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Professional competencies among extension personnel of Karnataka State Department of Agriculture

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Abstract

The present study was undertaken during 2023-24 to measure the perceived importance and possession of professional competencies among extension personnel of Karnataka State Department of Agriculture. An “*ex-post facto*” research design was employed to collect data from a sample of 120 extension personnel comprising Agricultural Officers (AOs) and Assistant Agricultural Officers (AAOs) randomly selected from seven districts of Northern Karnataka coming under the jurisdiction of UAS, Dharwad. The results of the study revealed that ‘skills to carry out tasks of KSDA’ was ranked first both in case of perceived importance (83.38 mean index) and possession (78.39 mean index), followed by ‘knowledge to carry out tasks’ (81.10 and 77.86 mean index respectively) and ‘personal qualities to carry out tasks’ (78.42 and 76.33 mean index respectively). The incidence of professional competency gaps highlights that ‘personal qualities to carry out tasks’ revealed high gap index (18.69), followed by knowledge to carry out tasks’ (17.30) and ‘skills to carry out tasks of KSDA’ (15.79). The study results implied that extension personnel were sound in the knowledge of importance and possession of professional competencies and further existence of less than 20.00 percent gap pointed out that extension personnel had better exposure to the challenges of farmers, increased media use, and competitiveness of private extension services.

Keywords: Professional competencies, extension personnel, gap index, perceived importance, perceived possession

Introduction

In today’s rapid advancements in farm technologies and emerging challenges in demographics and social, environment, the role of extension personnel becomes more critical. So, the extension personnel need to be equipped with range of competencies for their greater role in achieving success of extension service for the development of agriculture. Extension staff must learn new knowledge and skills since it is only a knowledgeable and skillful individual can play a vital role in the success of an organization in today’s technological environment (Rohit *et al.*, 2020) ^[5]. For an extension professional to be successful, they must not only be competent in technical matters but also in management, programming, communication, human relation and leadership (Graham, 2009; Stone and Coppennoll, 2004) ^[2,6].

This underlines the need to equip professional competency to carry out both specified and unspecified tasks leading to the satisfaction of all stakeholders’ current and future desired standards (Khadayata *et al.*, 2019) ^[4]. Professional competencies of extension personnel refer to possession of those skills, knowledge, abilities and attitudes to adequately perform their roles effectively (Khadayata, 2018) ^[3]. Identified competencies in extension require program planning, execution, implementation, and evaluation;

faculty and public relations; professional and personal development; communication and management skills (Cooper and Graham, 2001) ^[1].

Karnataka State Department of Agriculture, established in 1913, plays a vital role in promoting scientific agriculture and improving farmers’ lives. While the department’s extension system has undergone significant changes, there is a need to assess the perceived gaps in professional competencies among extension workers to enhance their performance and job satisfaction.

Despite the indispensable role of extension personnel, there exists a growing concern regarding perceived gaps in their professional competencies. These gaps can hinder the effectiveness of extension programs and limit their ability to meet the dynamic needs of their target audience. Identifying these competency gaps is crucial in equipping them with necessary skills and knowledge to excel in their roles for the continuous improvement of extension services. Keeping these, the present study was undertaken to measure the perceived level of importance and possession of professional competencies and the existing gaps in professional competencies of extension personnel.

Materials and Methods

The study was undertaken during 2023-24 in the seven

districts of Northern Karnataka which comes under the jurisdiction of UAS, Dharwad. Agricultural Officers (AO) and Assistant Agricultural Officers (AAO) of State Department of Agriculture working at Raitha Samparka Kendras (RSKs) form the population for the study. Simple random sampling procedure was employed to select 15 AOs and 5 AAOs from Bagalkot, 8 AOs and 2 AAOs from Belagavi, 15 AOs and 5 AAOs from Dharwad, 15 AOs and 5 AAOs from Gadag, 15 AOs and AAOs from Haveri, 9 AOs and 1 AAO from Uttar Kannada and 15 AOs and 5 AAOs from Vijayapura to constitute a total sample size of 120 extension personnel. The questionnaire was developed and pre-tested in non-sample area to ascertain content validity and reliability. The professional competence was measured by considering three components namely, Knowledge to carry out tasks, Skills to carry out tasks of KSDA and Personal qualities to carry out tasks. The data were collected by employing personal interview and also through google forms. Percentage and mean index were used to calculate the perceived level of importance and possession of professional competencies and the existing gaps in professional competencies of extension personnel.

