

**RESEARCH ARTICLE :**

# Farm profits derived by the beneficiaries on account of adoption of urd interventions under NFSM

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**SUMMARY :** The present study was conducted in Banswara and Udaipur districts of Southern Rajasthan. Total 120 urd beneficiary and non-beneficiary farmers were selected on the basis of random sampling method from the identified districts. The study reveals that out of 120 respondents, 51 (42.50 %) respondents in high farm profit group *i.e.* above Rs.21500/year. Whereas, 47 urd growers (39.17 %) could be placed under medium level of farm profit group *viz.*, ranging from Rs.18000 to 21500/year and 22 respondents (18.33 %) were found in the low farm profit group upto Rs. 18000/ year.

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**KEY WORDS :**

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## **BACKGROUND AND OBJECTIVES**

National Food Security Mission is being run at present in all 13, 33 and 12 districts of Rajasthan under the component of wheat, pulses and coarse cereals, respectively. In Rajasthan, rice is not covered under this programme. 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 impact 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 entitled "Farm profits derived by the beneficiaries on account of adoption of urd interventions under NFSM in southern Rajasthan" was undertaken with the following specific objectives:

- To measure the changes in farm profits derived by beneficiaries on account of adoption of urd interventions introduced under National Food Security Mission.
- To find out the significant difference between beneficiary and non-beneficiary

farmers in farm profits derived from cultivation of urd crop.

## RESOURCES AND METHODS

The present study was conducted in Banswara and Udaipur districts of Southern Rajasthan. The National Food Security Mission is in operation in all eight panchayat samities of Banswara and Udaipur district, out of which only two panchayat samities from each identified district were selected on the basis of maximum number of farmers are benefited through pulse interventions introduced under NFSM. Thus, total four Panchayat Samities were taken for study. For selection of villages, four villages where interventions related to urd are introduced were selected from each identified Panchayat Samiti on the basis of maximum farmers were benefitted under this mission. Thus, in all 16 villages were selected from all the identified Panchayat Samities for present investigation. These villages were termed as beneficiary villages. To know the impact of National Food Security Mission, a control group of villages were also required. Therefore, two distant villages where the NFSM was not in operation were selected on the basis of maximum number of urd growers from each identified panchayat samiti. Thus, in total 8 villages were selected from all the identified panchayat samities and these villages were considered as non-beneficiaries villages. 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 from the identified villages. Likewise, 5 urd growers were also selected on the basis of random sampling technique from the each identified non-beneficiary village. Total 40 non-beneficiary farmers were selected from all the non-beneficiary villages. Thus, in all 120 respondents (80 beneficiary farmers and 40 non-beneficiary farmers) were included in the sample of study.

## OBSERVATIONS AND ANALYSIS

The National Food Security Mission (NFSM) is initiated for enhancing the food grain production of wheat, rice and pulse crops through area expansion and productivity enhancement, restoring soil fertility and productivity, creating employment opportunity and enhancing farm level economy to restore confidence of

farmers of targeted district. In this connection, the present investigation was carried out with one of its objectives as “to measure the changes in farm profits derived by beneficiaries on account of adoption of pulse interventions introduced under NFSM. The farm profits of non-beneficiary farmers due to cultivation of urd crop were also worked out for comparison with farm profits of beneficiary farmers. The results have been presented in subsequent tables.

### Distribution of the respondents according to their farm profits due to cultivation of urd crop :

The net farm profit (net income) due to cultivation of urd crop was calculated of beneficiary and non-beneficiary farmers. On the basis of income received from cultivation of urd crop, the respondents were categorized into three groups *viz.*, (i) low (upto Rs. 18000/year) (ii) medium (Rs. 18000 to 21500/year) and (iii) high (above Rs. 21500/ year). These categories were made on the basis of mean and standard deviation of the income obtained from the cultivation of urd crop by the respondents.

Table 1 reveals that out of 120 respondents, 51 (42.50 %) respondents were in high farm profit group *i.e.* above Rs.21500/year. Whereas, 47 urd growers (39.17 %) could be placed under medium level of farm profit group *viz.*, ranging from Rs.18000 to 21500/year and 22 respondents (18.33 %) were found in the low farm profit group upto Rs. 18000/ year.

