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RESEARCH PAPER

A Study on Personal Profile and Organizational Facilitation of Agricultural Extension Functionaries for Information **Dissemination in Kashmir Valley**

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ABSTRACT

State department of Agriculture in every state is running with objectives of technology transfer, providing training services, updating farmers with new technologies and giving solutions to problem of farmers. The present study regarding the personal profile of the Agricultural Extension Functionaries (AEFs) and assessing the organizational facilitation of AEFs for dissemination of information was carried out in three purposively selected Sub-Divisional Agricultural Offices namely Baramulla, Sopore and Rohama in district Baramulla of Jammu & Kashmir. Among the Sub-Divisional Extension functionaries, all Subject Matter Specialists (SMS's), Agricultural Extension Officers (AEO's), Agricultural Assistants Inputs (AAI's), Junior Agricultural Extension Officers (JAEO's) and Agricultural Extension Assistants (AEA's) were taken for collecting the primary data with the help of a well-structured interview schedule. The study indicated that majority (51.80 %) of the Agricultural Extension Functionaries (AEFs) belonged to the age group of 36 to 43 years, 74.82 per cent of the AEFs were Agricultural Extension Assistants (AEAs), 83.45 per cent of the AEFs were male, 57.55 per cent of the AEFs were Post graduates, 100 per cent of the AEFs were married, 68.35 per cent of the AEFs belonged to joint family type, 51.8 per cent of the AEFs belonged to medium family size (6-10 members), 41.73 per cent of the AEFs belonged to rural family background, 48.92 per cent of the AEFs preferred public transport, 79.86 per cent of the AEFs belonged to job experience category of 2-13 years and 74.82 per cent of the AEFs belonged to income category of ₹ 35400 - ₹ 112400. Under overall organizational facilitation, majority (56.84 %) of the Agricultural Extension Functionaries (AEFs) were having medium level of organizational facilitation.

HIGHLIGHTS

- The Department of Agriculture aims to transfer technology, train staff, and solve farmers' problems.
- The study was conducted in Baramulla, Sopore, and Rohama in Jammu & Kashmir.
- 56.84% of AEFs reported medium-level organizational facilitation.
- Key recommendations include staff training, info-sharing, partnerships, and monitoring.
- Emphasizing data-driven collaboration to improve farmer support.

Keywords: Agricultural Extension Functionaries, Personal profile, Organizational facilitation, Job experience

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Agricultural extension service delivery plays a pivotal role in transforming agriculture by disseminating research-based knowledge, innovations and improved practices to the farming community. Across the globe, extension systems serve as a crucial bridge between research institutions and farmers, aiming to enhance productivity, ensure food security and contribute to rural economic development (Apantaku & Oyegunle, 2016). In this regard, extension functionaries act as front-line agents in facilitating the transfer of technology to farmers through various communication and training methods.

In India, State Departments of Agriculture (SDAs) serve as the primary public sector institutions responsible for agricultural extension services. These departments have traditionally relied on a range of extension methods to reach farmers, including demonstrations, training sessions, field visits and information campaigns. However, the efficacy of these efforts depends not only on the availability of technologies but also significantly on the capacity, motivation and institutional support provided to extension personnel (Ravikishore *et al.* 2023).

With rapidly changing agricultural landscapes driven by globalization, climate variability, market uncertainties and technological advancements, there is a growing need for extension systems to adapt and become more responsive. The functionaries, in this evolving context, require not only updated knowledge but also adequate organizational facilitation to perform their roles effectively. This includes access to mobility, digital tools, communication aids, training opportunities, financial incentives and institutional backing from higher authorities. As Anirban and Aniruddha (2015) argue, the strength of the extension system is inherently linked to the organizational environment in which its agents operate.

Despite the recognized importance of these factors, limited research exists on the extent and impact of organizational facilitation for agricultural extension personnel, particularly in challenging regions like the Kashmir Valley. Jammu and Kashmir, with its unique agro-climatic conditions and sociopolitical context, presents distinct challenges for extension delivery. The effectiveness of agricultural extension in this region is intricately tied to how

well the extension staffs are supported by their organizations.

