



Role Expectations of Agricultural Extension Professionals – A Study in Odisha

K. K. Behera^{1*} and R. N. Das¹

¹*Department of Extension Education, College of Agriculture, OUAT, Bhubaneswar, India.*

Authors' contributions

This work was carried out in collaboration between both authors. Author KKB designed the study, performed the statistical analysis, wrote the protocol, managed the analysis and wrote the first draft of the manuscript. Author RND guided the entire study. Both authors read, discuss and approved the final manuscript.

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ABSTRACT

The role expectations of the Agricultural extension professionals are the determinant factors in developing competencies to perform their job successfully. A study was therefore conducted with the extension professionals working in the department of Agriculture and Horticulture, Govt. of Odisha during 2018. A questionnaire was developed and finalized after pre-testing which was mailed to 325 extension professionals working in all the 30 districts of Odisha. Only 182 had responded and returned the filled-in questionnaire. The data collected on the scale point of most essential, essential, undecided and not essential were analyzed with the score value of 4,3,2 and 1 respectively. Full support of the beneficiaries and stakeholders, computer and storage facility, documentation, prior arrangement of inputs and materials, regular monitoring and supervision, continuous guidance and expertise, training facilities as well as sufficient funds for demonstration were the pertinent role expectations of the extension professionals for their better job performance. The attributes such as education, experience, training and background of the Agricultural extension professionals had significantly influenced their job performance. The authorities of the state

*Corresponding author: E-mail: kishorkumarbehera@yahoo.com;

department of Agriculture have to provide facilities as per these expectations utilizing pertinent identified attributes enabling the Agricultural extension professionals to provide better job performance in technology transfer and adoption by the farmers for their sustainable livelihoods.

Keywords: Role expectation; extension professionals; job expectations and performance.

1. INTRODUCTION

Transfer of technology as well as development of capability and potential have been identified as two factors in ensuring effectiveness of any extension service [1]. The effectiveness of extension services is also highly dependent on the ability of extension professionals to transfer technological information properly [2]. The extension professionals should therefore have both technical and human development competencies particularly socio-cultural, programme planning and implementation as well as evaluation along with appropriate use of extension teaching methods [3]. The competencies of extension professional should be in accordance with the task areas in which they are assigned to operate in order to perform successfully [4]. The planners and executives of the concerned departments have to analyze the role expectations of the extension professionals and provide necessary facilities to enable them to perform their job effectively and efficiently [5,6]. The present study has been designed to assess the role expectations of the Agricultural extension professionals which will be a guidance for the planners and executives of the state Agriculture department to provide necessary facilities in effective transfer of technologies for the betterment of the farming community.

2. MATERIALS AND METHODS

The study was conducted in Odisha during 2018. There are 704 extension professionals in the department of Agriculture and 271 in Horticulture working under technology transfer system in all the 30 districts of Odisha. The list was collected from both the concerned department and one third of them i.e. 325 were randomly selected as the respondents for the study. A questionnaire was developed on the basis of pilot study and mailed to them. Intermediary contact was made to clarify doubts and sending the filled-in questionnaire. Only 130 from Agriculture and 52 from Horticulture department totaling to 182 from 19 districts had responded back and sent the filling-in questionnaire.

Administrative management, planning, implementation, capacity building, fund availability, marketing, report and return were selected as the variables to assess the role expectations. The responses received on the scale point of most essential, essential, undecided and not essential were analyzed with the score value of 4,3,2, and 1 respectively. Statistical tools such as mean score, rank order and path analysis were employed to reveal the results.

3. RESULTS AND DISCUSSION

Favorable organizational climate enables the extension professionals to perform their job successfully. Computer facilities help in collecting recent technological information to update their knowledge along with documentation of activities and timely submission of reports [7,8]. They perform better, if satisfied with the job assigned. Motivational climate in the organization develops interest to do better work. Well-furnished office, efficient supporting hand, adequate office contingencies and web portal facilities have enhanced their work efficiency [8,6]. Therefore, the respondents had prioritized for computer facilities followed by job satisfaction, motivational climate, well-furnished office, and efficient supporting hands as observed from Table 1 which are very much essential for better job performance.

