

PRODUCTIVITY OF EXTENSION SCIENTISTS IN KRISHI VIGYAN KENDRAS

A.K. Godara¹, V.P.S. Yadav², S.P. Singh³ and S.K. Mehta⁴

ABSTRACT

The present study was undertaken at the Chaudhary Charan Singh Haryana Agricultural University, Hisar to measure the productivity of extension scientists. The quantitative and qualitative productivity status of extension scientists was medium. The variables were morale, organizational health, communication behavior, training attended, supervisory style, rural-urban back-ground, experience, general facilities and experience on present post had positive and significant correlation with quantitative productivity of extension scientists. The qualitative productivity of the respondents was found to have a positive and significant relation with moral, aspiration, organizational health, communication credibility, mass media exposure, training attended and communication behavior of the respondents, supervisory style, parental occupation and rural-urban background. Overall the moral, organizational health, training attended, supervisory style, communication behavior, communication credibility, mass media exposure and level of aspiration had positive and significant association. Job stress exhibited negative and significant association with the overall productivity.

Key Words: Productivity; Extension Scientists; Transfer of Technology;

INTRODUCTION

The state agricultural universities are expected to pay attention on extension also besides, teaching and research. It also provides feedback from farmers to the scientists, which in turn helps in strengthening the research and extension activities. Hence, extension function is also considered a very important in these universities. Keeping this in view, the present study was undertaken at the Chaudhary Charan Singh Haryana Agricultural University, Hisar to measure the productivity of extension scientists.

METHODOLOGY

The present study was conducted in CCS Haryana Agricultural University, Hisar during 1999-2000. A census approach was followed to select the respondents. Therefore, all the scientists working in all the Krishi Vigyan Kendras and Krishi Gyan Kendras throughout the state, all the Incharge of KVKs, Coordinators of all the KGKs and all the Extension Specialists and Senior Extension Specialists posted at university headquarters were taken as the respondents for the study. The data were collected with the help of well-structured pre-tested interview -schedule. The information was obtained by using interview technique. The Krishi Vigyan Kendras (KVKs) and Krishi Gyan Kendras (KGKs) working under the control of CCS HAU, Hisar were selected purposively. All the 143 extension scientists, working in the KVKs and KGKs were included as respondents for the study. The data were obtained from 76.92 per cent of the respondents despite best efforts.

The productivity of extension scientists was taken as dependent variable. Eighteen important antecedent factors of extension scientists namely, age, education, experience, experience on present post, rural-urban background, parental

occupation, training attended, mass media exposure, job satisfaction, job stress, attitude towards extension profession, level of aspiration, communication credibility, communication behaviour, morale, organizational health, supervisory style and general facilities, were selected an independent variables. For measurement of organizational health, supervisory style and general facilities, scales were constructed using prescribed procedures. The reliability and validity of these scales were also tested. Some of the variables were measured by using the scale/index already available. The data were statistically analysed to work out correlation coefficient and multiple regression coefficients to draw the meaningful inferences.

RESULTS AND DISCUSSION

Profile of Extension Scientists: Looking at the profile of extension scientists (Table -1), majority of them belonged to young to middle age groups, were highly educated, had rich service experience, belonged to rural background with farming as their parental occupation, and had not attended enough in service training courses. The respondents had low level of aspiration, low to medium level of job stress, communication credibility, organizational health and morale. However, large majority of them reported to have a medium level of job satisfaction, mass media exposure, and attitude towards extension profession, communication behaviour, supervisory style and general facilities.

Productivity status of extension scientists: The Data in Table-2 revealed that 64.54 percent of the respondents had medium level of quantitative productivity. While 20.00 and 15.45 per cent of them were found to have low and high level of productivity, respectively. However, in terms of qualitative productivity they were better as 80.90 per cent of extension scientists had medium, while 12.72 per cent belonged to high category and 6.36 per cent of them had low level of qualitative

productivity status. More than half of the respondents (55.45%) had medium level of overall productivity. Whereas, 24.54 and 20.00 per cent extension scientists belonged to low and high overall productivity categories, respectively.

