

RESEARCH ARTICLE :

Impact of National Food Security Mission with special reference to adoption level to field demonstration interventions in gram crop in southern Rajasthan

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SUMMARY : The present study was conducted in Banswara and Udaipur districts of Southern Rajasthan. Total 120 gram beneficiary and non-beneficiary farmers were selected on the basis of random sampling method from the identified districts. The findings reveal that the extent of adoption of RSG-888 variety of gram among beneficiary farmers was recorded 86.25 per cent, while in case of non-beneficiary farmers it was 61.25 per cent. In case of extent of adoption of the complete package of practices of RSG-888 variety of gram, it was found that beneficiary and non-beneficiary farmers had 83.75 and 62.50 per cent adoption, respectively.

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KEY WORDS :

NFSM, Beneficiary, Interventions, Adoption, Demonstration

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

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entitled “Impact of National Food Security Mission with special reference to adoption level to field demonstration interventions in gram crop in southern Rajasthan” was undertaken with the following specific objectives:

- To find out the level of adoption of recommended gram interventions among the respondents
- To find out the extent of adoption of field demonstration practices by the respondents in gram cultivation.

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 gram 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 gram 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 g growers were selected randomly from each identified village. Thus, a total of 80 g beneficiary farmers were selected on the basis of random sampling method from the identified villages. Likewise, 5 g 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 results obtained from the present study as well as discussions have been summarized under following heads:

Adoption of recommended gram interventions among the respondents :

National Food Security Mission offers assistance to farmers like purchasing of high yielding variety/hybrid seeds, soil amenders such as gypsum and lime and micro-nutrients, a large number of agriculture machinery and also assistance for taking up integrated pest control measures. In this connection, the personnel of State Agriculture Department introduced the interventions related to gram crop under NFSM namely, field demonstrations among the beneficiary farmers of Banswara and Udaipur districts of Rajasthan. Keeping this view in mind, an effort has been made to find out the

Table 1 : Distribution of respondents according to their level of adoption about gram interventions (n=120)

Sr. No.	Adoption level	Beneficiary farmers		Non-beneficiary farmers		Total	
		f	%	f	%	f	%
1.	Low (<19.21)	19	23.75	14	35.00	33	27.50
2.	Medium (19.21- 26.85)	23	28.75	16	40.00	39	32.50
3.	High (>26.85)	38	47.50	10	25.00	48	40.00
	Total	80	100.00	40	100.00	120	100.00

f = Frequency, % = Per cent

Table 2 : Extent of adoption of field demonstration practices by the respondents in gram cultivation (n=120)

Sr. No.	Aspects	Beneficiary farmers		Non-beneficiary farmers		Total	
		MPS	Rank	MPS	Rank	MPS	Rank
1.	Adoption of RSG-888 variety of gram	86.25	1	61.25	2	77.92	1
2.	Adoption of package of practices of gram	83.75	2	62.50	1	76.67	2

MPS=Mean per cent score

extent of adoption of recommended pulse interventions introduced under NFSM. The crop-wise results have been presented under the following heads:

Distribution of respondents according to their level of adoption about gram interventions :

To get an overview of adoption level, the respondents were divided into three categories *viz.*, low level of adoption (<19.21), medium level of adoption (19.21 to 26.85) and high level of adoption (>26.85). The groups were based on the calculated mean and standard deviation of the adoption scores obtained by the respondents. The results of the same are presented in Table 1.

Table 1 depicts that 32.50 per cent of the total respondents were in the medium level of adoption group, whereas, 40.00 per cent respondents were in high level of adoption group and remaining 27.50 per cent gram growers to be observed in the low level of adoption about recommended gram interventions.

Further, among the categories of gram growers, it was observed that 28.75 per cent beneficiary farmers and 40.00 per cent non-beneficiary farmers were in medium level of adoption category. Whereas, 23.75 per cent beneficiary farmers and 35.00 per cent non-beneficiary farmers were noted in the low level of adoption category. Likewise, 47.50 per cent and 25.00 per cent beneficiary and non-beneficiary farmers possessed high level of adoption, respectively about recommended gram interventions. Thus, from the above results it can be concluded that beneficiary gram growers had more adoption about recommended gram interventions than non-beneficiary gram growers in the study area. The similar findings are reported by Sarada and Kumar (2013) concluded that more than fifty per cent of beneficiary chickpea farmers had medium level of adoption with respect to Integrated Pest Management practices, followed by 36.00 per cent of beneficiary farmers under high category. Whereas 48.00 per cent of the non-beneficiary farmers were in low adoption category.

