

International Journal of Agriculture Extension and Social Development

Volume 8; Issue 5; May 2025; Page No. 331-334

Received: 11-02-2025
Accepted: 18-03-2025

Indexed Journal
Peer Reviewed Journal

A study on association of effectiveness of extension service delivered by government and non-government organisations with socio-economic, communication and psychological behaviour of beneficiaries

¹Dr. Vasupriya Parashar and ²Dr. Prasanlata Arya

¹Ph.D. Research Scholar, Department of Extension Education and Communication Management, College of Community Science, S.K. Rajasthan Agricultural University, Bikaner, Rajasthan, India

²Assistant Professor, Department of Extension Education and Communication Management, College of Community Science, S.K. Rajasthan Agricultural University, Bikaner, Rajasthan, India

DOI: <https://www.doi.org/10.33545/26180723.2025.v8.i5e.1905>

Corresponding Author: Dr. Vasupriya Parashar

Abstract

Agricultural development and rural development can be efficiently converted into economically rewarding opportunities. For that extension organizations generally responsible for transforming improved agricultural technologies from the point of production to its units of utilization through extension services. The collaboration between government organisations and non-government organisations further enhances the reach and impact of extension services, by leveraging diverse expertise, resources, and networks. In the context of rural India, where agriculture is a primary source of income for a greater part of the population, effective extension services are essential for sustainable development. The identified findings of the study show the association of effectiveness of extension services with socio-economic communication and psychological behavior of beneficiaries. A list of farmers procured by the investigator from the individual organisation and from the list total 180 beneficiaries were selected as sample size, 60 farmers or beneficiaries (women and men) each from State Department of Agriculture, Krishi Vigyan Kendra and Non-Government Organisation of Bikaner district of Rajasthan. The ex-post facto Research design was used for this study. Chi-square test as statistical tools was used in this study to identify association of effectiveness of extension services with profile characteristics of beneficiaries. It was found from the study that beneficiaries' age, family size, educational qualification, social participation, mass media utilization, information seeking behavior, innovation, economic motivation, risk orientation, attitude towards extension services, attitude towards development programme and training participation were significantly associated with the effectiveness of extension services delivered by SDA, KVK and NGO.

Keywords: SDA= state department of agriculture, KVK=Krishi Vigyan Kendra, NGO=Non Government Organisation

Introduction

With enhancement in government policies, demand and supply characteristics of technology, and marketing modification, agriculture extension system is facing extra opportunities collectively with challenges. It stress that the terms of all the generated technologies to the farming and rural community without any obstruction. So it is very clear that information about critical inputs agricultural development and rural development which could be efficiently converted into economically rewarding opportunities. For that extension organizations generally responsible for transforming improved agricultural technologies from the point of production to its units of utilisation. In the context of rural India, where agriculture is a primary source of income for a greater part of the population, effective extension services are essential for sustainable development. Till 1960's agricultural extension was simply performed under the direction of State Department of Agriculture. In order to assist government extension, the Indian Council of Agricultural Research (ICAR) started getting concerned in extension activities. ICAR's participation increased significantly with the

beginning and stretch of Krishi Vigyan Kendra's (KVKs). In addition to the extension services of government sector some Non Governmental Organisations (NGOs) are also doing efficient extension work in the limited areas of their control. NGOs play greater role in rural development. They had greater enthusiasm and capability to mobilise community resources. The NGOs are increasingly able to be a magnet for skilled people away from the public sector. Now NGO has become an immense force available for agricultural extension and rural development. The collaboration between government organisations and non-government organisations further enhances the reach and impact of extension services, by leveraging diverse expertise, resources, and networks. By delving into the intricacies of extension services in Bikaner District, this research seeks to contribute to the broader discourse on agricultural extension and rural development, with the ultimate goal of creating positive and sustainable change in the lives of farmers in arid regions. The aim of the research is to calculate the impact of these services on agricultural productivity, adoption of sustainable practices, and overall rural development. By understanding the dynamics of

extension services, research seeks towards building a more resilient and sustainable agricultural system that benefits both farmers and the community at large.

