



A study on constraints responsible for low adoption of wheat technology of small farmers in Aligarh district of U.P.

Pushpendra Singh

Associate Professor, Department of Economics, R.B.S. College, Agra, Uttar Pradesh, India

Abstract

The present study has been laid on two basis issues viz. Socio-Agro- Economic Characteristics of small farmers and constraints responsible for low adoption of wheat technology. The study covers 120 respondents of Aligarh district. Majority of the small farmers adoption are in-adequate supply of irrigation water, poor credit facilities and high cost of fertilizers.

Keywords: constraints responsible, wheat technology, Socio-Agro- Economic

Introduction

Indian agriculture had reached the stage of development and maturity much before the now advanced countries of the world embarked on the path of progress. At the time, there was a proper balance between agriculture and industry and both flourished hand-in-hand. This situation continued till the middle of 18th century. The interference from the alien British Government and its deliberate policy of throttling the village handicrafts and cottage industries destroyed the fiber of balance and the economy of the country was badly shattered. British pursued a typical colonial policy in the India and did nothing for development (or restoring) agriculture. Instead, they created a class of intermediaries known as "Zamindars" who sucked the very blood out of the rural poor. A substantial part of the produce was taken away by the parasitic class and the actual cultivators were left only with subsistence income. The cultivators had neither the resources nor the incentives to invest in agriculture. Therefore, Indian agriculture in the pre-independence era can be correctly described as a subsistence occupation. It was only after the advent of planning and more precisely after the advent of Green Revolution in the year 1966 that some farmers started adopting agriculture on a commercial basis.

At the time of the First World War, agriculture contributed two-third of national income. This was on account of the practical non-existence of Industrial development and infrastructure. However, after the initiation of Planning in India, the share of agriculture has persistently declined on account of the development of the secondary and tertiary

sectors of the economy. From 53.1% in 1950-51, the share of agriculture and allied activities (including agriculture, forestry and logging and fishing) in G.D.P. at factor cost declined to 29.6% in 1990-91 and further to 13.9% in 2013-14 (at 2004-05 prices). According to the new series (with base year 2011-12), the share of agriculture and allied activities in G.V.A. (Gross Value Added) at basic prices was 14.8% in 2017-18 and 14.4% in 2018-19.

In India during 2016-2017 the area under wheat was 31.8 million hectare under different cropping sequence and production was 275.68 million tones. Wheat productivity can be increased by providing copious water at the right time and timely given resources by the government. The study was conducted to examine the Socia-Agro-Economic features and constraints responsible for low adoption of wheat technology in C.D. block khair, Aligarh district, U.P.

Research Methodology

This study was conducted in khair Block of Aligarh district. Four village were selected randomly, namely Ahrula, Andala, Arni, Bajhera. Proportionate number of respondents were selected thus working total 120 respondents were selected thus working total 120 respondents for wider and scientific understanding. The data was collected and analyzed with the help of average and percentage basis.

Results and Discussion

The Socia-Agro-Economic status of the farmers are presented in Table.

Table 1: Socio-Agro-Economic status of the farmers.

S.No.		No. of Respondents	% of Respondents
Age wise distribution of respondents			
1.	Upto 30 years	25	20.84
2.	31 to 45 years	71	59.16
3.	Above 45 years	24	20.00
	Total	120	100.00
Caste wise distribution of respondents			
1.	Scheduled caste	41	41.66
2.	Backward caste	23	19.17
3.	Upper caste	56	46.67

	Total	120	100.00
Land ownership wise distribution of respondents			
1.	Upto 1 acre	50	41.66
2.	2 to 3 acres	33	27.50
3.	Above 3 acres	37	30.84
	Total	120	100.00
Education wise distribution			
1.	Illiterate	20	16.67
2.	Can read only	29	24.17
3.	Primary	27	22.50
4.	High School/Intermediate	33	27.50
5.	Graduate	11	9.16
	Total	120	100.00
On the basis of family type			
1.	Single	98	81.66
2.	Joint	22	18.34
	Total	120	100.00
On the basis of family size			
1.	Upto 5 member	76	63.34
2.	Above 5 member	44	36.66
	Total	120	100.00
Occupational background wise distribution			
1.	Labour	7	5.84
2.	Caste occupation	6	5.00
3.	Business	8	6.66
4.	Independent profession	-	-
5.	Service	8	6.66
6.	Cultivation	91	75.84
	Total	120	100.00
On the basis of type of house			
1.	Kaccha	26	21.67
2.	Mixed	80	66.66
3.	Pakka	14	11.67
	Total	120	100.00
On the basis of rooms in house			
1.	One	110	91.67
2.	Two	10	8.33
3.	Three	-	-
	Total	120	100.00
On the basis of annual income			
1.	Rs. 5000 to Rs. 28000	86	71.66
2.	Rs. 28000 to Rs. 51000	22	18.34
3.	Rs. 51001 to Rs. 73000	12	10.00
	Total	120	100.00
On the basis of farm power			
1.	Nil	50	41.67
2.	Bullocks	64	53.33
3.	Tractors	6	5.00
	Total	120	100.00
On the basis of farm implements			
1.	Country plough	58	48.33
2.	Seed drill	2	1.66
3.	Thresher	18	15.00
4.	Pump set	27	22.50
5.	Tubewell	22	18.34
6.	Cultivator	12	10.00
	Total	139	115.83
1.	Cycle	62	51.66
2.	Chair and table	26	21.66
3.	Radio	59	49.17
4.	T.V.	16	13.34
	Total	163	135.83

