

Examine the Magnitude of the Technological Gap in the Adoption of Pulse Technology

Dr. Triveni Dutt
Associate Professor,
Department of Ag. Extension,
Amar Singh College, Lakhaoti, Bulandshahr.
Email: drindusharma77@gmail.com

Abstract

Marginal farmers about 52.63% of respondents were in 'medium' technological gap category followed by 'high' technological gap 38.95%. Only 8.42% respondents were in 'low' technological gap category. The mean technological gap score was worked out to be 39.40.

Small farmers indicates that 43.34% of respondents were in the 'medium' technological gap categories followed by 35% and 21.66% respondents in 'low' and 'high' technological gap categories respectively. The mean technological gap score was worked out to be 34.97%. High technological gap indicates the low level of knowledge on the recommended practices. other Farmers indicates that 57.78% of respondents were in 'medium' technological gap categories followed by 35.56% and 6.66% respondents in 'low' and 'high' technological gap categories respectively. The mean technological gap score was worked out to be 33.27. This high technological gap indicates the low level of knowledge on the recommended practices. All selected farmers indicates that 51.00% of respondents were in the 'medium' technological gap categories followed by 26.50% and 22.50% respondents in the 'high' and 'low' technological gap categories respectively. The mean technological gap score was worked out to be 36.69. The high technological gap indicates that there is low level of knowledge on the recommended practices among the respondents. It might be due to certain constraints related with the adoption of various recommended practices of pulse cultivation.

Keywords- *Examine Magnitude, Technological Gap, Adoption, Knowledge, Farmers, Respondents, Package of Practices, Score.*

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Introduction

To improve production and productivity, a centrally sponsored scheme; Pulse Development Program (NPDP) was launched in 24 states and two Union Territories during the Seventh Plan. This program is being continued. Pulses are also covered under the Special Food Grains Production Program (SFPP) in 13 states to ensure (a) plant protection, and (b) expansion of area under summer moong and urd.

In addition, Pulses Development Program constitutes a technology mission in itself. The main thrust of the NPDP is on (i) Improving existing cropping system, (ii) Organization of front line or general demonstration, (iii) producing pulses seed through Seed Village Program and (iv) distribution of seed minikits/distribution of certified seeds, chemicals and agricultural implements and dal processing machines

Keeping in view the gap in demand and supply of pulses in the country, a production target of 15.5 million tones was fixed for 1991-92. The target for the Eight Plan is expected to be fixed at 23 million tones. For the current kharif season, the strategy for increasing production includes area coverage under early arhar varieties, utilization of kharif fallows, inter-cropping and increased use of inputs for increasing production and productivity.

Cultivation of summer moong/urd has become popular in some states. To encourage the practice, seed kits at concessional rates have been supplied to farmers. Beside, price support/market intervention measures are also being adopted to increase production of pulses to achieve a higher level of per capita availability of pulses in the country. So a study (Triveni 1992) has planned with the following objectives-

1. To study the Technological gap with respect to marginal farmers.
2. To study the Technological gap with respect to small farmers.
3. To study the Technological gap with respect to other farmers.
4. To study the Technological gap with respect to all selected farmers.

Methodology

The data for the study have been collected from about 200 farmers of them randomly selected villages of Pahasu and Siyana. The sample of respondents included 95 marginal farmers 60 small farmers and 45 other farmers.

Technological gap refers to the difference in knowledge between the practices recommended by the state govt. department of Agricultural and the knowledge that farmers had at the time of interview about different aspects of improved practices of pulse cultivation.

The three kinds of farmers i.e. marginal, small and others were classified into three different categories of technological gap namely 'Low', 'Medium' and

‘high’. The detailed findings on each kind of farmers have been presented in the following pages.

1. To Study the Technological Gap with respect to Marginal Farmers-

Table-1 indicates that about 52.63% of respondents were in ‘medium’ technological gap category followed by ‘high’ technological gap 38.95%. Only 8.42% respondents were in ‘low’ technological gap category. The mean technological gap score was worked out to be 39.40.

Table-1. Technological Gap in recommended Package of Practices of Pulse Cultivation among Marginal Farmers

N=95

S.N.	Technological gap and score range	Frequency	Percentage of Respondents	Mean technological gap Score	S.D.
1.	Low (22-31)	08	8.42		
2.	Medium (31-40)	50	52.63	39.40	5.03
3.	High (40-49)	37	38.95		

This high technological gap indicate that the low level of knowledge on the recommended practices. It might be due to certain constraints related with the adoption of various package of practices of pulse cultivation.

