

**RESEARCH ARTICLE :**

Constraints in adoption of recommended package of practices of greengram faced by the farmers in Nagaon district of Assam

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SUMMARY : The study was carried out to see the extent of adoption of recommended package of practices of greengram and the problems faced by the farmers. The present study was conducted in Nagaon district of Assam. The survey was conducted in the month of February to March, 2016. The study revealed that the most important problems faced by majority of the pulse growers which ranked 1st, 2nd and 3rd were non-availability of quality seeds, lack of irrigation facility and lack of knowledge on scientific cultivation of pulses. The other important problems which also need attention were high incidence of pest and diseases, post-harvest storage problem, price fluctuation in the market throughout the year, high cost of fertilizers and plant protection chemicals and flood damage the *Kharif* crops, lack of proper marketing facility, high rate of interest on loan charge by the professional money lender, high cost of certified seed/quality seeds, high incidence of intervention of middle men, complicated procedure for obtaining loan from the credit institution, heavy rainfall and lack of proper extension service.

KEY WORDS :

Extent of adoption,
Pulse crops, Package
of practice

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BACKGROUND AND OBJECTIVES

Notwithstanding the growing importance of the manufacturing and the service sectors in the national economy, agriculture still play a dominant part in the rural economy as much as it continues to contribute about 25 per cent of the national income and remains a major sector that employs 60 per cent of the labour force in the rural India (Anonymous, 2002).

Among the crops, pulses are the basic ingredient in the diets of a vast majority of the Indian population, as they provide a perfect

mix of vegetarian protein component of high biological value when supplemented with cereals. Pulses are not only important sources of proteins but also offer vitamins and minerals, popularly known as “poor man’s meat” and “rich men vegetable”. For an active normal body pulses requirement is about 40 g per day or 14.6 kg per person per year (Rao, 2010).

In Assam, pulses occupy only 4 per cent of the total cropped area. In the year 2013-14, Assam produced 104.3 thousand ton pulses

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from the area of 150.1 thousand ha with the productivity of 695 kg/ha. The requirement of pulses in Assam is 2.62 lakh ton and the deficit is 1.63 lakh ton which is 62 per cent. Self-sufficiency in pulses in Assam is at present 38 per cent of the total requirement. But the productivity of the pulse crops in Assam (695 kg/ ha) as well as in Nagaon district (584 kg/ha) is low as compared to the national average (764 kg/ ha) and the state has to import 62 per cent of the pulses requirement from other states of the country. As the production and productivity of pulses in the state is low and had to import 60 per cent of the requirement from outside the states, question naturally arises why the production and productivity of pulses is low, what are the hidden factors affecting the production and productivity, what are the problems of farmers in cultivating pulse crops.

RESOURCES AND METHODS

The present study was carried out in the purposively selected Nagaon district of Assam as it is one of the major pulse growing district of Assam (4th rank in area and production). The survey was conducted in the month of February to March, 2016. From Nagaon district, Hojai, Lanka, Raha and Samuguri sub-divisions were selected purposively for the study as greengram is mostly cultivated in these four sub-divisions. Jugijaan development block from Hojai sub-division, Lumding block from Lanka sub-division, Raha block from Raha sub-division and

Bajiagaon block from Samuguri sub-division were purposively selected because of higher concentration of families engaged in cultivation of greengram. From each of the selected blocks, two villages and from each village 15 farmers were selected randomly for the study. Data collection was carried out by personal interview technique administering a structured schedule. Statistics like percentage, frequency, mean, ranking, correlation coefficient were used for the analysis of data.

OBSERVATIONS AND ANALYSIS

The experimental findings obtained from the present study have been discussed in the following heads.

Problems faced by the farmers in adoption of recommended package of practices of greengram:

The problems faced by the farmers in adoption of scientific cultivation of green gram are presented in Table 1. It is evident from the Table 1 that non-availability of quality seeds was the most important of the constraints as mentioned by 99 per cent of the respondents. Similar results were also reported by Patel *et al.* (2014). This was probably due to shortage of govt. seed firm and village level seed producer. Lack of irrigation facility was the second most important problems reported by 91 per cent of the respondents. Lack of knowledge on scientific cultivation of pulses was ranked as the third important constraints faced by 69 per cent of the respondents