Field demonstrations intervention extent of adoption among gram growers:

The interventions of field demonstrations were introduced under National Food Security Mission in the study area. Therefore, an effort was made to assess the intervention of field demonstration of extent of adoption

among gram growers. The results of the same have been given in subsequent tables.

Adoption of field demonstration practices by the respondents in gram cultivation :

In order to know the extent of adoption of field demonstration practices by the respondents, two major aspects have been identified. The mean per cent scores were calculated for each aspect and then the results about the same have been presented in Table 2.

Data presented in Table 2 reveal that the extent of adoption of RSG-888 variety of gram among beneficiary farmers was recorded 86.25 per cent, while in case of non-beneficiary farmers it was 61.25 per cent. In case of extent of adoption of the complete package of practices of RSG-888 variety of gram, it was found that beneficiary and non-beneficiary farmers had 83.75 and 62.50 per cent adoption, respectively.

From the above discussion, it can be concluded that the extent of adoption in beneficiary farmers was 83.75 to 86.25 per cent, while in case of non-beneficiary farmers the extent of adoption was 61.25 to 62.50 per cent in all the aspects of field demonstrations. The similar findings have been reported by Samota *et al.* (2011) and Kumar *et al.* (2012).

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REFERENCES

- Chodhary, M.V.** (1999). A study of knowledge and adoption of improved cultivation practices of moth bean in Bikaner district of Rajasthan. M.Sc. (Ag.) Thesis, Rajasthan Agricultural University, Bikaner, RAJASTHAN (INDIA).
- Kumar, P.G.**, Jyosthna, M.K. and Reddy, P.L. (2013). Knowledge and extent of adoption of improved practices of chickpea through KVK interventions. *J. Res. ANGRAU*. **41** (3): 58-63.
- Kumar, R.** (2012). Effectiveness of National Food Security Mission in relation to recommended interventions of wheat crop in Udaipur district of Rajasthan. M.Sc. (Ag.) Thesis, Maharana Pratap University of Agriculture and Technology, Udaipur, RAJASTHAN (INDIA).
- Kumar, S.** (2001). Impact of National Research Centre on

rapeseed-mustard production technology by the farmers of Bharatpur district of Rajasthan. Ph.D. Thesis, Maharana Pratap University of Agriculture and Technology, Udaipur, RAJASTHAN (INDIA).

Kumar, S., Purushottam and Yadav, V. K. (2012). Knowledge and attitude of hill farmers towards improved agricultural practices. *Indian J. Extn. Edu.*, **48**(3&4): 26-29.

Rathore, N.S. (2001). A study on adoption of improved cultivation practices of mung bean (*Vigna radiata*) among the farmers of Nagaur district of Rajasthan. M.Sc.(Ag.) Thesis, Maharana Pratap University of Agriculture and Technology, Udaipur, RAJASTHAN (INDIA).

Samota, S.D. (2011). Evaluation of NAIP with special reference to interventions introduced in wheat cultivation in Banswara

district of Rajasthan. M.Sc. (Ag.) Thesis, Maharana Pratap University of Agricultural and Technology, Udaipur, RAJASTHAN (INDIA).

Samota, S. D. and Dangi, K.L. (2014). Impact of NAIP with special reference to high yielding variety (Raj-3765) in Banswara district of Rajasthan. *Indian J. Extn. Edu. & R.D.*, **22**: 103-105.

Sandhu, J.S. (2014). Impact evaluation studies of technical component of National Food Security Mission-ii Department of Agriculture and Cooperation, MOA GOI, New Delhi.

Sarada, O. and Kumar, G.V.S. (2013). Effect of front line demonstrations and trainings on knowledge and adoption of integrated pest management practices by chickpea farmers of Prakasam District of Andhra Pradesh. *J. Res. ANGRAU*, **41** (2): 68-73.

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