Objective

To examine the association of effectiveness of extension services delivered by State Department of Agriculture, Krishi Vigyan Kendra and Non Government Organisation with socio-economic, communication and psychological behaviour of beneficiaries

Methodology

The present study was conducted in Bikaner district of Rajasthan. For the present research study three organisation were selected namely State Department of Agriculture of Bikaner division, Krishi Vigyan Kendra and Non Government Organisation (URMUL Seemant Samiti) of Bikaner district of Rajasthan to identify the different working of extension services in this region. The ex-post facto Research design was used for this study. A list of farmers (women and men) or beneficiaries was procured from the organisation, which had direct contact and had membership of the organisation. From the list sixty beneficiaries from were selected from each organisation for the investigation. Thus, total 180 beneficiaries were selected for the study. The data were collected from 180 beneficiaries through personal interview method and with a well-structured interview schedule. To determine the association of effectiveness of extension services of State Department of Agriculture, Krishi Vigyan Kendra and Non Government Organisation with general profile of beneficiaries, firstly effectiveness of extension services was analysed and questions were asked from the beneficiaries regarding need based extension services of specific area, weaker sections of society, SC/ST, social welfare, women, etc, extension services in major areas as agriculture management, livestock management, health and hygiene, women empowerment and entrepreneurship development, utilization of communication facilities viz., individual contact method, group contact method and mass contact

method by the organisation, extension activities for example, demonstration, training, campaign, field days, field trips and tours, group discussions, meeting, seminars, etc, Human resource of the extension organisation, Other factors affecting extension services like infrastructural facilities, unbiased participation, team work and contact with research institute, monitory benefits earned from extension services during last three years, adequate, relevant and timely delivery of extension services like content, training, inputs, etc, change in behavior of beneficiaries at personal, family and societal level and satisfaction level of beneficiaries. The questions were evaluated from the experts of the field. The question was scrutinize with the answer in agree, undecided and disagree and the mean was computed to analysed mean difference. Secondly, the computed data of effectiveness was then analysed to find association of effectiveness of extension services with socio-economic factor, communication behavior and psychological behavior of beneficiaries with the help of chi-square test.

Statistical tool

1. Chi-square test

The chi-square test as a goodness of fit has been used to determine whether a significant difference subsist between the observed number of response in each category and the expected number for each category. Chi-square test is used to determine the association among the effectiveness of extension services with independent variable of beneficiaries.

$$\chi^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i}$$

Where,

O= Observed frequency

E= Expected frequency

Results

Table 1: Association between effectiveness of extension services of SDA, KVK and NGO with independent variables of beneficiaries
N=180

S. No.	Variables	“P” Value (Chi-Square Test)		
		SDA (n=60)	KVK (n=60)	NGO (n=60)
1.	Age	0.013*	0.023*	0.035*
2.	Caste	0.521	0.665	0.810
3.	Educational qualification	0.023*	0.003**	0.005**
4.	Family size	0.642	0.002**	0.007**
5.	Family type	0.832	0.719	0.690
6.	Farming experience	0.082	0.657	0.074
7.	Family occupation	0.214	0.339	0.159
8.	Farm size	0.541	0.092	0.071
9.	Annual income	0.724	0.324	0.032*
10.	Livestock	0.345	0.086	0.471
11.	Social participation	0.035*	0.063	0.010**
12.	Extension personnel contact and Mass media utilization	0.016*	0.029*	0.031*
13.	Information seeking behavior	0.001**	0.003**	0.004**
14.	Innovation	0.023*	0.002**	0.023*
15.	Scientific orientation	0.521	0.851	0.350
16.	Economic motivation	0.032*	0.041*	0.005**
17.	Risk orientation	0.005**	0.023*	0.003**
18.	Attitude towards extension services	0.030*	0.001**	0.013*
19.	Attitude towards development programmes	0.001**	0.003**	0.007**
20.	Training participation	0.005**	0.001**	0.003**
		**Significant at 0.01 level of significance, * Significant at 0.05 level of significance.		

1. Age

With the “p” value of 0.013* of State Department of Agriculture, 0.023* of Krishi Vigyan Kendra and 0.035* of Non Government Organisation at 0.05 level of significance, data in the Table 1 showed that there was a significant association between the age of beneficiaries and effectiveness.