Table 1. Profile of extension scientists

S. No.	Antecedent factor	Categories	F	%age
1	Age	Upto 35 years	40	36.36
		36 to 45 years	42	38.18
		Above 45 years	28	25.45
2	Education	Graduation 1 st division	84	76.36
		2 nd division	26	23.63
		PG Degree 1 st division	98	89.09
		2 nd division	12	10.90
		Doctoral degree	78	70.90
3	Experience	Non Doctoral degree	32	29.09
		Upto 5 year	25	22.73
		6 to 15 years	44	40.00
4	Experience on present post	Above 15 years	41	37.27
		Upto 2 years	8	7.27
		3 to 10 years	78	70.90
5	Rural urban background	Above 10 years	24	21.83
		Rural	87	79.09
6	Parental occupation	Urban	23	20.90
		Farming	62	56.36
		Business	6	5.45
7	Training attended	Others	10	9.09
		No training	31	28.18
		With training	79	71.81
8	Mass media exposure	Low (<8)	34	43.43
		Medium (8 to 14)	25	31.64
		High (>14)	20	25.31
		Low (<13)	15	13.63
9	Job satisfaction	Medium (13 to 22)	76	69.09
		High (>22)	19	17.27
		Low (<42)	15	13.63
10	Job stress	Medium (42 to 63)	77	70.00
		High (>63)	18	16.36
		Low (<60)	21	19.09
11	Attitude toward extension work	Medium (60 to 86)	71	64.54
		High (>86)	18	16.36
		Low (<78)	17	15.45
12	Level of aspiration	Medium (78 to 106)	75	68.18
		High (>106)	18	16.36
		Low (<2)	46	41.81
13	Communication Credibility	Medium (2 to 4)	59	53.63
		High (>4)	5	4.54
		Low (<63)	15	13.63
14	Communication Behaviour	Medium (63 to 81)	82	74.54
		High (>81)	13	11.81
		Low (<39)	14	12.76
15	Morale	Medium (39 to 54)	75	68.18
		High (>54)	21	19.09
		Low (<44)	16	14.54
16	Organizational health	Medium (44 to 55)	78	70.90
		High (>55)	16	14.54
		Low (<73)	20	18.18
17	Supervisory style	Medium (73 to 144)	74	67.27
		High (>144)	16	14.54
		Low (<73)	12	10.90
18	General facilities	Medium (73 to 144)	73	66.36
		High (>144)	25	22.72
		Low (<73)	3	2.72
		Medium (73 to 144)	94	85.45
		High (>144)	13	11.81

Table 2. Productivity status of extension scientists N=110

S. No.	Productivity	Productivity status	Class intervals	Freq- uency	%age
1	Quantitative productivity	Low	<4	22	20.00
		Medium	4-7	71	64.54
		High	>7	17	15.45
2	Qualitative productivity	Low	<4	07	06.36
		Medium	4-7	89	80.90
		High	>7	14	12.72
3	Overall productivity	Low	<9	27	24.54
		Medium	9-13	61	55.45
		High	>13	22	20.00

Relationship between antecedent factors and productivity: Relationship between extension scientists' quantitative productivity and independent variables is presented in Table-3. Out of eighteen antecedent variables, nine variables were found to have positive and significant correlation with the quantitative productivity of extension scientists either at 0.01 or 0.05 level of probability. These variables are morale, organizational health, communication behaviour, training attended, supervisory style, rural-urban back-ground, experience, general facilities and experience on present post. While job stress had negative and significant association. However, all the remaining factors, viz, age, education, parental occupation, mass media exposure, attitude towards extension work, level of aspiration, communication credibility and job satisfaction did not show any significant relationship with their productivity.

Table 3. Correlation coefficient between extension scientists' quantitative productivity and independent variables N = 110

S. No.	Independent variables	Correlation coefficient ('r' values)
1	Age	0.1142
2	Education	0.0608
3	Experience	0.2120*
4	Experience on present post	0.1953*
5	Rural urban background	0.2262*
6	Parental occupation	0.0870
7	Training attended	0.3092**
8	Mass media exposure	0.1266
9	Job satisfaction	-0.0930
10	Job stress	-0.1952*
11	Attitude toward extension work	0.1089
12	Level of aspiration	0.1213
13	Comm. Credibility	0.0943
14	Comm. Behaviour	0.3234**
15	Morale	0.4154**
16	Organizational health	0.4022**
17	Supervisory style	0.2676**
18	General facilities	0.1966*

