# Various Constraints Perceived By Urd Growers In Southern Rajasthan

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#### ABSTRACT

The present study was conducted in Banswara and Udaipur district of Southern Rajasthan. Total 80 urd beneficiary farmers were selected on the basis of random sampling method from the identified districts. The study revealed that timely non-availability of seed mini kits of urd at village level, lack of skill about application of chemicals, improper knowledge about application of micronutrients, Non–availability of bio-fertilizers at village level, lack of technological guidance at proper time and inadequate knowledge about soil treatments were major constraints perceived by the beneficiary urd growers in the study area.

KeyWords: Bio-fertilizers, Chemicals, Constraints, Growers, Urd

#### INTRODUCTION

National Food Security Mission (NFSM) is being run at present in all 13, 33 and 12 districts of Rajasthan under the component of wheat, pulses and course cereals, respectively. In Rajasthan, rice is not covered under this prourdme. The emphasis in component third on NFSM- pulse reflects that several million people in the country remain largely bypassed by the green revolution and modern agricultural practices. The component NFSM- pulse is being implemented in Udaipur, Dungarpur and Banswara districts of Southern Rajasthan since 2010. These districts are comes under Tribal- Sub-Plan area and also represent the nearly 45 per cent tribal population of the state. The mission is in full swing and so far no study in the operational area of the mission has been conducted regarding the response of farmers about urd interventions introduced under NFSM. This is the right time to assess the impact of the mission with regards to interventions introduced in urd cultivation. With this background in view, the present study was undertaken with the specific objectives:

- To find out the level of constraints perceived by the NFSM beneficiaries in adoption of recommended urd interventions
- To find out the extent of constraints perceived by beneficiaries regarding adoption of recommended urd interventions

# Methodology

The present study was conducted in Banswara and Udaipur district of Southern Rajasthan. Two panchay at samities from each identified district were selected on the basis of maximum number of farmers are benefited through pulse interventions introduced under NFSM. For selection of villages, a complete list of all the villages in which pulse interventions were introduced under National Food Security Mission from 2010 to 2015 was prepared in consultation with the personnel of Deputy Director Agriculture (Extension) office from the selected panchayat samities. From each selected panchayat samiti four beneficiary villages where interventions related to urd are introduced were selected on the basis of maximum farmers were benefitted under NFSM. Thus, in all 16 villages were selected from all the identified panchayat samities for present investigation. For selection of beneficiary respondents, 5 urd growers were selected randomly from each identified village. Thus, a total of 80 urd beneficiary farmers were selected on the basis of random sampling method. Data were collected by personal interview technique. Thereafter, data were analyzed, tabulated and results were interpreted in light of the objectives of study. Face to face interview technique was used to collect data from the selected respondents. Thereafter, hypotheses were formulated and appropriate statistical tests were used to arrive at specific conclusions. The statistical measures used were mean, percentage, mean per cent score, standard deviation, 'Z' test and chi-square test

#### **RESULTS AND DISCUSSION**

In the present study, the term constraint means the barriers or obstacles, which are perceived by the beneficiary respondents in the adoption of recommended pulse interventions. Adoption of technology depends on various factors, which may either accelerate or retard its adoption. It is important on the part of extension functionaries to identify such factors so as to make the dissemination of technologies in line with the farmers' perception and need. It is needless to mention that pace of adoption can be augmented by overcoming the perceived constraints. So, it was felt necessary to overcome the perceived constraints, which prevented the respondents from adopting recommended urd interventions. In the present context, the constraints perceived by the respondents in the adoption of urd interventions were identified and the results are presented in the tables 1 and 2.

#### **Respondent's strata**

To get an overview of the level of constraints, the respondents were identified into three strata i.e. low (upto 23.37), medium (23.38 to 28.36) and high (above 28.36) level of constraints.<sup>1</sup>These categories were formed on the basis of calculated mean and standard deviation of the scores given to the constraints by the respondents. The results of the same have been given in table 1.

The data presented in table 1 reveal that 45.00 per cent beneficiary farmers faced medium level of constraints in adoption of recommended urd interventions.<sup>2</sup> Whereas, 35.00 per cent beneficiaries were observed to be in high constraints group and only 20.00 per cent beneficiary respondents perceived low level of constraints in recommended urd interventions.<sup>3</sup> From the above results, it can be concluded that majority of beneficiary farmers had either medium or high level of constraints in adoption of urd interventions.

The present findings are supported by the findings of<sup>20</sup> revealed that 53.75 per cent of total respondents were in the medium constraints group and 23.75 per cent of total respondents were in high constraints group and 22.50 per cent respondents were observe in the low constraints group.<sup>19</sup> It was further indicated that 46.25 and 61.25 per cent of tribal and non-tribal pigeon-pea growers were in the medium constraints group respectively, whereas 15.00 per cent non-tribal farmers perceived high level of constraints in adoption of pigeon-pea cultivation technology.<sup>5</sup>

#### **Extent of constraints**

Efforts were made to find out the priority of constraints perceived by the beneficiary respondents in adoption of recommended urd interventions introduced under National Food Security Mission.