Note : More than one item has been mentioned by the respondents hence respondents exceed 120 and also exceed to 100 in case of farm implements and material possession.

The basic constraints/problems related to wheat cultivation experienced by small farmers.

The major finding pertaining to constraints experienced by small farmers are presented in following tables;

Table 2: Main bio-physical constraints perceived by the respondents regarding wheat technology.

S.No.	Constraints	No. of respondents	% of respondents	Rank order
1.	Weeds	85	71.66	II
2.	Non-availability of improved variety	82	68.33	IV
3.	Non-availability of good seed quality	25	20.83	-
4.	Poor cropping intensity	32	26.66	-
5.	Inadequate supply of fertilizer	96	80.00	I
6.	High cost of fertilizer	84	70.00	III
7.	Lack of proper knowledge	58	48.33	-
8.	Non-availability weedicide	14	11.66	-
9.	More attack of insect and pest	05	4.16	-

Note: Percentage calculated on the basis of response

It is evident from Table 2 that 80.0 percent respondents have faced the problem of inadequate supply of fertilizer, this problem is ranked 1st. The other Important problems are weeds 71.66 percent, high cost of fertilizer 70.00 per cent

and while 68.33 per cent respondents relished the non-availability of improved variety, these problems are ranked IInd, IIIrd and IV respectively.

Table 3: Socio- Economic constraints perceived by the respondents regarding wheat cultivation.

S.No.	Constraints	No. of respondents	% of respondents	Rank order
1.	Poor knowledge regarding cultivation of wheat crop	58	48.33	III
2.	Risk orientation	11	9.16	V
3.	Poor credit facilities	69	57.50	II
4.	Low profitability	87	72.50	I
5.	Poor marketing facilities	57	47.5	IV

Note : percentage calculated on the basis of response

From the Table :3, it is Clear that the low profitability in the major constraints realized by the farmers. The poor credit facility is the next constraints realized by the farmers. The

third constraints was the poor knowledge of wheat cultivation technology. The other constraints were poor marketing facility and risk in agriculture.

Table 4: Non- availability of water/irrigation

S.No.	Constraints	No. of respondents	% of respondents	Rank order
1.	Poor soil fertility	58	48.33	II
2.	Cultivation of marginal land	55	45.83	III
3.	Non-violability of labour	52	43.33	IV
4.	Poor knowledge of crop rotation	38	31.06	VI
5.	Lack of extension activities at the village level	38	31.6	VII
6.	Lack of mechanization	42	35.00	V
7.	Non – Availability of irrigation water	75	62.50	I
8.	Non-consolidation of field	25	20.00	VIII

Note : More than one problem has been experienced by the respondents hence total percentage exceed to 100.

The Table 4 clearly indicates that 62.50 per cent of the respondents were facing a problem of non-availability of water and ranked 1st, 48.33, 45.83, 43.33, per cent of the respondents reported the problem of poor soil fertility cultivation of marginal land and non-availability of these problems are ranked II, III and IV respectively. It can be concluded that lack of irrigation water is the major constraints in wheat cultivation in the area.

References

1. Bhuiyan, M.S.R. and Nandal, D.S. 1987 Tenurial status of farm resources endowment, resource use and productive efficiency in My men Singh distt. of Bangladesh Ind. Jour. Agril. Econ., 42(2): 207-219.
2. Gupta, D.D. et al. 1988 Economics of paddy cultivation in Haryana. Agril. situation in India, 42(12): 1051.
3. Gosh, Madhusudan 1988 Technological change and employment generation in a rice based agriculture. Agril. situation in India, 42(10):881. 1988
4. Munindra Swami et al. 1988 Employment effects of new agricultural technology in Indian village. Agril.

- situation in India, 43(3): 217.
5. Bhat, G.M. 1989 et al. Crop concentration and cropping pattern in Jammu & Kashmir State. Agril. situation in India, 43(11):937.
6. Khan, B.A. and Alam, S.A. 2018 Impact of technological change on size productivity relationship and re- source use efficiency in Kashmir Agri- culture. Agril. situation in India, XLIII (4) July: 301-307.
7. Yadav, D.S. et al. 2019 Production potential and economic fea- sibility of different rice based cro- Pping systems under sub humid condition of eastern U, P. Narendra Dev. Jour. Agril. Res., 4(2): 147-50.