Proper planning is the essential requirement for better job performance. Technological adoption depends on easy marketing of the produce with remunerative price, prior arrangement of inputs and materials required. Continuous guidance of the supervising officers, need based approach, strong coordination with related departments for resource mobilization and proper planning as per the interest of the farmers enabled the extension professionals for effective implementation of the programme [9-11]. Therefore, the respondents had opined all these expectations in planning (Table 2) for their better job performance.

Proper implementation of the planned programme helps in achieving the objectives and improvement of the farming community. Full support of the beneficiaries and stakeholders,

adequate mobility facilities, regular monitoring and supervision to solve the field problems, well arrangement of inputs and materials, proper documentation of implemented activities and skill competency of farmers in post-harvest management were the expectations of the respondents for better job performance in programme implementation as observed from the Table 3.

The innovation system emphasizes the need to nurture the demand for knowledge and technologies to the farmers and other stakeholders associated with farm activities.

Agricultural extension professionals therefore need latest technological developments for their capacity building to fulfill the demands of the farmers. Adequate training facilities at village level, required training for competency development of the Agricultural extension professionals, all facilities at the training institutions for better learning environment, regular exposure to abreast with latest developments, well arrangement of good experts and professional to impart training effectively were the priority expectations for capacity building of the extension professions towards better job performance (Table 4).

Table 1. Job expectations on administrative management

Sl. no.	Expectation	Mean Score	Rank
1.	Motivational climate	3.604	3
2.	Well-furnished office	3.533	4
3.	Good work environment	3.099	8
4.	Computer facilities	3.728	1
5.	Efficient supporting hand	3.528	5
6.	Job satisfaction	3.621	2
7.	Adequate contingency for stationaries	3.489	6
8.	Web portal facilities	3.484	7

(Maximum obtainable score – 4)

Table 2. Job expectations in planning

Sl. no.	Expectation	Mean Score	Rank
1.	Continuous guidance from authorities	3.577	3
2.	Need based approach to achieve the goal	3.539	4
3.	Planning from farmer's perspective	3.506	6
4.	Prior arrangement of inputs and materials	3.588	2
5.	Strong co-ordination with related departments	3.511	5
6.	Involving related stakeholders	3.363	7
7.	Consideration for marketing of the produce	3.599	1

(Maximum obtainable score – 4)

Table 3. Job expectation on programme implementation

Sl. no.	Expectation	Mean Score	Rank
1.	No interference in selection of beneficiaries	3.440	8
2.	Full support of beneficiaries and stakeholders	3.755	1
3.	Well arrangement of inputs and materials	3.566	4
4.	Regular monitoring and supervision	3.582	3
5.	Flexibility in implementation on situation demand	3.407	9
6.	Incentives on use of implements and machineries	3.462	7
7.	Skill competency of farmers in post-harvest management	3.555	5
8.	Proper documentation of implemented activities	3.550	6
9.	Adequate mobility facilities	3.599	2

(Maximum obtainable score – 4)

Table 4. Job expectations on capacity building

Sl. no.	Expectation	Mean Score	Rank
1.	Regular exposure to technological developments	3.500	4
2.	Continuous flow of information and literatures	3.478	5
3.	Adequate training for competency developments	3.550	2
4.	All facilities at institution training center	3.544	3
5.	Adequate training facilities at village level	3.555	1
6.	Supply of reference materials to trainees	3.407	6
7.	Well arrangement of experts and professionals	3.544	3

(Maximum obtainable score – 4)

Fund availability is another important consideration for farmer’s training, demonstrations, farm publications, critical input supply and other need based educational approaches. The Agricultural extension professionals expect sufficient funds for demonstrations, technological exposure, supply of inputs and materials (Table 5) for better job performance as these are the essential requirements in effective transfer and adoption of technologies by the farming community.

Easy disposal of the produce with remunerative price always motivate farmers to adopt new technologies with recommended practices for better production, productivity and income. Both extension professionals and farmers should have competency on market information and disposal of the produce at appropriate time for better price. The extension officials had expected (Table 6) storage facility and government support for remunerative price as the priority areas towards effective marketing of the produce by the farmers.

Proper documentation is another mandatory activity of the extension professionals. Therefore,

they need competency in record maintenance, documentation and timely reporting along with publication of success stories for the reference of others. The extension professionals have also expected facilities for proper documentation of progress and timely submission of reports as priority concerns (Table 7) for their better job performance.