A comparative view of farm profit derived from urd crop highlights that 56.25 per cent beneficiary farmers and only 15.00 per cent non-beneficiary farmers were observed in the group of high farm profit level (more than Rs. 21500/year). It was further noted that only 13.75 per cent beneficiary farmers and 27.50 per cent non-beneficiary farmers possessed farm profits from urd crop upto Rs.18000/year. Whereas, 30.00 per cent beneficiary farmers and 57.50 per cent non-beneficiary farmers were found to be in the group of medium farm profit ranging from Rs. 18000 to 21500/year due to urd cultivation.

From the above discussion it could be concluded that more than 85.00 per cent beneficiary farmers were either in high or medium group of farm profit more than Rs. 18000/year farm profit group. This was due to the fact that beneficiary farmers adopted the urd interventions introduced under National Food Security

Mission. Hence, there was a good impact on beneficiary farmers so that they obtained farm profits at higher level from cultivation of urd.

On the basis of results it can be recommended that NFSM on urd may be continued for next five years in Banswara and Udaipur districts so that all urd growers may be benefitted by this scheme.

The present finding are in line with the findings of Singh *et al.* (2009) who revealed that increase in crop yield been recorded in NATP adopted districts as compared to non-NATP districts. Samota (2011) also reported that 50.66 per cent of the total respondents were in medium B:C group, whereas, 46.71 and 2.63 per cent of the total respondents were found in the high and low B:C ratio group respectively.

**Comparison between beneficiary and non-beneficiary farmers about farm profits derived from recommended interventions of urd crop :**

To find out the variation or similarity in the farm profits derived by the respondents through adoption of recommended urd interventions between beneficiary and non-beneficiary farmers, ‘Z’ test was applied. The results are presented in Table 1.

**Hypotheses:**

NH<sub>06</sub> : There is no significant difference between beneficiary and non-beneficiary farmers in farm profits derived from cultivation of urd crop.

RH<sub>6</sub> : There is significant difference between beneficiary and non-beneficiary farmers in farm profits derived from cultivation of urd crop.

Data presented in Table 2 indicates that calculated

‘Z’ value (7.22) was greater than its tabulated value at 1 per cent level of significance. Hence, research hypothesis (RH<sub>6</sub>) was accepted and null hypothesis (NH<sub>06</sub>) was rejected, which leads to the conclusion that there had been significant difference in the farm profits derived by the beneficiary and non-beneficiary farmers on account of adoption of recommended interventions of urd crop.

Further analysis of Table 2 shows that mean score of beneficiary farmers was more than non-beneficiary farmers, which indicates that beneficiary farmers had more farm profits due to recommended interventions of urd crop introduced under the National Food Security Mission. From the above results it can be concluded that National Food Security Mission is most effective in terms of farm profits derived due to urd interventions introduced in Banswara and Udaipur district. The similar finding are supported by Reddy and Patil (1998) who revealed that the improved technology tested on farmer’s fields under the project of Front Line Demonstrations on oilseed crops showed the beneficial impact of improved technologies over farmer’s practices. The incremental benefit cost ratio clearly showed that the technologies were cost effective.

**Conclusion :**

It was found that that out of 120 respondents, 51 (42.50 %) respondents in high farm profit group *i.e.* above Rs. 21500/year. Whereas, 47 urd growers (39.17 %) could be placed under medium level of farm profit group *viz.*, ranging from Rs. 18000 to 21500/year and 22 respondents (18.33 %) were found in the low farm profit group upto Rs.18000/ year. It was concluded that there was a significant difference in level of farm profits

**Table 1: Distribution of the respondents according to their farm profit due to urd cultivation (n =120)**

Sr. No.	Level of farm profits	Beneficiary farmers		Non-beneficiary farmers		Total	
		f	%	f	%	f	%
1.	Low (Upto Rs.<18000 /year)	11	13.75	11	27.50	22	18.33
2.	Medium (Rs.18000 to 21500 /year)	24	30.00	23	57.50	47	39.17
3.	High (Above Rs. 21500 / year)	45	56.25	6	15.00	51	42.50
	Total	80	100.00	40	100.00	120	100.00

f = Frequency, % = Per cent

**Table 2 : Comparison between beneficiary and non-beneficiary farmers about farm profits derived from adoption of recommended urd interventions (n = 120)**

Sr. No.	Category of respondents	Mean	S.D.	‘Z’ value
1.	Beneficiary farmers	61425	15878	7.229**
2.	Non-beneficiary farmers	48955	10245	

\*\* indicates significance of value at P=0.01

between beneficiary and non-beneficiary farmers from urd cultivation. The beneficiary farmers had more farm profits than non-beneficiary farmers in urd cultivation. Thus, the NFSM played a significant role in more farm profits among beneficiary farmers of urd crop.

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