

## Perceived Level of Important Extension Activity and Competency of Agricultural Extension Officers (A.E.Os)

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**ABSTRACT:** Agricultural Extension Officers were the major people in charge of transferring technology in the right manner, thus a study was done to establish their perceived importance and competency in extension activities. In the year 2019, a study was undertaken on Agricultural Extension Officers in the Andhra Pradesh district of Anantapur. For the analysis, a Hershkowitz 2 × 2 matrix was used. The findings suggested that the A.E.Os had high competency-high importance for conducting farmers meetings, offering technical advice and feedback, and soil sample collecting out of eight extension activities. Although they had a low level of competency when it came to visiting contact farmers, they perceived it as an important activity. As a result, the Department of Agriculture must organise training programmes to improve the competency abilities of A.E.Os so that they can effectively undertake these extension operations.

**Keywords:** A.E.Os, Competency, Hershkowitz 2×2 matrix, Importance extension activity.

### INTRODUCTION

An agricultural extension service provides farmers with agricultural technical assistance as well as the inputs and services they need to support their agricultural productivity. As scientific research is rapidly progressing, with new approaches being introduced on a regular basis. The difficulties faced by Indian farmers would remain un-resolved unless these agricultural advances are disseminated from research to client systems. Agriculture extension workers were the main people in charge of ensuring that technology was transferred in the right fashion. The effectiveness of extension services is also highly dependent on the ability of extension workers who are competent as the whole extension process is dependent on them to transfer information from extension organizations to the clients (Tiraieyari *et al.*, 2010). The success of any extension programme will be determined to a large extent by the ability of her extension personnel to display competence since the whole extension delivery process is dependent on them to transfer new ideas and technical advice to the rural people (Owen, 2004). Suvedi and Ghimire (2015) noted that the role of extension today goes beyond technology transfer to

facilitation; beyond training to learning and includes assisting farmers to form groups, dealing with marketing issues, addressing public interest issues in rural areas such as resource conservation, health, monitoring of food security and agricultural production, food safety, nutrition, family education, youth development and partnering with a broad range of service providers and other agencies in rural development. It is critical to understand the degree of performance and competence of agricultural extension officers in order to improve their competence and performance, as they were the primary conduits for knowledge transfer. Unless the employees are well informed about their performance and also their strong and weak points, it's very difficult for them to improve their level of performance (Mishra, 2005). Issahaku (2014), Competency is a skill, a personal characteristic or a motive demonstrated by various behaviors which contributes to outstanding performance in a job. Anisha (2012) reported that competency is a set of knowledge, skills and attitudes required to perform a job effectively and efficiently. The purpose of this study was to determine the perceived importance and competency of Agricultural Extension Officers' extension activities.

## METHODOLOGY

The research was carried out in the Andhra Pradesh district of Anantapur. Purposive sampling was used to select 5 mandals from Anantapur district (Putlur, Tadipatri, Peddapappur, Yellanur, and Pamidi). Random sampling technique was employed to select 50 respondents from the Anantapur district in the year 2019. The following steps were taken to determine the degree of competency of Agricultural Extension Officers working in agricultural development. The items (activities) were pre-tested with ADOs and A.E.Os to determine their relevance in the field. Eight items (activities) were chosen for administration to the AEOs after discussions with Department of Agriculture experts. The extension activities includes: Soil sample collection, Visiting contact farmers, Providing technical advice and feedback, Crop cutting survey, Crop demonstration, Field survey, Disaster management and Conducting farmers meeting.

It was developed to assess the importance of the above-mentioned extension activities as well as assess the competence of Agricultural Extension Officers to carry out the activities for agricultural development. Each item (activity) was given a five-point scale with weights of 5, 4, 3, 2 and 1 for very important, important, moderately important, little important, and unimportant, respectively for assessing the importance of activity perceived by Agricultural Extension Officers. Similarly, a five-point scale with weights of 5, 4, 3, 2 and 1 for very competent, fairly competent, moderately competent, little competent and not at all competent was used to assess the competency of Agricultural Extension Officers to perform extension activities. Each item was given a weighting in terms of importance and competency, and respondents were asked to rate it.

According to Hershkowitz (1973), a  $2 \times 2$  matrix was developed to determine the importance of extension activities and A.E.O competency. First, an overall mean

score was determined for all items related to importance and competency. The overall mean importance and competency scores were then plotted on the x- and y-axis, respectively. From each of these points, perpendicular lines were drawn, resulting in a  $2 \times 2$  matrix. High competency - High importance (HH), High competency - Low importance (HL), Low competency - High importance (LH), and Low competency - Low importance (LL) were the four quadrants of the matrix (LL). Then, based on mean rankings for importance and competency, all of the extension activities were arranged in the matrix.