Results and Discussion

The results presented in the Table 1 revealed that extension personnel exhibited high perceived level of importance and possession of 'Skills to carry out tasks of KSDA' (83.38 and

78.39 mean index respectively), followed by importance and possession of 'Knowledge to carry out tasks' (81.10 and 77.86 mean index respectively) and 'Personal qualities to carry out tasks' (78.42 and 76.33 mean index respectively). The ability of extension personnel who had the required skills and knowledge found to perform better hence the said results. Further, results on delineated aspects of skills to carry out tasks of KSDA revealed 'initiativeness' was ranked first in the perceived level of importance (mean index of 86.58) since to persuade farmers to accept technologies and market related information it is the initiativeness among the extension workers count the lot, hence the results, followed by 'documentation skills' (mean index of 85.00), 'leadership qualities' (mean index of 83.19), 'planning and organization' (mean index of 82.92), 'communication' (mean index of 82.83) and 'analysis and diagnosis' (mean index of 82.42). Whereas, documentation skills ranked first with respect to perceived level of possession (mean index of 79.58) because how much work extension workers do depend on recorded work as a good reference material for impressing the farmers, hence the extension personnel possessed good documentation skills, followed by 'initiativeness' (mean index of 78.75), 'analysis and diagnosis' and 'communication' (mean index of 78.50), 'planning and organization' (mean index of 78.38) and 'leadership qualities' (mean index of 77.17).

Table 1: Distribution of extension personnel in the perceived level of importance and possession of professional competencies n=120

Sl. No.	Professional competencies	Perceived level of importance		Perceived level of possession	
		Mean Index	Rank	Mean Index	Rank
1	Knowledge to carry out tasks	81.10	II	77.86	II
2	Skills to carry out tasks of KSDA	83.38	I	78.39	I
	a) Analysis and Diagnosis	82.42	6	78.50	3
	b) Planning and Organization	82.92	4	78.38	4
	c) Communication	82.83	5	78.50	3
	d) Leadership qualities	83.19	3	77.17	5
	e) Initiativeness	86.58	1	78.75	2
	f) Documentation skills	85.00	2	79.58	1
3	Personal qualities to carry out tasks	78.42	III	76.33	III

The results on incidence of overall gaps in professional competencies as perceived by extension personnel as shown in Table 2 highlight the highest gap in professional competencies was noticed in case of 'personal qualities to carry out tasks' (18.69), followed by 'knowledge to carry out tasks' (17.30), it is because of the fact that individual and even the Department of Agriculture was focussing less on the personal qualities like building self-confidence, stress management, work pressure etc. which needs to be improved by providing trainings and workshops related to

improving their personal qualities. Whereas, the lowest gap was observed in 'skills to carry out tasks of KSDA (17.79), due to the fact that extension personnel had ample of opportunities to update the required skills. Further, the incidence of gap among the six aspects showed that documentation skills shown lowest gap (14.58), because of how much work extension workers do depend on recorded work as a good reference material for impressing the farmers.

Table 2: Professional competency gaps among extension personnel n=120

Sl. No.	Professional competencies	Gap index (%)	Rank
1	Knowledge to carry out tasks	17.30	II
2	Skills to carry out tasks of KSDA	15.79	III
	a) Analysis and Diagnosis	14.75	4
	b) Planning and Organization	17.13	1
	c) Communication	15.78	2
	d) Leadership qualities	15.17	3
	e) Initiativeness	14.67	5
	f) Documentation skills	14.58	6
3	Personal qualities to carry out tasks	18.69	I

Conclusion

The present study revealed that extension personnel in Karnataka State Department of Agriculture possessed a high level of perceived importance and possession of the required professional competencies. While the overall gaps in professional competencies were found to be less than 20 per cent, highlights the need for targeted interventions like exposure to farmer challenges, media use and competition from private extension services to address the strengthening of the personal qualities and knowledge. The findings shown that 'Skills to carry out tasks of KSDA' exhibited high perceived level of importance and possession, indicates that extension personnel had ample of opportunities to update the required skills and 'Personal qualities to carry out tasks' shown high gap index, thereby reflect that Department of Agriculture should focus more on equipping personal qualities in the emerging needs of different stakeholders. By implementing these recommendations, the Karnataka State Department of Agriculture can further enhance the professional competencies of its extension personnel, leading to more effective and impactful agricultural extension services.

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