This study, therefore, focuses on analysing the personal profile of extension functionaries and assessing the level of organizational facilitation provided to them within the Jammu and Kashmir State Department of Agriculture. By identifying gaps and strengths in the current system, the study aims to provide insights into improving extension delivery mechanisms for enhanced agricultural development in the Kashmir Valley.

METHODOLOGY

Research Design

The present study adopted an ex-post-facto research design, as it aimed to analyze a phenomenon that had already occurred without manipulating any variables. This design is appropriate for exploring the personal profile and organizational facilitation aspects of Agricultural Extension Functionaries (AEFs) engaged in technology dissemination.

Locale of the study

The research was conducted in Baramulla district of the Kashmir Valley, Jammu and Kashmir, which was purposively selected for the study. Baramulla is the largest district in the valley in terms of both population and geographical area, making it a representative locale for the study of agricultural extension systems.

Baramulla district comprises six Sub-Divisional Agricultural Offices namely Baramulla, Pattan, Sopore, Rohama, Uri and Tangmarg. Among these, three sub-divisions namely Baramulla, Sopore and Rohama were purposively selected, based on the extent of area under agricultural practices, ensuring that the study focused on the most agriculturally active zones of the district.

Sampling Procedure

Within the selected sub-divisions, a census method was followed to include all available Agricultural Extension Functionaries (AEFs). The categories of extension personnel included in the study were Subject Matter Specialists (SMSs), Agricultural Extension Officers (AEOs), Agricultural Assistants Inputs (AAIs), Junior Agricultural Extension



Officers (JAEOs), Agricultural Extension Assistants (AEAs). A total of 139 AEFs across these three Sub-Divisions constituted the sample size for the study.

Measurement of Variables

To study the personal profile of AEFs, total of eleven independent variables were taken. Various self-scoring classification (designation, gender, educational qualification, marital status, family type, family background, mode of transport), cube root method (age), size of census family, India, 2015 (family size) (Government of India, 2015), minimum-maximum value classification (job experience) and pay scale (income/salary) were adopted to study the personal profile of AEFs.

To assess the organizational facilitation for dissemination of Agricultural information, a list of eleven questions was prepared by discussing with experts from Agriculture Extension and by referring to review of literature. Each question was framed in a statement form to obtain the response from Agricultural Extension Functionaries (AEFs). Eleven items/statements were administered to Agricultural Extension Functionaries (AEFs) along with three point continuum representing 'Fully satisfied, 'Partially satisfied', 'Dissatisfied', with assigned score of 3, 2 and 1 respectively for positive statements and vice versa for negative statements. The satisfaction score of an AEF were calculated by adding up the scores obtained by an individual on all items/statements. The satisfaction score of this scale ranges from a minimum of 11 to a maximum of 33. Higher score on the scale indicates that Agricultural Extension Functionaries (AEFs) have higher level of satisfaction towards their organisational facilities.

The mean and standard deviation of the organizational facilitation were 22.77 and 4.14 respectively. Initially, based on the maximum score (33) obtained and minimum score (13) obtained, Agricultural Extension Functionaries (AEFs) were categorized into six organizational facilitation categories viz., very low, low, low medium, high medium, high and very high. Exclusive method was followed while categorizing the level of organizational facilitation.

RESULTS

(i) Personal profile of Agricultural Extension Functionaries

1. Age

As presented in Table 1, 51.80 % of the Agricultural Extension Functionaries (AEFs) were in the 36 to 43 years age group, followed by 33.8 % in the 43 to 50 years category and 14.3 % aged 50 years and above. The mean age was 43.91 years with a standard deviation of 5.23.

This age distribution may be attributed to the halt in recruitment for nearly a decade, after which a significant number of AEFs were appointed, resulting in a concentration of mid-career personnel. These results are consistent with the findings of Manjunath (2015).

2. Designation

A majority (74.82 %) of the AEFs were Agricultural Extension Assistants (AEAs), followed by 11.51 % Agricultural Extension Officers (AEOs), 10.07 % Junior Agricultural Extension Officers (JAEOs), 2.16 % Agricultural Assistants Inputs (AAIs) and 1.44 % Subject Matter Specialists (SMSs). The mean and standard deviation were 1.42 and 0.78, respectively.

