Constraints analysis of chickpea production in Auraiya district of Uttar Pradesh

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Abstract
Chickpea in India have long been considered as good source of protein thus play a crucial role in healthy diets, sustainable food production. Study on constraints analysis of chickpea was conducted during agricultural year 2017-18. Keeping in the view their food and nutritional security and also income and employment generation in Auraiya District of Uttar Pradesh assumes special significance. The study based on Constraints analysis of chickpea production in Auraiya District of Uttar Pradesh. District Auraiya was purposively selected and the block Auraiya having highest acreage under gram was selected purposively for the study. List of the villages from selected block were prepared along with acreage under Chickpea cultivation and 5 villages were selected randomly for study. In all 100 number of farmers were selected proportionally from each category of farmers and classified into three categories i.e. marginal (below 1 ha), small (1-2 ha) and medium (2-4 ha). The data were collected by personal interview technique with the help of pre-tested structured schedule. The period of enquiry pertain to the agricultural year 2017-18.

The study revealed that four types of constraints faced and raised by the chickpea growers i.e. related to Technical problems, Financial problems, Managerial problems and Miscellaneous problems. Technical problems were ranked first followed by financial problems, Managerial problems and miscellaneous problems. All the problems were commonly faced by Marginal farmers followed by small and medium farmers. Except problem related to miscellaneous commonly faced by small farmers and followed by medium and marginal farmers. Thus, it concluded that problems and size group of farms have indirect relationship except miscellaneous problems it means the size of farm increases problems faced are decreases but in case of miscellaneous problems, miscellaneous problems not show any definite problems. Good quality seed, adequate farmer’s training, crop loan and fencing of farms facilitated to the farmers. Chickpea is a lucrative crop and it can help the farmers in doubling their income in the study area.

Keywords: Pre-tested schedule, Income and employment, Technical Problems, financial problems, Managerial problems and miscellaneous problems.

Introduction
In India, the total food production in 2013-14 was about 257.4 million tones, out of which only 19.3 million tones was contributed by pulses. The production of cereals increase by 460 per cent since 1950-51 but the production of pulses in the country has increased only 178 per cent. There is acute shortage of pulses in the country. The prices have increased considerably and the consumer is hard hit to buy his pulse requirements. Thus the availability of pulse per capita per day has proportionately decline from 71g [1955] to 36.9g [1998] against the minimum recommended requirement of 70g per capita per day. There is not much possibility of the import of pulses in the country. The production of pulses has to be increased internally to meet the demand. India is the largest producer of chickpea in the world sharing 65.25 and 65.49 per cent (FAO STAT, 2013) of the total area (11.97 m ha) and production (9.53mt), respectively. In India, Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharashtra, Gujarat, Andhra Pradesh and Karnataka are the major chickpea producing states sharing over 95 per cent area. During last five decades, chickpea has registered significant increase in production (3.53 average annual growth rate for 1950-2012), which is primarily due to introduction of high yielding and diseases resistant varieties and adoption of improved production technologies. During last ten years, the productivity of chickpea has increased @ 1.74 per cent but the gross Chickpea production has gone up by 6.32 per cent, besides the growth in area @ 4.43 per cent. With accelerated growth rate and steps taken by the government under National Food Security
Mission, the target of 10.22 mt chickpea production by 2030 can be achieved, successfully. Pulses are grown across the country with highest share coming from Madhya Pradesh (24 per cent), Uttar Pradesh (16 per cent), Maharashtra (14 per cent), Andhra Pradesh (10 per cent), Karnataka (7 per cent) followed by Rajasthan (6 per cent), which together accounted about 77 per cent of the total pulse production, while the remaining 23 per cent contributed by Gujarat, Chhattisgarh, Bihar, Orissa and Jharkhand. Among Pulses, chickpea (45.1 per cent) occupies the major share, followed by pigeonpea (15.7 per cent), moong (9.9 per cent), urad (9.6 per cent) and lentil (7.3 per cent), altogether which together accounts for 87 per cent of the total pulses production. Much of the pulses production has been slowly shifted from kharif to rabi and now the rabi share is increased to about 61.10 per cent of the total pulse production. Therefore, more emphasis is required to be given on rabi pulse crops as there production share is much higher and increasing in recent years. Chickpea is a less labour intensive crop and it requires low inputs as compared to other high yielding cereals. Most of the people in the country satisfy their appetite requirements by consuming pulses and chickpea is the most dominating pulse in that list. Some important fact reflecting impacts of gram are; first, it fixes atmospheric nitrogen in soils and thus improves soil fertility and saves fertilizer costs in subsequent crops. Second, it improves more intensive and productive use of land, particularly in areas where land is scarce and the crop can be grown as a second crop using residual moisture. Third, it reduces malnutrition and improves human health especially for the poor who cannot afford livestock products. It is an important source of protein, vitamins and minerals etc. Fourth, the growing demand in both the domestic and export markets provides a source of cash for small farmer. Fifth, it increases livestock productivity as the residue is rich in digestible crude protein content compared to cereals. It has been well recognized as a valuable source of protein particularly in India, where a majority of the population is vegetarian and depends on the low priced food for meeting their dietary requirements. India alone covers nearly 52.5 per cent of the world acreage and production of gram. Chickpea occupies about 38 per cent of area under pulses and contributes about 50 per cent of total pulse production of India. It is used for human consumption, as well as, for feeding to animals. It is eaten both whole fried or boiled and salted, or more generally in the form of the split pulse which is cooked and eaten. In Auraiya district of U.P., no scientific and economic study has been so far conducted, hence this study entitled

