

## Perception of the Extension Personnel about Transfer of Technology System in North Gujarat

D. B. Patel<sup>1</sup>, K. A. Thakkar<sup>2</sup> and K.S. Patel<sup>3</sup>

- 1 Assit. Extn. Educationist, Spices Research Station,  
S. D. Agril. University, Jagudan
- 2 Professor (Extn. Education), Directorate of Extn.Edu.,  
SDAU, Sardarkrushinager
- 3 Assit. Extn. Educationist, ATIC, Directorate of Extn.Edu.  
SDAU, Sardarkrushinager  
E-mail : depatel8263@yahoo.com

### ABSTRACT

*The present study was conducted two randomly selected districts of North Gujarat namely Mehsana and Patan. The lists of extension personnel working under State Departments in the field of Agriculture, Horticulture and Animal Husbandry both in Mehsana and Patan district were obtained from the office of the respective Deputy Director of Agriculture, Deputy Director of Horticulture, KVKS, Animal Husbandry department etc. An equal number of extension personnel i.e. 30 extension personnel each were selected each from both districts randomly. Thus, a sample of 60 extension personnel was included in this study. For measurement of perception, a scale was developed using Likert's(1932) technique. The data revealed that majority of the extension personnel (71.67 %) perceived the transfer of technology system as useful. Three independents variables viz.; Training received (0.3123), job satisfaction (0.4223) and interpersonal communication (0.2544) had significant and positive relationship with extension personnel's perception about usefulness of transfer of technology system. All the seven selected variables explained 24.14 per cent variation in extension personnel's perception about usefulness of transfer of technology system.*

**Keywords :** Perception, Expectation, Transfer of Technology

### INTRODUCTION

At present, various transfer of technology programmes are being implemented by State and Central Government, Non-Government Organization, State Agricultural Universities and Private agencies. Increase in agriculture production would have to be necessarily obtained by appropriate agricultural technology and its speedy transfer to the extension personal through efficient transfer of technology system. To meet this emerging issue, it is worth necessary to have a strong and efficient transfer of technology system working force. Therefore, to understand the usefulness of present transfer of technology system for its, the study entitled “ perception

and expectations of the extension personnel about transfer of technology system was undertaken.

### OBJECTIVES

The present study was conceived with a general objective to measure the “Perception of the extension personnel about transfer of technology system in North Gujarat” The specific objectives of the study are:

- 1 To study the personal, socio-economic, psychological and communication characteristics of the extension personnel.
- 2 To study the perception of the extension personnel about transfer of technology system

- 3 To find out the relationship between selected characteristics of the extension personnel and their perception about transfer of technology system

### METHODOLOGY

The present study was conducted in North Gujarat region of Gujarat State, because this region falls under the jurisdiction of Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar. The ex-post-facto research design was adopted to collect the data. Out of 6 districts under North Gujarat region of Gujarat State two districts viz.; Mehsana and Patan Were selected randomly. The lists of extension personnel working under State Departments, in the field of Agriculture, Horticulture and Animal Husbandry both in Mehsana and Patan district were obtained from the office of the respective Deputy Director of Agriculture, Deputy Director of Horticulture, KVKs, Animal Husbandry department etc. An equal number of extension personnel i.e. 30 each were selected from both districts randomly. Thus, a sample of 60 extension personnel was included in this study. For measurement of perception the author has restored the methodology suggested by Likert (1932) with slight modification in the procedure. Initially 57 statements covering entire universe of content were collected. The 't' value of all these statement was significant based on the judgment of the panel of 80 judges and hence, were included in the scale. Structure schedule was prepared and data were collected through personal interview.

### RESULTS AND DISCUSSION

#### Personal characteristics of the extension personnel

It can be seen from table 1 that half of the extension personnel were Agricultural diploma holder, whereas; 38.33 and 8.33 per cent of them had B.Sc.(Agri.) and M.Sc. (Agri.) qualification, respectively. Only 3.34 per cent the extension personnel had Ph.D. qualification. Majority (80.00 %) of the extension personnel had medium service experience, whereas; 15.00 and 5.00 per cent of them had low and high service experience respectively.

Majority (80.00%) of the extension personnel had received medium level of training (2-4 trainings), whereas; 11.67 and 8.34 per cent of the extension personnel belonged to less (Up to 2 trainings) and more level of training (Above 4 trainings), respectively. Majority of the extension personnel

(78.33 %) had medium annual income. While, only 16.67 per cent had low annual income. Majority (85.00%) of the extension personnel were the employees of Government organization followed by 8.33 and 6.67 per cent who were the employees of NGO and Private Organization, respectively.

Similarly, Majority (75.00%) of the extension personnel had medium job satisfaction, whereas; 9.00 and 6.00 per cent of them had high and low job satisfaction, respectively. So for interpersonal communication is concerned, Majority 66.67 per cent of the extension personnel were in medium level of interpersonal communication category whereas 21.66 and 11.67 per cent of them had high and low level of interpersonal communication, respectively.

#### Perception of the extension personnel

**Table 1: Perception of the extension personnel about usefulness of transfer of technology system**

Sr. No.	Category	Number	Per cent
1	Less useful (Up to 196 score)	09	15.00
2	Useful (In bet <sup>n</sup> 197 to 238 score)	43	71.67
3	More useful (Above 238 score)	08	13.33

Majority of the extension personnel (71.67 %) perceived the transfer of technology system as useful whereas, 15.00 per cent of them perceived the present transfer of technology system as less useful and only 13.33 per cent of them perceived the transfer of technology system as more useful.