# Table 1: Impact of constraints on the respondents for the adoption of urd

| S. No. | Classes of respondents     | Frequency | n=80<br>Per cent |
|--------|----------------------------|-----------|------------------|
| 1      | Low<br>(Upto 23.37 )       | 16        | 20               |
| 2      | Medium<br>(23.38 to 28.36) | 36        | 45               |
| 3      | High<br>(Above 28.36)      | 28        | 35               |
|        | Total                      | 80        | 100              |

<sup>[7]</sup> For this mean per cent score for each constraint was calculated and ranked accordingly. The results of the same have been presented in table 2.

The data presented in table 2 reveals that "timely non-availability of seed mini kits of urd at local level" was expressed as most important constraint by the urd growers with mean per cent score (MPS) 82.08 and it was ranked first in the priority of the constraints<sup>8</sup> The second important constraint perceived by the beneficiary respondents was "lack of skill about application of chemicals" with the extent of MPS 80.42<sup>9</sup> Whereas, the constraint related to "improper knowledge about application of micro-nutrients" was also expressed as third important constraint by the beneficiary urd growers with MPS 77.92.<sup>11</sup>

Further analysis of table shows that "nonavailability of bio- fertilizers of urd at local level", "lack of technology guidance at proper time," "lack of competence of AAOs/ Agriculture Supervisor in conducting demonstrations", "high cost of improved seeds, micro-nutrients & fungicides," "inadequate knowledge about soil treatment," "biased agriculture supervisor", lack of knowledge about application of gypsum "fragment and undulating land for urd cultivation," "high cost of farm implements", were expressed as important constraints by the beneficiary farmers in adoption of recommended urd interventions.<sup>18</sup> The mean percent score of these constraints was 77.50, 77.08, 73.33, 72.50, 72.08, 69.58, 69.17, 68.75 and 67.92, respectively.12 It was also found that "lack of knowledge about seed treatment," "lack of skill about plant protection measures", inadequate amount of micro nutrients and chemicals", were also perceived as average constraints by the respondents with 67.50, 67.08 and 66.50 MPS, respectively.13 The least important constraints expressed by the urd growers were nonavailability of plant protection equipments and "lack of irrigation water for cultivation of urd" with 66.25 and 65.42 MPS.<sup>16</sup> These constraints were ranked at lowest in the ranking hierarchy of constraints perceived by the beneficiary farmers.

From the above discussion it could be concluded that timely non- availability of seed minikits of urd at local level, lack of skill about application of chemicals, improper knowledge about

| S.<br>No. | Constraints  | MPS   | n=8<br>Rank |
|-----------|--|-------|-------------|
| NO.       |  |       |             |
| 1         | Timely non-availability of seed minikits of urd at local level | 82.08 | 1           |
| 2         | Inadequate knowledge about soil treatment                      | 72.08 | 8           |
| 3         | Lack of knowledge about seed treatment                         | 67.5  | 13          |
| 4         | Improper knowledge about application of micro-nutrients        | 77.92 | 3           |
| 5         | Biased Agriculture supervisor                                  | 69.58 | 9           |
| 6         | Lack of technological guidance at proper time                  | 77.08 | 5           |
| 7         | Lack of knowledge about application of gypsum                  | 69.17 | 10          |
| 8         | High cost of farm implements                                   | 67.92 | 12          |
| 9         | High cost of improved seeds, micro-nutrients and fungicides    | 72.5  | 7           |
| 10        | Lack of skill about plant protection measures                  | 67.08 | 14          |
| 11        | Non-availability of plant protection equipments                | 66.25 | 16          |
| 12        | Lack of skill about application of chemicals                   | 80.42 | 2           |
| 13        | Inadequate amount of micronutrients and chemicals              | 66.5  | 15          |
| 14        | Lack of competence of AAOs / Agriculture Supervisors in        | 73.33 | 6           |
|           | conducting urd demonstrations                                  |       |             |
| 15        | Fragment and undulating land for urd cultivation               | 68.75 | 11          |
| 16        | Lack of irrigation water for cultivation of urd                | 65.42 | 17          |
| 17        | Non –availability of bio-fertilizers at village level          | 77.5  | 4           |

Table 2: Constraints perceived by beneficiaries in adoption of recommended urd interventions

application of micro-nutrients, non-availability of bio-fertilizers of urd at local level, lack of knowledge about soil treatment, fragment & undulating land and were major constraints expressed by the urd growers in complete adoption of recommended urd interventions. The similar findings are supported by the findings of.<sup>6</sup>

#### CONCLUSION

The study revealed that timely nonavailability of seed mini kits at local level, lack of skill about application of chemicals, improper knowledge of micro-nutrient application, non-availability of bio-fertilizers at village level, lack of technology guidance at proper time, Lack of competence of AAOs / Agriculture Supervisors in conducting urd demonstrations, fragmented & undulating land for urd cultivation, non-availability of plant protection equipments, lack of skill about plant protection measures, inadequate knowledge about soil treatment, biased Agriculture supervisors and high cost of improved seeds, micro-nutrients, fungicides were important constraints expressed by the beneficiary farmers in the adoption of recommended urd interventions in the study area.

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