Agricultural Extension Officers' Perceptions towards Their Roles: A Case Study of Simiyu Region

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Abstract

Studies have been conducted in Africa to assess extension officers' perception towards their roles, however, little is known on agricultural extension officers' perception on their roles as per government job description in Tanzania. The study was therefore conducted in Simiyu Region to assess the perception of agricultural extension officers towards their roles. A cross-sectional survey design was used whereby a structured questionnaire was employed to collect data from 100 randomly selected Agricultural extension officers (AEOs). The collected quantitative data were analyzed by using the Statistical Package for Social Sciences computer programme (SPSS). On the other hand, the content analysis was used to analyze the collected qualitative information. The findings show that most of interviewed AEOs perceived their roles namely, advisory, organizational, educational, technical, facilitation and intermediation as important. However the AEOs perceived the existence of difficulties in fulfilling the roles. These include agricultural extension officers overloaded with non-extension tasks like tax collection that hinder them to perform their technical roles; lack of in-service training which results to low level of competence in performing their mandated roles; inadequate logistics such as motorcycles, vehicles, just to mention few, These results to EAOs blamed for not performing their roles. Based on these findings it is recommended that there is a need to work out with all aspects that affect performance of the AEOs' mandated roles as follows: AEOs concentrate more on their mandated roles and not non extension work, organize short and long term training to improve their knowledge and skills.

Keywords: Agricultural Extension Officers, Perception, Roles, Simiyu Region

Introduction

According to Scheme of Service for Local Government Authorities (Compiled version from 2002-2011), in Tanzania AEOs are mandated to perform various roles as per their job description. These include facilitating farmers' group formation and advice in making better decisions to increase agricultural production; promoting collaboration in the implementation of a projects and programs; ensuring good relations/ communication between research centre and farmers; cooperating with non-governmental organizations involved in crop production, processing and marketing; educating farmers on good agricultural practices and advice on the use of modern agricultural equipment/ implements; identifying the sources of water and develop strategies for conservation in the community; providing advice on diversified agriculture and engaging researchers in conducting experimental plots, and participating in evaluating the performance for effective advice of farmers (URT, 2011).

Suvedi and Kaplowitz (2016) stated that AEOs roles can be grouped into two broad categories; process and technical skills. However, according to Agricultural for impact (2015) AEOs roles are categorized as technology transfer roles, advisory roles, and facilitation roles. Also, Moris (1987) as cited by Mattee (1994) grouped AEOs roles into two categories namely educational and advisory. Based on the literature reviewed and the author's experience in the field of extension, the seven categories of roles were formulated to help in understanding the AEOs perception towards their roles. These include facilitation, organizational,

intermediation, educational, technical, advisory and administrative roles.

Despite various roles assigned to AEOs, these efforts have not shown positive outcomes to farmers (Ragasa *et al.,* 2013). This is due to the fact that the smallholder farmers produce low yields, suffer from the problem of post-harvest handling, processing and poor access to markets that adversely affect their livelihood (Magesa *et al.,* 2014). For example, in 2019, the average productivity of seed cotton in Tanzania was around 300 kilogrammes per acre, which was only 20% of its potential productivity (Chami, 2018). Potentially, cotton productivity in Tanzania can reach 1,500 kg per acre. Also, Magesa *et al.* (2014), revealed that farmers sell their produce at farm or at home mainly due to lack of market information, the information that could actually have been provided by agricultural extension officers.

Several studies have assessed the status of agricultural extension service delivery, and some include that of Komba *et al.* (2018) who examined socio-economic factors influencing farmers perception on the effectiveness of agricultural information and service delivery. Maoba (2016) studied on farmers' perception on agricultural extension services delivery in Germiston, Gauteng Province in South Africa. Furthermore, Ibrahim *et al* (2008) assessed role perceptions and job satisfaction among extension workers in Nigeria. Also, Suweidu (2019) examined the perception of agricultural officers on their job satisfaction in Ghana. However, little is known on agricultural extension officers' perception on their roles as per government job description in Tanzania, which this study intends to fill the gap. Therefore the objective of this study is to assess the perception of extension officers towards their assigned roles.

Understanding of the agricultural extension officers' negative perception towards their mandated roles will help to come up with strategies that will be recommended to policy makers and planners for addressing these perceptions. For those which are positively perceived, the study will recommend the modality for maintaining them. This will assist extension officers to perform their work as mandated and ultimately improve extension service delivery for improvement of agricultural performance in the country (Dube, 1993).