2. Caste

The data in the Table 1 depicted that there was a non-significant association between caste of the beneficiaries and effectiveness of extension services with the “p” value of 0.521, 0.665 and 0.810 of State Department of Agriculture, Krishi Vigyan Kendra and Non Government Organisation, respectively.

3. Educational qualification

According to Table 1 data, there was a significant association between the educational qualification and effectiveness of extension services with value of “p” value of State Department of Agriculture ($p=0.023^{**}$), Krishi Vigyan Kendra ($p=0.003^{**}$) and Non Government Organisation ($p=0.005^{**}$) at 0.05 level.

4. Family size

It can be inferred from the Table 1 that, there was a significant association between effectiveness of extension services and Family size of Non Government Organisation with “p” value of 0.007** at 0.05 level of significance. Further the data also revealed that, effectiveness of State Department of Agriculture ($p=0.642$) and Krishi Vigyan Kendra ($p=0.002$) expressed non-significant association with family size of beneficiaries.

5. Family type

With respect to family type Table 1, data showed that “p” value 0.832, 0.719 and 0.690 of State Department of Agriculture, Krishi Vigyan Kendra and Non Government Organisation, respectively had non-significant association between effectiveness of extension services and family type of beneficiaries.

6. Farming experience

Information pertaining to association between effectiveness of extension services of three organization and farming experience is shown in Table 1. The data in the table observed that there was a non-significant association between effectiveness of extension services of State Department of Agriculture ($p=0.082$), Krishi Vigyan Kendra ($p=0.657$) and Non Government Organisation ($p=0.074$) and farming experience of beneficiaries of the individual’s organization.

7. Family occupation

Data of the Table 1 divulges that effectiveness of extension service with “p” value 0.214 of State Department of Agriculture, 0.339 of Krishi Vigyan Kendra and 0.159 of Non Government Organisation had no significant association with family occupation of the beneficiaries of individual organization.

8. Farm size

Glance of the Table 1 revealed that, there was a Non significant association between effectiveness of extension services and Farm size of Krishi Vigyan Kendra, Non Government Organisation and State Department of Agriculture with “p” value 0.092, 0.071 and 0.541, respectively.

9. Annual income

With the “p” value of 0.724 of State Department of Agriculture, 0.324 of Krishi Vigyan Kendra and 0.032 of Non Government Organisation, data in the Table 1 showed that there was a significant association between the annual income of beneficiaries and effectiveness of extension services provided by the organisations.

10. Livestock

Perusal of the Table 1 shows the association between livestock possession and effectiveness of extension services provided by the three organisations and stated that effectiveness of extension services of State Department of Agriculture ($p=0.345$), Krishi Vigyan Kendra ($p=0.086$) and Non Government Organisation ($p=0.471$) had no significant association with livestock possession.

11. Social participation

Data presented in the Table 1 represents the association among social participation and effectiveness of extension services and revealed that effectiveness of extension services of State Department of Agriculture ($p=0.035$) and Non Government Organisation ($p=0.010$) had significant association with social participation whereas effectiveness of extension services of Krishi Vigyan Kendra ($p=0.063$) had non significant association with social participation.

12. Extension personnel contact and Mass media utilization

With the data in the Table 1 analysed that effectiveness of extension services of Non Government Organisation with “p” value 0.031, Krishi Vigyan Kendra with “p” value 0.029 and State Department of Agriculture with “p” value 0.016 were significantly associated with mass media utilization at 0.05 level.

13. Information seeking behavior

Glance of the Table 1 expressed that effectiveness of extension services of Non Government Organisation (0.004), Krishi Vigyan Kendra (0.003) and State Department of Agriculture (0.001) were significantly associated with information seeking behaviour at 0.05 level.

14. Innovation

Data pertaining to Table 1 shows association among innovation behavior with effectiveness of extension services and observed that with “p” value 0.023 of State Department of Agriculture and Non Government Organisation and with “p” value 0.002 of Krishi Vigyan Kendra had significant association with the innovation behavior of beneficiaries.