The demographic analysis revealed that majority of 66.48% of the respondents were within the age of 35 years, 12.64% within 36 to 50 years and rest 20.88% above 50 years. Out of the total respondents 66.48% were male and rest 33.52% female extension professionals. Regarding educational qualification, 57.69% were post graduate, 41.21% graduates and only 1.10% having Ph.D. degree. Similarly, majority of 61.54% of the respondents had service experience within five years followed by above 15 years (30.77%), 6 to 10 years (7.14%) and only 0.55 within 11 to 15 years. Mixed responses obtained on their background, where 42.31% were from rural areas, 35.71% semi-urban and 21.98% coming from urban areas. Majority of 50.55% of the respondents received pre-service training, 24.73% special and 23.63% refresher training.

Table 5. Job expectations on fund availability

Sl. no.	Expectation	Mean Score	Rank
1.	Competency in accounting	3.451	7
2.	Adequate funds for training	3.495	4
3.	Sufficient funds for demonstrations	3.555	1
4.	Adequate funds for field days	3.462	6
5.	Adequate funds for exposure visits	3.500	3
6.	Sufficient funds for inputs and materials	3.511	2
7.	Competency in record maintenance	3.489	5
8.	Additional funds for contingent measures	3.297	8

(Maximum obtainable score – 4)

Table 6. Job expectations on marketing of the produce

Sl. no.	Expectation	Mean Score	Rank
1.	Storage facility	3.676	1
2.	Preservation and value addition	3.390	4
3.	Liasoning with traders and businessmen	3.385	5
4.	Developing co-operative system	3.324	6
5.	Creating marketing avenue	3.489	3
6.	Govt. support for remunerative price	3.544	2

(Maximum obtainable score – 4)

Table 7. Job expectations on reports and return

Sl. no.	Expectation	Mean Score	Rank
1.	Proper documentation of progress	3.588	1
2.	Timely submission of reports	3.500	2
3.	Competency in documentation and reporting	3.352	6
4.	Guidance and expertise in reporting	3.417	4
5.	Feedback from authorities on reports	3.374	5
6.	Competency on publication of successful activities	3.418	3

(Maximum obtainable score – 4)

Table 8. Path analysis of socio-economic attributes for better job performance

Sl. no.	Attribute	Total effect	Total direct effect	Total indirect effect	Substantial effect		
					I	II	III
1.	Age	-0.229	0.381	-0.610	-0.172 x ₁	0.149 x ₃	0.111 x ₂
2.	Qualification	0.048	0.077	-0.029	0.162 x ₃	0.093 x ₅	-0.078 x ₄
3.	Experience	-0.383	-0.724	0.341	-0.234 x ₂	0.175 x ₁	0.133 x ₁
4.	Background	0.075	0.060	0.015	0.084 x ₄	0.069 x ₂	-0.024 x ₃
5.	Training	-0.011	0.001	-0.012	-0.143 x ₃	-0.105 x ₄	-0.098 x ₁

Residual effect: 0.028

Highest indirect effect: Experience

Path analysis was done to decompose the influence of socio-economic attributes of the extension professionals through direct, indirect and residual effect. Analysis of data reflected in Table 8 revealed that experience of the extension professionals had the highest indirect effect being associated with all the four other attributes. The findings therefore inferred that the variable experience channelized through qualification, training, age and background of the extension professionals could exhibit significant influence for better job performance.

4. CONCLUSION

Competency development of extension professionals is crucial in making the extension system more efficient and effective. The extension officials require facilities as per their expectation for effective transfer of technology. The data analyzed on four point scale revealed that full support of the beneficiaries and

stakeholders (3.775), computer facility (3.728), storage facility (3.676), job satisfaction (3.621), motivational climate (3.604), mobility facility and marketing of the produce (3.559), proper documentation of progress and prior arrangement of inputs (3.588), regular monitoring and supervision (3.582), continuous guidance and expertise (3.577), adequate training for farmers and extension professionals as well as sufficient funds for demonstration (3.555) were the pertinent expectations of the extension professionals for better job performance. The attributes like education, experience, training, age and background of the extension professionals significantly influence for their better job performance. Since, job performance is essential for effective transfer of technologies towards improvement of the farming community, the authorities of the state department of Agriculture and Horticulture have to provide facilities on these expectations enabling the extension professionals to perform their job effectively and efficiently.

CONSENT

As per international standard respondent's written consent has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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