Methodology

This study was conducted in Simiyu Region, which comprises five districts namely Maswa, Meatu, Itilima, Bariadi and Busega. The major activities conducted in the Region include small-scale farming of food and cash crops such as maize, sorghum, millet, sweet potatoes, groundnuts, paddy, cotton and livestock keeping. Simiyu Region was selected for this study due to the fact that it is famous in food and cash crop production. Also it has a number of extension staff (130) at Ward and Village levels mandated to perform various roles of improving food and cash crop production including cotton but productivity has been low as stated above. Also the Region has available number of extension staff that can be used to draw the sample, which is statistically acceptable for data analysis and making inferences.

A cross-sectional survey design was used in this study because of the nature of the study intended to collect data once from the respondents. Babbie (1990) proposes that cross-sectional research design is suitable for describing study purposes where data is collected at a single point in time. The design is also considered favorable due to limited resources like finance, time, and manpower for collecting data.

The study population comprised of all 130 AEOs working at Ward and Village levels in Simiyu Region. This is the group of AEOs who are in direct contact and working closely with farmers and therefore it was thought desirable to assess their perception towards the roles they perform to assist farmers to improve agricultural production. Hence, using Krejcie and Morgan (1970) sample size Table, the sample size of this study was determined as 100 out of the 130 AEOs. As supported by Wooldridge (2008), a sample or sub-sample of 30 respondents is the minimum for studies in which statistical data analysis can be done. A sample size of 100 AEOs was proportionally and selected randomly from the five districts (Table 1).

Table 1: Distribution of AEOs in the study wards and villages

Name of the district	Total AEOs in the wards and villages	Ratio	Sample size	Percentage
Maswa	35	35/130*100	27	27
Itilima	23	23/130*100	18	18
Bariadi	22	22/130*100	17	17
Busega	20	20/130*100	15	15
Meatu	30	30/130*100	23	23
Total	**130**		**100**	**100**

The primary data were collected from AEOs at ward and village level by using a structured questionnaire. Focus group discussions (FGDs) were conducted to supplement the collected quantitative data. These were organized in Maswa, Itilima and Busega Districts, which were randomly selected to represent other Districts. Each FGD involved eight agricultural officers at the District level including the District Agricultural Irrigation and Cooperative Officers (DAICOs). Secondary data for this study were obtained from various sources such as reports from regional and district agricultural offices, journals, websites and Sokoine National Agriculture Library (SNAL). These include cotton yield per acre and the optimum yield that can be obtained per acre.

The quantitative data collected were coded and summarized prior to the analyses by using the Statistical Package for Social Sciences (SPSS) version 16.0 computer program. Descriptive analysis consisted of frequencies and percentages, which were used to report the findings. Qualitative data were analyzed using content analysis techniques whereby emerging themes from FGDs were identified, described and discussed. Some of the emerged themes during the FGDs include the AEOs perception towards their roles and the general perception of AEOs towards extension work. These findings were used in the discussion to complement the findings obtained from village and ward AEOs.

Results and discussion

This section presents the findings of the agricultural extension officers perception towards their roles namely; facilitation, organization, intermediation, educational, technical, advisory and administrative roles. The extension officers perception of components of each role is presented first followed by average perception of each role. The study went further to investigate the general perception of extension officers towards the extension work.

Agricultural extension officers' perception towards their roles

A five point Likert scale was used to indicate the perceived importance of each role as follows: Most important (MI), Important (I), moderate (M), Less important (LI) and Not important (NI). In reporting the results, MI and I were grouped together as Important (I) and moderate remained as M, while LI and NI were grouped together as Not important (NI). Table 2 summarizes the study findings regarding to the perceived level of importance of extension officers roles namely, facilitation, organization, intermediation and education.

Facilitation roles

The facilitation roles investigated include facilitating group formation, access to credit, market and access to input suppliers. The study findings presented in Table 2 show that on average, 88% of the respondents perceived four facilitation roles as being important. This is due to the fact that facilitating farmers on various aspects like group formation will assist them to have collective efforts that assist them to access important services like credits, inputs and markets for improving agricultural production. This is reflected in the specific study results presented in Table 2 whereby 93% of the AEOs respondents perceived the role of facilitating smallholder farmers' group formation as important. This is in line with URT (2015), which contends that group

formation and adoption of collective approach are indispensable steps for realizing agricultural commercialization. Similarly, 92% and 90% of the respondents perceived the role of facilitating smallholder farmers' access to input suppliers and to markets, respectively as important. The findings are in line with those of Kumar *et al.* (2013) who found that AEOs rated the roles of facilitating farmers' access to input suppliers, credit and markets as important.