* Significant at 0.05 level of probability

** Significant at 0.01 level of probability

The qualitative productivity of the respondents was found to have a positive and significant correlation at 0.01 level of probability with 7 variables, viz., Moral, aspiration, organizational health, communication credibility, mass media exposure, training attended and communication behaviour of the respondents whereas supervisory style, parental occupation and rural-urban background whereas antecedent variables were also found to be positive and significant correlation at 0.05 level of probability. While job stress had negative significant correlation at 0.05 level of probability with qualitative productivity. The rest of independent variables did not show significant correlation with qualitative productivity (Table-4).

Table 4. Correlation coefficient between extension scientists qualitative productivity and independent variables N = 110

S. No.	Independent variables	Correlation coefficient ('r' values)
1	Age	0.0228
2	Education	0.1151
3	Experience	-0.0663
4	Experience on present post	-0.0162
5	Rural urban background	0.2048*
6	Parental occupation	0.2247*
7	Training attended	0.2990**
8	Mass media exposure	0.3389**
9	Job satisfaction	0.0119
10	Job stress	-0.2440*
11	Attitude toward extension work	0.1136
12	Level of aspiration	0.3950**
13	Communication Credibility	0.3802**
14	Communication Behaviour	0.2544**
15	Morale	0.4460**
16	Organizational health	0.3882**
17	Supervisory style	0.2255*
18	General facilities	0.1055*

* Significant at 0.05 level of probability

** Significant at 0.01 level of probability

As far as the overall productivity of the respondents was concerned, the morale, organizational health, training attended, supervisory style, communication behaviour, communication credibility, mass media exposure and level of aspiration had positive and significant association. Job stress exhibited

negative and significant association with the overall productivity. However, remaining variables did not have significant correlation with the overall productivity of extension scientists (Table 5). The above findings were similar as reported by Kumar (1995), Kumari, *et.al.* (1997), Laharia, (1978), Laharia and Singh (1987), Monga (1992), Rani, *et.al.* (1987).

Table 5. Correlation coefficient between extension scientists overall productivity and independent variables N = 110

S. No.	Independent variables	Correlation coefficient ('r' values)
1	Age	0.0844
2	Education	0.1165
3	Experience	0.0711
4	Experience on present post	0.0959
5	Rural urban background	0.1387
6	Parental occupation	0.1040
7	Training attended	0.3915**
8	Mass media exposure	0.2545**
9	Job satisfaction	0.0095
10	Job stress	-0.2130*
11	Attitude toward extension work	0.0977
12	Level of aspiration	0.2378*
13	Communication Credibility	0.2598**
14	Communication Behaviour	0.3109**
15	Morale	0.5412**
16	Organizational health	0.4873**
17	Supervisory style	0.3173**
18	General facilities	0.1478

* Significant at 0.05 level of probability

** Significant at 0.01 level of probability

CONCLUSION

The rate of adoption of improved technologies in the field condition is very low. Many innovations developed by the scientists remain in the laboratories without being utilized by the farming community. This demands a quick and efficient transfer of technology system. The state agricultural universities are doing better job to overcome this problem. The extension function of agricultural scientist should be considered a very important activity to achieve the maximum level of productivity.

REFERENCES

1. Keshava, B. Kumar (1995). Extension involvement of farm scientists. *Indian. J. Extn. Edu.* **31**(1&4): 44-49.
2. Kumari, P. Baby; Rathakrishanan, T. and Seetharaman, T. Netaji. (1997). Farm scientists constraints: An analysis. *J. Extn. Edu.* **8**(1): 60-63.
3. .Laharia, S.N. and Singh, Y.P. (1987). Scientific productivity measurement. *Productivity.* **18**(1): 57-64.
4. Monga, R.C. (1992). Dynamics of productivity management. *Productivity.* **33**(1): 1-9.
5. Rani, G.J.; Reddy, S.V. and Rao, G.N. (1987). Influence of selected variables on scientific productivity of Agricultural Scientists. *Indian J. Extn. Edu.* **23**(3&4): 26-29.