## RESULTS AND DISCUSSION

From the Table 1 based on mean scores given by A.E.O's on extension activities, the most important extension activity was conducting Farmers meeting (4.86) followed by Soil sample collection (4.68), Providing technical advice and feedback (4.44), Visiting contact farmers (4.26), Disaster management (3.80), Crop demonstration (3.74), Crop cutting survey (3.50) and the least was Field survey (3.36). Competency skills of A.E.O's on extension activities based on mean scores reported that the highest competency skill was on Conducting farmers meeting (4.50) followed by Providing technical advice and feedback (4.34), Soil sample collection (4.06), Crop demonstration (3.92), Crop cutting survey (3.88) Visiting contact farmers (3.76), Field survey (3.26) and the least was Disaster management (3.00). Agbamu (2017), reported that practitioners had highest competency in public relations job followed by simplifying agricultural research results and least in use of visual aids and practitioners' perception of the importance shown highest in the use of visual aids followed by practical (method and result) demonstration and use of audio aids were ranked as last.

**Table 1: Distribution of mean scores according to Importance and Competency.**

Sr. No.	Extension activities of A.E.Os	Mean score (Importance of activity)	Mean score (Competency of A.E.Os)
1.	Soil sample collection	4.68	4.06
2.	Visiting contact farmers	4.26	3.76
3.	Providing technical advice and feedback	4.44	4.34
4.	Crop cutting survey	3.50	3.88
5.	Crop demonstration	3.74	3.92
6.	Field survey	3.36	3.26
7.	Disaster management	3.80	3.00
8.	Conducting farmers meeting	4.86	4.50
	<b>Overall mean score</b>	<b>4.08</b>	<b>3.84</b>

Fig. 1 represents the mean scores of major activities and competency skills of A.E.Os in the form of a  $2 \times 2$  matrix. Conducting farmer meetings, providing technical advice and feedback, and Soil sample collection were considered under High Competency-

High Importance activities. The A.E.Os considered these activities to be very significant and required high competency skills. As a result, there is no requirement for A.E.Os to be trained in these extension efforts. Crop demonstrations and crop cutting surveys were

categorised as High Competency-Low Importance activities. Contacting farmers had fallen into the Low Competency-High Importance category. These activities were critical, but A.E.Os lacked proficiency, necessitating training for them. Field surveying and disaster management had been relegated to the Low Competency-Low Importance category. There was no need for any recommendations because these activities were of lesser importance and competency. Similar studies were done by Debnath *et al.* (2014) reported that AO's (40 per cent) have high level of job competence and job performance. Because of limited activities in the guidance of others, adaptability to new environment, making judgment and creativity in new work VLWs had medium level of job competence. So, AO's still needs to be improved in job competence, but its urgency for VLW's. Karbasioun *et al.* (2007) studied the competency needs of AEIs that subject matter understanding scores highest. Presentation skills are amongst the top three competencies needed. Most of the other competencies are specific for the work of human resource development specialists (like understanding learning processes, feedback skills, relationship building, adult training and development, and objective preparation).



**Fig. 1.** 2x2 Matrix determining Important activities and Competency of A.E.Os.

Khan *et al.* (2012), stated about the technical competencies of AEOs as highest competency skills were presented in the “Describe agricultural recommendations regarding vegetables” (0.75) and the lowest in the “Describe agricultural recommendations

regarding floriculture” (0.60). Kusumalatha and Shivalinge Gowda (2020) reported that 41.11% of the respondents had medium level, 30.00% and 28.89% had high and low level of job competence. Panjshiri *et al.* (2018), reported as majority respondents (62.90 %) had medium level of competency, 20.00% and 17.10% had low and high levels, respectively. Rohit *et al.* (2017), concluded that the KVK scientists had high competency possession on Ability to present seminar with mean score 3.237 and lowest competency possession on Ability to use computer (Internet) and PowerPoint presentation with mean score 2.539 and training is needed. Timothy (2015) assessed these areas (extension organization, programme planning, communication, resource management, human development, educational process, social system and efficient thinking) for competence of extension personnel, among these their least competent is social system and efficient thinking.

## CONCLUSION

The study concluded important extension activities and competency of Agricultural Extension Officers. Conducting farmers meetings, providing technical advice and feedback, and soil sample collecting activities were all included in the High Competency-High Importance and Agricultural Extension Officers needed to be kept up to date on new technologies and skills. Visiting contact farmers was fallen under high importance and low competency and in which trainings, workshops have to conduct for improvement of competency skills of Agricultural Extension Officers.

## FUTURE SCOPE

In the Agricultural department, the Agricultural Extension Officers come under grass root level workers to assist the farmers in their present situation. Their chief work is to bridge the gap between researchers and farmers. Similar research may be conducted for the M.P.Os (Mandal Parishadh Officers) who are the lowest level functionaries in the department of agriculture of the other states in India. The present study was conducted with few independent variables, but research may be carried out with other variables like job satisfaction, motivation of Agricultural Extension Officers.

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**Conflict of Interest.** None.

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