This indicates that field-level extension staffs form the bulk of the workforce, similar to the structure reported by Oladele and Mabe (2010).

3. Gender

The study showed that 83.45 % of the AEFs were male and only 16.55 % were female, with a mean of 1.17 and standard deviation of 0.37.

This gender disparity reflects broader trends observed in agricultural departments, aligning with the observations of Dhiraj and Pandey (2012) and Ayele (2014).

4. Educational Qualification

Over 57.55 % of AEFs were postgraduates, while 31.66 % held agriculture graduate degrees, 7.19 % had completed the Basic Agricultural Training (BAT) course, and 3.59 % were graduates in Science/B.Tech. The mean and standard deviation were 5.37 and 0.96.

A E C C D A

Table 1: Personal profile of selected Agricultural Extension Functionaries (AEFs) (n=139)

Sl. No.	Variables	Category	Functionaries		3.5	- Cr. 1 1D 11
			Frequency	Percentage (%	−Mean)	Standard Deviation
1	Age	36-43 years	72	51.80		
		43-50 years	47	33.81	43.91	5.23
		50 years and above	20	14.39		
2	Designation	AEA	104	74.82		
		JAEO	14	10.07		
		AEO	16	11.51	1.42	0.78
		AAI	3	2.16		
		SMS	2	1.44		
3	Gender	Male	116	83.45		
		Female	23	16.55	1.17	0.37
4	Educational	Basic Agricultural Training	10	7.19		
	Qualification	Graduation (Science/B.Tech)	5	3.59	5.37	0.96
		Agriculture graduate	44	31.66		
		Post-graduation	80	57.55		
5	Marital status	Married	139	100.00	2	0
		Unmarried	NIL	NIL		
6	Family type	Joint family	95	68.35	1.68	0.47
		Nuclear family	44	31.65		
7	Family size	Small family	41	29.5		
	•	(Upto 5 members)				
		Medium family	72	51.8		
		(6-10 members)	,_	01.0	7.66	3.15
		Big family	26	18.7		
		(Above 10 members)	20	10.7		
8	Family	Rural	58	41.73		
	background	Semi urban	44	31.65	1.85	0.82
		Urban	37	26.62		
9	Mode of transport	By foot	6	4.32		
	•	Public transport	68	48.92		1.04
		Two wheeler	6	4.32	2.85	1.04
		Four wheeler	59	42.44		
10	Job experience (in years)	2-13 years	111	79.86		
		13-24 years	8	5.76	13.63	7.91
		24-35 years	20	14.39		
11	Income/Salary	₹ 35400 - ₹ 112400	104	74.82		
	(Pay scale)	₹ 35900 - ₹ 113500	14	10.07		
		₹ 47600 - ₹ 151100	19	13.67	NIL	NIL
		₹ 50700 - ₹ 160600	2	1.44		

This trend indicates a rising inclination toward higher education among extension personnel, supporting the findings of David and Robert (2013).

5. Marital Status

All respondents (100 %) were married, with a mean

of 2.00 and standard deviation of 0. This can be attributed to the age profile of the respondents, who were mostly above the typical marital age in India, as per the 2011 marriage statistics. The findings are consistent with those of Varinder and Prabhjot (2015).



6. Family Type

Most AEFs (68.35 %) belonged to joint families and 31.65 % to nuclear families, with a mean of 1.68 and standard deviation of 0.47.

The prevalence of joint families may be due to proximity to native villages, allowing co-residence with extended family. These findings align with those of Kuldeep *et al.* (2010).

7. Family Size

The majority (51.80 %) belonged to medium-sized families (6–10 members), while 29.50 % had small families (up to 5 members) and 18.70 % had large families (above 10 members). The mean family size was 7.66, with a standard deviation of 3.15.

This is consistent with the joint family pattern observed among respondents, corroborating Neeta (2015).