**Chickpea:** Study on Cost of Cultivation and Profit measures in Auraiya Distt. Of western U.P. assumes special importance and was carried out with objective: Constraints analysis of chickpea production in Auraiya District of Uttar Pradesh.

**Materials and Methods**

Auraiya district of Uttar Pradesh was selected purposively to avoid the operational inconvenience of the investigator. A list of all 7 blocks of Auraiya district was prepared and one block namely Auraiya having highest are coverage under chickpea crop was selected. A list of villages growing chickpea was prepared from selected block and five villages were selected for study. A list of all chickpea growers of each selected village was prepared along with their size of holding. The respondents were stratified into 3 categories, marginal farmers (below 1 ha), small farmers (1-2 ha) and medium farmers (2-4 ha). Finally 100 farmers were selected randomly according to their proportion under various categories viz.: marginal farmers (45), small farmers (35) and medium farmers (20). The primary data were collected by survey method i.e. pre-tested structured schedule used while secondary data were collected from journals, reports and records of districts and block head quarter. The study covers the agriculture year 2017-18. Simple tabular statistical analysis was applied for the result. Weighted average and percentages were drawn out for various measures of interest for presenting in more effective manner.

**Results and Discussion**

**Table 1:** Indicates Problems faced by producer on different size of sample farms

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particular</th>
<th>Size of sample farms</th>
<th>Total</th>
<th>Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Technical problem</td>
<td>21.00</td>
<td>9.00</td>
<td>48.00</td>
</tr>
<tr>
<td>2.</td>
<td>Managerial problem</td>
<td>9.00</td>
<td>3.00</td>
<td>12.00</td>
</tr>
<tr>
<td>3.</td>
<td>Financial problem</td>
<td>12.00</td>
<td>5.00</td>
<td>17.00</td>
</tr>
<tr>
<td>4.</td>
<td>Miscellaneous problem</td>
<td>3.00</td>
<td>3.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>45.00</td>
<td>25.00</td>
<td>70.00</td>
</tr>
</tbody>
</table>

Major problems and constraints faced by the chickpea growers of the district were basically divided in four part i.e. (i) Technical problem (knowledge and skill), (ii) Managerial problem, (iii) Financial problem and (iv) Miscellaneous problem (risk and uncertainty) table revealed that As per the average score found against the respective problems, technical knowledge was ranked 1st with 48 per cent followed by financial 23 per cent, managerial 19 per cent and miscellaneous problems 10 per cent ranked as 2nd, 3rd and 4th respectively.

Major suggestions received from the respondent side to overcome the mentioned problems were to strengthen the extension services improvement of input supply system and financial support from financial institution. Detail knowledge about decision making crops planning and budgeting as well as disposal of farm produce along with market information should be extended.

**Suggestions for increasing Chickpea production in study area:**

1. Different government departments like department of agriculture, plant protection and irrigation should assure the timely and adequate supply of the inputs and irrigation water.
2. Government should also ensure that the quality inputs are supplied to the farmer by different private agencies.
3. Agencies involved in disseminating the improved scientific techniques should organize more practical training programmers in order to increase the knowledge and skill of chickpea growers.
4. Awareness among the farmers should be developed to have the market information which may help for efficient disposal of marketable surplus.
5. Any agricultural knowledge and new technology farmers should call “Kisan Call Center” No. 18001801551 and “IFFCO KISAN CALL CENTER” No. 534351.
Summary and Conclusion
From the above discussion it concluded that four types of constraints faced by the chickpea grower i.e. Technical problems, financial problems, managerial problems and miscellaneous problems. Technical problems rank 1st with 48 per cent followed by financial problems 23 per cent, managerial problems 19 percent and miscellaneous problems 10 per cent of total constraints faced by marginal, small and medium farmers. Thus, it concluded that problems and size group of farms have indirect relationship except miscellaneous problems it means the size of farm increases problems faced are decreases but in case of miscellaneous problems, miscellaneous problems not show any definite problems. Good quality seed, adequate farmer’s training, crop loan and fencing of farms facilitated to the farmers. Chickpea is a lucrative crop and it can help the farmers in doubling their income in the study area.

References