IMPACT OF NAIP WITH SPECIAL REFERENCE TO HIGH YIELDING VARIETY (RAJ-3765) IN BANSWARA DISTRICT OF RAJASTHAN

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ABSTRACT

National Agricultural Innovation Project (NAIP) focuses on four components which aimed at ICAR as the catalyzing agent for the management of change in the Indian National Agricultural Research System; Research on Sustainable Rural Livelihood Security; and Basic & Strategic Research in Frontier Areas of Agricultural Sciences, multiple technology options in holistic and integrated manner in order to increase the productivity and profitability. In Rajasthan, a consortium NAIP was executed in four tribal populated districts namely, Udaipur, Banswara, Dungarpur and Sirohi. District Banswara was selected for present investigation based on maximum households covered under the project. Talwara Panchayat Samiti was selected for the study. Total size of sample was constituted of 152 respondents, combining beneficiaries and non – beneficiaries.

The findings revealed that of total, majority of the respondents 71 (46.71 per cent) were from high knowledge category, while 57 (37.50 per cent) could be placed under low knowledge category. The proportion of respondents reported in the medium knowledge were 24 (15.79 per cent) in the study area. This calls for serious attention to be paid by the consortia project of NAIP under MPUAT, Udaipur.

INTRODUCATION

Shri Sharad Pawar, Union Agriculture Minister, on July 2006, launched a 6 year ambitious National Agricultural Innovation Project (NAIP), which focuses on innovations in agricultural technology. It has been facilitating an accelerated and sustainable transformation of the Indian Agriculture so that it can support poverty alleviation and income generation. National Agricultural Technology Project (NATP) led by the ICAR, aimed to implement the shared understanding of the Government of India and the World Bank on technology-led - pro - poor growth, and it facilitated the public sector reform process for accelerating the flow of agricultural technologies. A key lesson from the NATP is that deliberate investments in partnership building and shared governance are required to speed up technology adaptation and dissemination. Keeping this lession in view, the present prestigious project (NAIP) has been launched in the country. Various Agricultural Universities in India have been provided with sufficient fund by the ICAR to implement different programmes for increasing livelihood and nutritional security through adoption of economically viable integrated farming system. Under component 3 of NAIP, Maharana Pratap University of Agriculture and Technology, Udaipur had also been sanctioned a consortia project entitled "Livelihood and nutritional security of Tribal dominated areas through integrated farming system and technology modules". Good efforts under the project were made to replace local seeds of wheat with High Yielding Varieties, hybrid seed of wheat is of key factors for higher production. So far no evaluation study in the operational area of the project under MPUAT has been conducted regarding the response of farmers about HYVs (Raj-3765) in wheat under NAIP. Introduction of Raj-3765 was one of the important interventions under NAIP. With this background, the study was conducted with the objective to determine the Impact of NAIP with special reference to High Yielding Variety (Raj-3765) in Banswara District of Rajasthan The comparison between two sets of respondents depicts the impact of NAIP in relation to HYVs (Raj-3765).

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RESEARCH METHODOLOGY

The investigation was carried out in Talwara Panchayat Samiti of Banswara district of southern Rajasthan with the specific objective to evaluate the impact NAIP with special reference HYVs (Raj-3765) intervention in Wheat cultivation. It was performed based on comparison of beneficiaries with those of non-beneficiaries with regard to their HYVs (Raj-3765) in Wheat cultivation

Out of total 52 Gram Panchayats under Talwara Panchayat Samiti, four Gram Panchayats viz. Masotiya, Devlia, Sageta and Jhalo ka Gada (Nokla) were covered under NAIP. Therefore, as such, these four Gram Panchayats were included in the present investigation.

Two sets of villages were selected for the present study. These were (a) Beneficiary villages and (b) Non-Beneficiary villages. Headquarters (villages) of Gram Panchayats were treated as selected villages for the study. Hence, Masotiya, Devlia, Sageta and Jhalo ka Gada (Nokla) were the villages where from required sample size of respondents (beneficiaries) was drawn. Since the knowledge level of HYVs (Raj-3765) in wheat crop had to be compared

between beneficiaries and non – beneficiaries of NAIP, a controlled sample of villages was also drawn. Therefore, four villages nearer to the beneficiary villages were selected; where from non – beneficiary farmers were interviewed. Seventy six beneficiaries and non-beneficiaries (19 from each village) were selected for the present study. Total size of sample was of 152 respondents, combining beneficiaries and non – beneficiaries.

Relevant data were collected from the selected respondents with the help of constructed interview schedule. Face -to -face interview technique was employed for collecting the data from the respondents. Thereafter, data were analyzed and results were interpreted in the light of the objective of study.