8. Family Background

Most AEFs (41.73 %) had a rural background, followed by 31.65 % from semi-urban, and 26.62 % from urban areas. The mean and standard deviation were 1.85 and 0.82, respectively.

This reflects the rural dominance of Kashmir valley's population, consistent with Mandavi (2002) and Meena *et al.* (2010).

9. Mode of Transport

About 48.92 % of AEFs used public transport, 42.44 % used four-wheelers, while 4.32 % each used two-wheelers or walked. The mean and standard deviation were 2.85 and 1.04.

Preference for public transport could be due to frequent traffic congestion, making self-driving inconvenient. These findings are similar to those of Neeta (2015).

10. Job Experience

The majority (79.86 %) had 2–13 years of experience, followed by 14.39 % with 24–35 years and 5.76 % with 13–24 years. The mean job experience was 13.63 years, with a standard deviation of 7.91.

This aligns with recruitment patterns in the region and supports the findings of Shanmugasundaram and Prema (2005).

11. Income/Salary (Pay Scale)

Most AEFs (74.82 %) were in the ₹ 35,400 - ₹ 1,12,400 pay scale, 13.67 % in ₹ 47,600 - ₹ 1,51,100, 10.07 % in ₹ 35,900 - ₹ 1,13,500 and 1.44 % in ₹ 50,700 - ₹ 1,60,600.

This reflects the current public service salary structure and is in agreement with Michaels (2004).

(ii) Organizational Facilitation for Dissemination of Agricultural Information

As per Table 2 and Fig. 1, 40.29 % of AEFs belonged to the high medium category of organizational facilitation, followed by 16.55 % in the low medium, 13.67 % in very high, 12.95 % in low, 12.23 % in high and 4.32 % in very low categories.

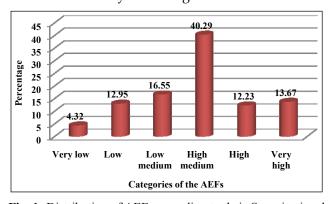


Fig. 1: Distribution of AEFs according to their Organizational facilitation

When aggregated, 56.84 % of the AEFs experienced a medium level of organizational facilitation, while 25.90 % were in the high and 17.27 % in the low category. The mean facilitation score was 22.77 with a standard deviation of 4.14.

This medium-level satisfaction may be due to partial satisfaction with facilities such as transportation, storage, repair and maintenance, stationary supply, audiovisual aids, financial and clerical support, computer systems, and internet connectivity. These results are in agreement with those of Mohan (2000) and Nagananda (2005).

DISCUSSION

The present study aimed to analyze the personal profile and level of organizational facilitation among Agricultural Extension Functionaries (AEFs) in Baramulla district of the Kashmir Valley. The findings offer insightful implications for both human resource development and institutional



Table 2: Overall Organizational facilitation for dissemination of Agricultural information

Level of Organizational facilitation		Frequency	Percentage (%)	Mean	Standard Deviation
Low	Very low (13-16)	06	4.32		
	Low (16-19)	18	12.95	22.77	4.14
Medium	Low medium	23	16.55		
	(19-22)				
	High medium	56	40.29		
	(22-25)				
High	High (25-28)	17	12.23		
	Very high	19	13.67		
	(28 & above)				
Total		139	100		

planning within the agricultural extension system in Jammu & Kashmir.

1. Personal Profile: Reflections and Implications

The analysis of the personal characteristics of AEFs reveals a workforce that is relatively young to middle-aged, with 51.80 % in the 36–43 years category and a mean age of 43.91 years. This age distribution is a result of recent recruitment following a long hiatus, indicating a renewed investment in agricultural human resources. The dominance of mid-career professionals suggests that the system now has a window of opportunity to invest in capacity building and upskilling, which will have long-term benefits.

A striking majority (74.82 %) of the respondents were Agricultural Extension Assistants (AEAs), showing a pyramidal staff structure that emphasizes field-level personnel. While this is favorable for farmer contact, it also implies a need to ensure that support systems and supervisory structures are well established to guide and manage this wide base.