15. Scientific orientation

It can be observed from the Table 1 that effectiveness of effectiveness of extension services of Krishi Vigyan Kendra with “p” value 0.851, State Department of Agriculture with “p” value 0.521 and Non Government Organisation with “p” value 0.350, were not significantly associated with scientific orientation of beneficiaries at 0.05 level.

16. Economic motivation

It can be evident from the Table 1 that effectiveness of extension services with “p” value 0.005, 0.041 and 0.032 of Non Government Organisation, Krishi Vigyan Kendra and State Department of Agriculture, respectively had significant association with economic motivation of beneficiaries at 0.05 level.

17. Risk orientation

It can be clearly visualize from the Table 1 that effectiveness of extension services of Krishi Vigyan Kendra (0.023), State Department of Agriculture ($p=0.005$) and Non Government Organisation ($p=0.003$) had significant association with risk orientation of beneficiaries.

18. Attitude towards extension services

With the value of “p” 0.030, 0.001 and 0.013, data pertaining to Table 1 shows that there is a significant association between attitude towards extension services with effectiveness of extension services of State Department of Agriculture, Krishi Vigyan Kendra and Non Government Organisation, respectively.

19. Attitude towards development programmes

Table 1 demonstrate the data related to association among attitude towards development programmes and effectiveness of extension services of Non Government Organisation ($p=0.007$), Krishi Vigyan Kendra ($p=0.003$) and State Department of Agriculture ($p=0.001$). Data in the table shows that there was a significant association between attitude towards development programmes of beneficiaries and effectiveness of extension services.

20. Training participation

Visualization of Table 1 reveals that with “p” value 0.005, 0.003 and 0.001 of State Department of Agriculture, Non Government Organisation and Krishi Vigyan Kendra, respectively, effectiveness of extension services was significantly associated with training participation of beneficiaries.

It can be keenly analysed from the above findings that beneficiaries’ age, family size, educational qualification, social participation, mass media utilization, information seeking behavior, innovation, economic motivation, risk orientation, attitude towards extension services, attitude towards development programme and training participation were significantly associated with the effectiveness of extension services. It might be due to, middle age of beneficiaries and their education will leads him/her to generate new ideas to increase their source of income. They are more enthusiastic with high energy and will actively connect with the organisation. They participate in different organisation to grasp knowledge. They increase more extension personnel contact with increase mass media

utilization and seek more information from different area directs them to be high observant towards effectiveness of extension services. Moreover, beneficiaries of all the organisation are eager to take more risk, encourage and adopt innovation, have high economic motivation, favourable attitude towards extension services and programme of extension organisation and training participation guides beneficiaries to be active participant in the organisation and analyse effectiveness of extension services.

Conclusion

It can be concluded from the present study that beneficiaries’ (SDA, KVK and NGO) age, family size, educational qualification, social participation, mass media utilization, information seeking behavior, innovation, economic motivation, risk orientation, attitude towards extension services, attitude towards development programme and training participation were significantly associated with the effectiveness of extension services.

References

1. Bansilal AK. Management, efficiency and effectiveness of extension services received by redgram growers in North-Eastern Karnataka [PhD thesis]. Bengaluru: University of Agricultural Sciences; 2019.
2. Pradhan S. An analysis of extension advisory services for nutrition sensitive agriculture in Nuapada district of Odisha [PhD thesis]. Jabalpur: Jawaharlal Nehru Krishi Vishwa Vidyalaya; 2022.
3. Sathish HS. System analysis of public and private agricultural extension services providers in Karnataka [PhD thesis]. Raichur: University of Agricultural Sciences; 2015.
4. Shrivastva S. Impact assessment of Maa-Bamleshwari Non-Governmental Organisation on empowering the rural women in Rajnandgaon district (C.G.) [MSc thesis]. Jabalpur: Jawaharlal Nehru Krishi Vishwa Vidyalaya; 2019.
5. Uikey R. Role of non-government organization in development of agriculture in Betul district, Madhya Pradesh [MSc thesis]. Jabalpur: Jawaharlal Nehru Krishi Vishwa Vidyalaya; 2012.