RESULTS AND DISCUSSION

Distribution of the respondents according to their knowledge level regarding HYV wheat (Raj-3765)

The respondents were classified into three categories *viz.*, high, medium and low levels of knowledge. These categories were formed on the basis of calculated mean per cent score of the knowledge obtained by the respondents.

Table 1: Distribution of the respondents according to their knowledge level regarding HYV of wheat (Raj-3765) n =152

S. No.	Knowledge level	Beneficiaries	Non-beneficiaries	Total
1	Low(MPS up to 33)	33 (43.42)	24 (31.58)	57 (37.50)
2	Medium(MPS 34-66)	5 (6.58)	19 (25.00)	24(15.79)
3	High(MPS above 66)	38 (50)	33 (43.42)	71 (46.71)
	Total	76(100)	76 (100)	152 (100)

MPS=Mean per cent score, figures within the parentheses are percentage to the total, $n=n_1 + n_2$, n_1 =Size of sample for beneficiary, n_2 = Size of sample for non-beneficiary

Table 1 revealed that majority of the respondents 71 (46.71 per cent) were from high knowledge category, while 57 (37.50 per cent) could be placed under low knowledge category. The proportion of respondents reported in the medium knowledge were 24 (15.79 per cent) in the study area. The analyzed data in Table 1 divulge that 38 (50.00 per cent) of beneficiaries and 33 (43.42 per cent) non-beneficiary had high level of knowledge. Likewise, 33 (43.42 per cent) of the beneficiaries and 24 (31.58 per cent) of non-beneficiaries possessed low level of knowledge.

However, 5 (6.58 per cent) beneficiary farmers and 19 (25.00 per cent) non-beneficiary farmers fell under medium level.

It is concluded that beneficiaries, as compared to non-beneficiaries possessed slightly higher knowledge regarding Raj-3765 variety of wheat. Evidently, it may be due to the intervention of wheat HYVs among them under NAIP. It also depicts positive impact of the project. It meant, the project has moved in the right direction.

The results of the study are in the conformity with the findings of Meghwal (1999), Meena (2001) and Singh, K. and Singh, P. 2001.

Aspects wise knowledge level of the respondents regarding HYV Raj- 3765

It is evident from the data in Table 2 that beneficiaries and non-beneficiaries possessed maximum knowledge about, "seed rate of Raj-3765" with 90.11 and 88.36 respectively.

Table 2: Aspects wise knowledge level of the respondents regarding HYV Raj-3765

n = 152

S. No	Aspect	Beneficiarie MPS	s (n ₁) Rank	Non-b MPS	eneficiaries (n ₂) Rank	Total MPS	Rank
1.	Right sowing time of Raj-3765	89.33	П	88.36	I	88.84	I
2.	Seed rate of Raj-3765	90.11	I	86.26	II	88.18	II
3.	Row to row spacing	85.36	${f I\!V}$	75.00	V	80.18	V
4.	Average plant height	70.41	VII	69.01	VII	69.75	VII
5.	Crop maturity period of Raj-3765	75.01	VI	70.01	VI	72.51	VI
6.	Characters of Raj-3765.	81.11	V	81.33	IV	81.22	IV
7.	Average yield	87.33	Ш	85.01	III	86.17	Ш

MPS=Mean per cent score, n_1 =Size of sample for beneficiaries, n_2 = Size of sample for non-beneficiaries

This aspect was ranked first by beneficiaries' farmers and second by non-beneficiaries followed by average yield and row to row spacing. Pooled data show that farmers of both the groups possessed maximum knowledge of right sowing time, seed rate followed by average yield with respect to Raj.3765 along with their MPS 88.84, 88.18 and 86.17.

CONCLUSION

It is concluded that beneficiaries possessed comparatively higher knowledge as compared to non-beneficiaries of NAIP. The knowledge level of severe aspects of HYV of wheat reveal higher knowledge than non-beneficiaries NAIP farmers. Hence, it is meant that NAIP has exerted definite positive impact in the study area with regards to HYV of wheat.

Therefore, it is recommended that Raj-3765 of wheat should be treated as an important intervention under similar climate condition to that of Banswara, and the variety must be popularized as much as possible.

REFERENCES

Meghwal, R. R. 1999. Impact of Krishi Vigyan Kendra in the adoption of improved practices of bajra cultivation in Jodhpur district of Rajasthan. M.Sc. (Ag.) Thesis (Unpublished) Rajasthan Agricultural University, Bikaner, Campus, Udaipur.

Meena, R. 2001. Role of Krishi Vigyan Kendra in adoption of improved production practices of Groundnut by the farmers of Bikaner district of Rajasthan. Ph. D. Thesis (Unpublished) submitted to Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan.

Singh, K. and Singh, P. 2001. Farmers' knowledge of Wheat production technology in Eastern Rajasthan. *Rajasthan Journal of Extension Education*. **8:** 71-74.

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