Further, the standard deviation value of the sample is (S.D. =5.03), which indicates that the sample is nearly homogeneous and there is not much variation within the category of marginal farmers in respect of gap in pulse production technology.

Hence, there is very high scope for extension agencies to educate and motivate farmers to bridge this gap.

2. To Study the Technological Gap with Respect to Small Farmers-

The table-2 indicates that 43.34% of respondents were in the ‘medium’ technological gap categories followed by 35% and 21.66% respondents in ‘low’ and ‘high’ technological gap categories respectively. The mean technological gap score was worked out to be 34.97%. High technological gap indicates the low level of knowledge on the recommended practices. It might be due to certain constraints related with the adoption of various package of practices of pulse cultivation.

Table-2 Technological Gap in Recommended Package of Practices of Pulse Cultivation among Small Farmers.**N=60**

S.N.	Technological gap and score range	Frequency	Percentage of Respondents	Mean technological gap Score	S.D.
1.	Low (22-31)	21	35:00	-	-
2.	Medium (31-40)	26	43:34	34.97	6.74
3.	High (40-49)	13	21.66		

Further, the standard deviation value of the sample is (S.D. = 6.74), which indicate that the sample is nearly homogeneous and there is not much variation with in the category of small farmers in respect of gap in pulse production technology.

Hence, this implies that the extension agencies working in the area for communication should go more in a well planned manner for extension activities and give the emphasis on input supply and services so that the present gap could be minimized.

3. To Study the Technological Gap with Respect to other Farmers-

Table-3 indicates that 57.78% of respondents were in 'medium' technological gap categories followed by 35.56% and 6.66% respondents in 'low' and 'high' technological gap categories respectively. The mean technological gap score was worked out to be 33.27. This high technological gap indicates the low level of knowledge on the recommended practices. It might be due to certain constraints related with the adoption of various package of practices of pulse cultivation.

Table-3. Technological Gap in Recommended Package of Practices of Pulse Cultivation among other Farmers.**N=45**

S.N.	Technological gap and score range	Frequency	Percentage of Respondents	Mean technological gap Score	S.D.
1.	Low (22-31)	16	35:56	-	-
2.	Medium (31-40)	26	57:78	33.27	5.54
3.	High (40-49)	3	6.66		

Further, the standard deviation value of the sample is (S.D. = 5.54) which indicates that the sample is nearly homogeneous and there is not much variation within the category of other farmers in respect of gap in pulse production technology.

Hence, there is still large scope for communication agencies to educate and motivate farmers to bridge this gap.

4. To Study the Technological Gap with Respect to all Selected Farmers-

Table-4 indicates that 51.00% of respondents were in the 'medium' technological gap categories followed by 26.50% and 22.50% respondents in the 'high' and 'low' technological gap categories respectively.

Table-4. Technological Gap in Recommended Package of Practices of Pulse Cultivation among all selected Farmers.

N=200

S.N.	Technological gap and score range	Frequency	Percentage of Respondents	Mean technological gap Score	S.D.
1.	Low (22-31)	45	22.50	-	-
2.	Medium (31-40)	102	51.00	36.69	6.27
3.	High (40-49)	53	26.50		

The mean technological gap score was worked out to be 36.69. The high technological gap indicates that there is low level of knowledge on the recommended practices among the respondents. It might be due to certain constraints related with the adoption of various recommended practices of pulse cultivation.

Further, the standard deviation value of the sample is (S.D. = 6.27), which indicates that the sample is nearly homogeneous and there is not much variation among all selected farmers in respect of gap in pulse production technology.

Similarly results were reported by Singh and Sharma (1990), Prasad and Mahipal and Vasant Kumar and Singh (1991) here they found that the data on weed control showed a technological gap of 60.83, 56.22 and 46.96 percent in case of marginal, small and medium farmers respectively. Further, plant protection was attended by 50% of medium farmers whereas; small and marginal had a technological gap of 70.76 percent.

Prasad and Mahipal (1991) reported that the adoption level as well as technological gap found to be 'medium' among the respondent indicating the non-adoption of some of the recommended practices.

From the above results it could be concluded that there is a need for the

extension agencies to keep the field level workers up to date about the recent recommendations.

Hence, this implies that the extension agencies working in the area for communication should go in well planned manner for extension activities and give emphasis on practical training and demonstration to the farmers so that the present gap could be minimized.

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