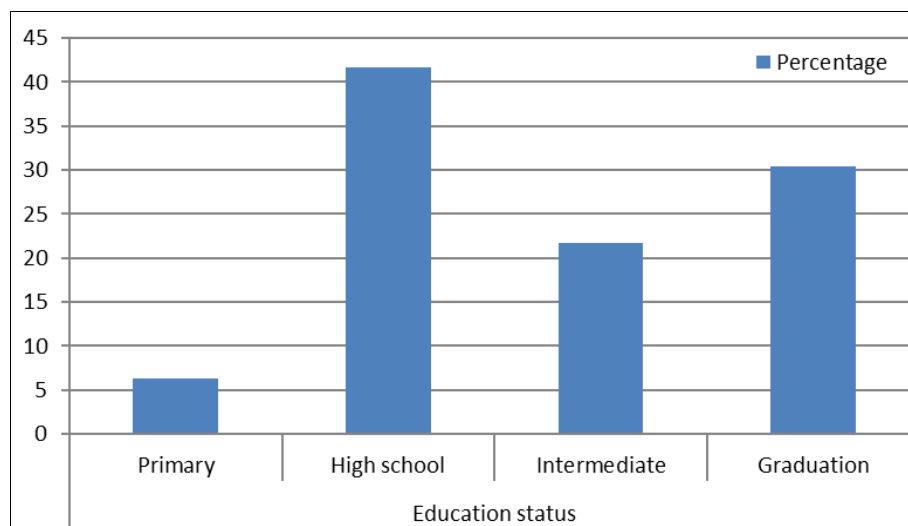| Particulars	Category	Percentage
Age group	Young Age - Up to 35	25.41
	Middle Age - 36 to 50	57.08
	Old Age - Above 50	17.50
Educational status	Primary	06.25
	High school	41.66
	Intermediate	21.66
	Graduation	30.41
Land holding	Marginal (< 1 hectare)	58.34
	Small (>1to < 2 hectares)	25.00
	Semi Medium (> 2 to < 4 hectares)	10.41
	Medium (> 4 to < 10 hectares)	06.25

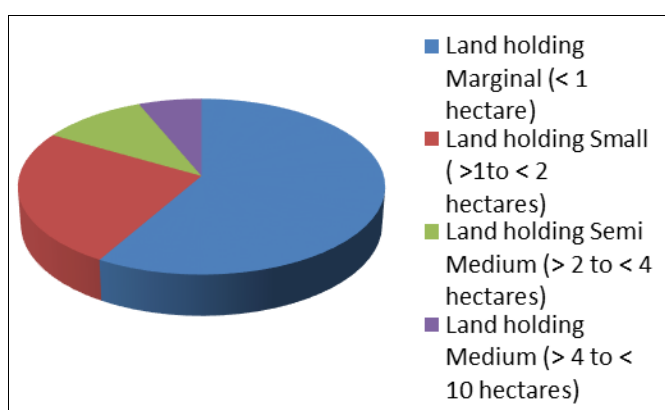**Fig 1:** Age group

Fig 2: Educational status

Fig 3: Land holding

2. Constrains faced by farmers related to Cultivation of crop
From the Table 2 it has been clearly observed that 'Lack of knowledge about diseases insect and pest of crop' was received the maximum Garret score of 71.22 and was ranked as the first constraint. The next important constrains was 'High cost of pesticides' with Garrett's score 69.7. The third important suggestion ranked was 'Uncertainty of weather' with Garrett's scoring 69.3. 'Lack of knowledge about insecticide / pesticide and its doses' was ranked fourth with Garrett scoring 61.2. A fifth constrains according to rank was 'High rent of machine' with Garrett's scoring 60.2. The sixth suggestion was 'Lack of knowledge of nutrient content of different fertilizer' with Garrett's scoring 48.4. The seventh constrains ranked was 'Shortage and high wages of labour' with Garrett's scoring 47.3. The next constrain was 'High cost of fertilizers and manures' with Garrett's score 47.2. 'Irrigation facility not available when needed' was ranked ninth with Garrett score 43.8. Tenth constrains ranked was 'lack of knowledge about Seed treatment' with Garrett score 30.4. 'High cost of seed 'got 27.4 Garrett score ranked Eleventh. The twelfth constrains faced by farmers was 'Unavailability quality seeds 'with Garrett scoring 25.1. The similar results can be seen in the study conducted by Ayush and Amar (2023) [6].