#### Relational analysis

##### Zero order Correlation

With a view to find out the relationship between the independent variables and level of perception (dependent variable) about usefulness of TOT system, the correlation coefficient ('r' values) were calculated. The result on zero order correlation is given in Table 3.

**Table 3: Correlation co-efficient of selected independent variables with extension personnel perception about transfer of technology system**

n=60

Sr. No.	Characteristics	'r' value
<b>I Personal</b>		
1	Academic qualification (X <sub>1</sub> )	0.1750 NS
2	Service experience (X <sub>2</sub> )	0.2319 NS
3	Training received (X <sub>4</sub> )	0.3123*
<b>II Socio-economic</b>		
4	Annual income (X <sub>5</sub> )	0.2460 NS
5	Nature of mother organization (X <sub>6</sub> )	0.0696 NS
<b>III Psychological</b>		
6	Job satisfaction (X <sub>8</sub> )	0.4223**
<b>IV Communication</b>		
7	Interpersonal communication (X <sub>12</sub> )	0.2544*

\* = Significant at 0.05 level of significance

\*\*= Significant at 0.01 level of significance

NS= Non significant

Based on the coefficient of correlations, three independent variables viz.; Training received (0.3123), job satisfaction (0.4223) and interpersonal communication (0.2544) had significant and positive relationship with extension personnel's perception about usefulness of transfer of technology system. Whereas; academic qualification, service experience, annual income and nature of mother organization had no significant relationship with extension personnel's perception about usefulness of transfer of technology system.

**3.3.2 Multiple regression analysis:**

In multiple regression analysis, all the 7 independent variables were fitted to explain the variation in extension personnel perception about usefulness of transfer of technology system. The results are presented in Table 4.

**Table 4: Multiple regression analysis of the selected independent variables with extension personnel perception about TOT system**

n=60

Sr. No.	Variables	Regression Co-efficient (b)	S.E. of "b"	'z' value
<b>I Personal characteristics</b>				
1	Academic qualification (X <sub>1</sub> )	-0.4942	4.874	-0.101
2	Total service experience(X <sub>2</sub> )	-0.1860	0.555	-0.335
3	Training received (X <sub>3</sub> )	1.2225	1.912	0.639*
<b>II Socio-economic characteristics</b>				
4	Annual income(X <sub>4</sub> )	0.0007	0.006	0.130
5	Nature of mother organization(X <sub>5</sub> )	2.8061	6.706	0.418
<b>III Psychological characteristics</b>				
6	Job satisfaction(X <sub>6</sub> )	1.7754	0.692	2.565**
<b>IV Communication characteristics</b>				
7	Interpersonal communication(X <sub>7</sub> )	1.5105	1.848	0.817*

\*= Significant at 0.05 level (0.630) of significance \*\* = Significant at 0.01 level (1.980) of significance R<sup>2</sup>= 0.2414 Multiple R=0.4913

All the independent variables mentioned in Table 4 explained as much as 24.14 per cent of total variation in the extension personnel perception about usefulness of transfer of technology system. The unexplained variation of 75.84 per cent may be due to the factors outside the scope of the study.

It can also be revealed that the "z" values of training received(0.639) and interpersonal communication(0.817) were significant at 0.05 level of significance and 'z' value of job satisfaction (2.565)was significant at 0.01 level of significance. These three variables had significantly contributed in explaining the variation in extension personnel's perception about the usefulness of transfer of technology system.

Remaining variables have failed to contribute significantly in extension personnel's perception about the usefulness of present transfer of technology system.

## CONCLUSION

Majority of the extension personnel (71.67 %) perceived the transfer of technology system as useful whereas, 15.00 per cent of them perceived the present transfer of technology system as less useful and only 13.33 per cent of them perceived the transfer of technology system as more useful. Two variable namely, training received and interpersonal communications were found having significant and positive relationship with their perception about usefulness of transfer of technology system.

## IMPLICATIONS

On the basis of present study, following implications are made for improvement in present transfer of technology system:

- 1 The developed scales may be administered to any categories of extension personnel with due modification to measure their perception about usefulness of present transfer of technology system.
- 2 The study suggested that due weightage shall be

given to such characteristics viz.; training received and interpersonal communications while selecting the contact extension personnel.

## REFERENCES

- Darpare, B.U. and Sinha, B.P. (1999). Mutual perception of researchers, extension personnel and farmers. *Mah. J. Extn. Edu.*, 18: 13-18.
- Khare, Y. R., Khare, N.K. and Dubey, M. K. (1997). Role perception of village panchayat chairman towards Agricultural development. *Maha.J.Extn.Edn.*, XVI:323-325.
- Saiyad A. S. (2000). A study on role perception and role performance of woman sarpanches of gram panchayats in Anand district of Gujarat State. Ph.D. Thesis (*Unpublished*), GAU, Anand.
- Sawant, R. P. (2001). Perception of farmers and extension personnel about usefulness of existing extension system. Ph. D. Thesis (*Unpublished*), GAU, Sardarkrushinagar.