Sr. No.	Problems	Frequency			Total score	Rank
		Very serious (2)	Serious (1)	Not so serious (0)		
1.	Flood damage the <i>Kharif</i> crops	45	11	0	101	VIII
2.	Lack of knowledge on scientific cultivation of pulses	42	27	0	111	III
3.	Complicated procedure for obtaining loan from the credit institution	18	35	5	76	XIII
4.	Non-availability of quality seed at sowing time	35	51	13	121	I
5.	High cost of certified seed/quality seeds	21	51	19	93	XI
6.	High cost of fertilizers and plant protection chemicals	18	66	10	102	VII
7.	High rainfall	15	45	17	75	XIV
8.	Lack of proper extension service	10	35	20	55	XV
9.	Lack of irrigation facility	35	49	7	119	II
10.	Lack of proper marketing facility	22	52	15	96	IX
11.	High incidence of intervention of middle men	20	47	12	87	XII
12.	Price fluctuation in the market throughout the year	29	47	7	105	VI
13.	Post-harvest storage problem	28	51	13	107	V
14.	High incidence of pest and diseases	27	55	17	109	IV
15.	High rate of interest on loan charge by the professional money lender	25	44	7	94	X

Similar results were also reported by Nath *et al.* (2014). High incidence of pest and diseases, post-harvest storage problem, price fluctuation in the market throughout the year, high cost of fertilizers and plant protection chemicals and flood damage the *Kharif* crops were ranked as 4th, 5th, 6th, 7th and 8th, respectively. Other problems reported by the respondents were lack of proper marketing facility, high rate of interest on loan charge by the professional money lender, high cost of certified seed/quality seeds, high incidence of intervention of middle men, complicated procedure for obtaining loan from the credit institution, high rainfall, scientific methods of cultivation is costly and require more labour and time and lack of proper extension service, respectively. Similar findings were also reported by Rai and Singh (2010); Pandit *et al.* (2010); Jaiswal and Sharma (1990); Patoliya *et al.* (2014) and Paswan and Sinha (2014).

Conclusion:

Non-availability of quality seeds, poor irrigation facilities and lack of knowledge on scientific cultivation of pulses were the major problems of the farmers. Hence, government should make adequate arrangement of irrigation facilities and supply of quality seeds to growers in time. It suggests that extension agencies should continue their efforts in accelerating the adoption of recommended scientific cultivation practices of greengram through training and demonstration. The study reveals that young groups are not so interested in farming. Hence, this group should be motivated by the government taking proper policy by providing proper finance and market and encourage them to go for post-harvest processing of their produce. The study revealed that most of the farmers do not use institutional source of finance. Hence, financial institution and government machinery should come forward to provide loan facility to encourage the pulse growers to go for commercialization. Government should take proper initiatives to establish storage facility and processing unit in the sub-division

and strengthen the marketing infrastructure for the growers.

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REFERENCES

- Anonymous (2002). Statistics of 2001: *Southern Economist*, **40**(4): 27-28.
- Jaiswal, P.K.** and Sharma, P.N. (1990). Constraints in adoption of improved technology of rice. *Maharashtra J. Extn. Edu.*, **9** (10): 341-343
- Nath, D.** and Patel, L.C. (2014). Constraints encountered by paddy growers of Tripura. *Agric. Update*, **9**(2): 246-248.
- Pandit, A.**, Kumar, A. Rana, R.K., Pandey, N.K. and Kumar, N.R. (2010). A study on socio-economic profile of potato farmers: comparison of irrigated and rainfed condition in Himachal Pradesh. *Potato J.*, **37**(1-2): 56-63.
- Paswan, A.K.** and Sinha, K.K (2014). Constraints faced by the wheat growers in adoption of wheat production technology. *Agric. Update*, **9**(2): 166-169.
- Patel, Durgesh**, Agrawal, Sonam, Singh, S.R.K. and Rajan, Parvez (2014). Constraints perceived by the soybean growers in Damoh district of Madhya Pradesh. *Agric. Update*, **9**(2): 170-173
- Patoliya, Jaydip**, Deshmukh, Girish and Bariya, Minaxi (2014). Comparative evaluation of characteristics of farmers and perceived constraints and suggestions in adoption of groundnut production technology. *Agric. Update*, **9**(2): 207-212
- Rai, D.P.** and Singh.B. (2010). Extent of knowledge and constraints in cotton production technology in Madhya Pradesh. *Indian Res. J. Extn. Edu.*, **10**(2): 78-80.
- Rao, N.B.S.** (2010). Nutrient requirement and safe dietary intake for Indians. *NFI Bull.*, **31**: 1-8.

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