The data also indicate a strong male dominance (83.45 %) in the extension system, underlining the gender imbalance that persists in the region. This highlights a policy gap and suggests the need for gender-inclusive recruitment and sensitization policies in future staffing.

Regarding educational qualifications, the majority of AEFs were postgraduates, followed by graduates in agriculture, reflecting a well-educated extension workforce. This educational base can significantly enhance the quality of technology transfer, provided the extension functionaries are continuously exposed

to new learning opportunities, including digital tools, climate-smart practices and participatory extension methods.

The prevalence of joint families (68.35 %), medium family sizes, and rural backgrounds aligns with the sociocultural setting of Kashmir and suggests that many extension workers are well-rooted in the farming context. This can be an advantage in building trust and rapport with farming communities.

However, the dominant use of public transport (48.92 %), coupled with the moderate job experience levels (Mean: 13.63 years), signals the need for better mobility support and infrastructure development, especially in difficult terrains.

2. Organizational Facilitation: Strengths and Gaps

The study revealed that a majority (56.84 %) of AEFs experienced a medium level of organizational facilitation, while only 25.90 % were in the high category and 17.27 % in the low category. The mean organizational facilitation score (22.77) suggests that while the foundational facilities are present, many elements remain under-optimized.

The areas of partial satisfaction included transportation support, office infrastructure, repair and maintenance, clerical assistance, financial entitlements, access to digital tools, and internet connectivity. The limited provision and inconsistent quality of these resources may be impacting morale, productivity, and outreach of extension personnel.

Moreover, this moderate level of satisfaction underscores that while the human resources are educationally competent and demographically



suitable, the institutional environment needs significant strengthening to enable them to perform to their full potential.

3. Overall Discussion and Policy Implications

The study brings to the fore the critical link between personal attributes of extension personnel and the organizational systems that support them. While the human capital appears promising in terms of age, education, and experience, the current level of institutional support may limit their effectiveness in disseminating agricultural information.

To improve the situation:

- Strengthening organizational facilitation through targeted investment in mobility, digital infrastructure, audio-visual tools and training resources is crucial.
- Promoting gender diversity in recruitment can add new dimensions to farmer engagement.
- Encouraging continuous professional development through refresher training, exposure visits, and ICT-based knowledge sharing will keep the extension staff updated and motivated.
- Decentralized decision-making and empowerment at the sub-divisional level could also enhance responsiveness and accountability.

In conclusion, the success of agricultural extension services in Kashmir Valley depends not just on the qualifications of the staff but more importantly on how well they are enabled, supported, and motivated through appropriate organizational mechanisms. By addressing the identified gaps, the State Department of Agriculture can significantly enhance the efficiency and impact of extension delivery, thereby contributing meaningfully to agricultural development in the region.

CONCLUSION

The present study recommends some points for attaining better organization facilitation:

 Enhancing capacity building by investing in comprehensive training programs and workshops to improve skills and knowledge of agricultural department staff.

- Establish a robust information dissemination system to ensure timely and accurate communication with farmers and stakeholders.
- Encourage collaborations between the department of agriculture and private entities such as agribusinesses, research institutions and NGOs.
- Set up regional or district-level agricultural innovation hubs to facilitate the adoption of advanced farming techniques, agripreneurship, and technology-driven solutions. These hubs can serve as demonstration farms, training centers, and business incubators. They should provide farmers with hands-on experience, access to modern equipment, and mentoring opportunities to promote sustainable agricultural practices.
- Streamline bureaucratic processes and simplify
 the application and approval procedures for
 government schemes and subsidies. Reduce
 paperwork, digitize forms, and establish
 transparent and efficient mechanisms for
 farmers to access financial assistance and other
 benefits. This will improve the ease of doing
 business for farmers and enhance their trust in
 government initiatives.
- Implement a robust monitoring and evaluation framework to track the effectiveness of departmental programs and policies. Implementing these policy recommendations will contribute to improved organizational facilitation within the State Department of Agriculture in India.
- By investing in capacity building, information dissemination, advisory services, partnerships, data-driven decision-making, and collaboration with various stakeholders, the department can effectively support farmers, promote sustainable agriculture, and drive rural development.

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