Table 2: Constrains faced by farmers related to Cultivation of crop (N=240)

Sr. No.	Constrains	Garrett Mean Score	Rank
1.	Unavailability quality seeds	25.1	XII
2.	High cost of seed	27.4	XI
3.	Lack of knowledge about Seed treatment	30.4	X
4.	High rent of machine	60.2	V
5.	Irrigation facility not available when needed	43.8	IX
6.	High cost of fertilizers and manures	47.2	VIII
7.	Lack of knowledge of nutrient content of different fertilizer	48.4	VI
8.	Shortage and high wages of labour	47.3	VII
9.	High cost of pesticides	69.7	II
10.	Lack of knowledge about diseases insect and pest of crop	70	I
11.	Lack of knowledge about insecticide / pesticide and its doses	61.2	IV
12.	Uncertainty of weather	69.3	III

3. Constrains related to Marketing and Sale of farm produce
From the Table 3 it has been clearly observed that 'Not getting the satisfactory price' was received the maximum Garret score of 73.7 and was ranked as the first constraint. The next important constrains was 'Price fluctuation of Agri. Produce' with Garrett's score 69.7. The third important suggestion ranked was 'Price fluctuation of Agri. Produce' with Garrett's scoring 66.6. 'Inadequate sources of finance' was ranked fourth with Garrett score 61.2. A fifth constrains according to rank was

'High rate of bank interest' with Garrett's scoring 59.2. The sixth suggestion was 'Lack of proper training about agriculture activity / extension programme' with Garrett's scoring 48.4. The seventh constrains ranked was 'High rate of interest of Money landers' with Garrett's scoring 47.3. The next constrain was 'Difficulty in getting loan' with Garrett's score 47.2. 'Lack of knowledge about market information' was ranked ninth with Garrett score 42.6. Tenth constrains ranked was 'Inadequate transport' with Garrett score 29.00. 'Lack of Regulated markets

'got 27.6 Garrett score ranked Eleventh. The twelfth constrains faced by farmers was 'Inappropriate Storage facilities 'with Garrett scoring 27.5. The similar results can be seen in the study conducted by Seema Yadav *et al*. (2010) [7].

Table 3: Constrains faced by farmers related to Marketing and sale of farm produce (N=240)

Sr. No.	Constrains	Garrett Mean Score	Ranking
1.	Inappropriate Storage facilities	27.5	XII
2.	Lack of Regulated markets	27.6	XI
3.	Price fluctuation of Agri. Produce	69.7	II
4.	Lack of knowledge about market information	42.6	IX
5.	Middle man involved	66.6	III
6.	Inadequate transport	29	X
7.	Lack of proper training about agriculture activity / extension programme	48.4	VI
8.	Inadequate sources of finance	61.2	IV
9.	High rate of bank interest	59.2	V
10.	Difficulty in getting loan	47.2	VIII
11.	High rate of interest of Money landers	47.3	VII
12.	Not getting the satisfactory price	73.7	I

Conclusion

It can be concluded from the study that in the age group maximum 57.08 percent farmers were belong to the middle age group, and in minimum 17.50 percent were old age group. In the education status 41.66 percent of farmers have their high school, and 06.25 percent farmers completed Primary education, 58.34 percent of farmers were found Marginal (< 1 hectare), and 06.25 percent of farmers were holding Medium size of land (> 4 to < 10 hectares). The major important constraints faced by farmers were analysed through Garrett Ranking. As per this method, respondents have been asked to assign the rank for all factors and the outcomes of such ranking have been converted into score value. It's clear from study that farmers are facing problems with their day to day agricultural activity. Constrains has been divided in two part 1. Constrains faced by farmers related to Cultivation of crop and 2. Constrains faced by farmers related to sale and Marketing of farm produce. Finding of the study show that Lack of knowledge about diseases of insect and pest of crop, High cost of pesticides, and Uncertainty of weather ranked I[st], IInd, and IIIrd respectively during cultivation of major crop, and after cultivation Not getting the satisfactory price identified I[st] rank followed by Price fluctuation of Agri Produce, Middle man involved detected IInd, IIIrd ranked for sale of their Agri Produce among many problems respectively.

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