Organizational roles

The organizational roles assessed in this study were planning on proper land use (e.g. land for livestock, crop production, etc), planning of extension programme (e.g. develop a work plan, budget etc), participating in evaluating crop production estimates for setting up future production plans and organizing farmers' meetings for identifying problems and setting priorities. The study findings presented in Table 2 show that, on average 91% of the interviewed

Table 2: Distribution of the respondents according to their perceptions towards facilitation, organization, intermediation and educational roles (n=100)

Role category	% Perceived level of importance		
Facilitation	I	M	NI
Facilitating group formation	93	7	0
Facilitating farmers access to credit	76	13	11
Facilitating farmers access to input suppliers	92	5	3
Facilitating farmers access to market	90	8	2
The average perceived importance of facilitation roles	88	8	4
Organization			
Planning on proper land use (e.g. land for livestock, crop production, etc)	91	9	0
Planning of extension programme (e.g. develop a work plan, budget etc)	89	7	4
Participating in evaluating crop production estimates for setting up future production plans	96	3	1
Organizing farmers' meetings for identifying problems and setting priorities	94	4	2
The average perceived importance of Organizational roles	93	6	1
Intermediation roles			
Linking farmers with research centres	76	14	10
Cooperating with researchers to conduct experiments	81	15	4
The average perceived importance of Intermediation roles	78	15	7
Educational roles			
Educate farmers on proper use of soil and water	96	3	1
Educate farmers on the best use of pesticides and fertilizers	82	15	3
Educate farmers on the best agricultural practices (e.g. land preparation, spacing, weeding, harvesting etc	97	1	2
Educate farmers on proper dietary practices for improved nutrition	85	12	3
The average perceived level of Educational roles	90	8	2

Source: Field Survey (2020)

respondents perceived that all investigated organizational roles were important. Similar findings were reported during the focus group discussion, which signifies the importance of organizational roles in extension activities. This is very critical especially at this moment where planning of various aspects like proper land use for crop and livestock production in order to avoid conflicts between farmers and pastoralists is critical.

Same findings were revealed in each aspect of organizational roles investigated. About 96, 94 and 91% of the interviewed AEOs perceived that evaluating crop production estimates for setting up future production plans, organizing smallholder farmers' meetings for identifying problems and setting priorities, and planning on proper land use, respectively as important roles in extension service delivery. The other role that was perceived as important by most of AEOs (89%) was development of extension programme. Similar findings were reported by Al-Zahrani *et al.,* (2017) and Kumar *et al.,* (2013) who reported that the AEOs regarded organizational roles as important in planning extension programmes and in the delivery of extension services in general.

Intermediation roles

According to Koutsouris (2012) intermediation roles means bridging the gap between two or more parts. It aims at making sure that there is a link between the parties in which both parts benefits from such connection. The intermediation roles investigated in this study were linking farmers with research centres and cooperating with researchers to conduct experiments. The study findings in Table 2 show that 78% of the interviewed AEOs perceived the intermediation roles as important. During the focus group discussion intermediation roles were also perceived as important. For example linking farmers with research centres and cooperating with researchers to conduct experiments were perceived as very important roles but not well implemented due to weak linkage that exist between the research and extension systems. More specifically, Table 2 shows that 81% and 76% of the AEOs perceived the roles of cooperating with researchers to conduct field agricultural experiments and linking smallholder farmers with research centers, respectively important in extension service delivery.

Educational roles

The study findings in Table 2 show that, on average, 90% of the interviewed respondents perceived educational roles as important to smallholder farmers. During the focus group discussion educational role was also mentioned as an important role that is commonly performed by AEOs in their daily activities. These findings are inline with Nwaogu and Akinbile (2018) who found that AEOs perceived the extension education and teaching roles as important. The study went further to investigate the level of importance of specific educational roles performed. It was found that, 97% and 96% of the AEOs perceived the roles of educating smallholder farmers on the best agricultural practices and on proper use of soil and water, respectively as important in extension service delivery (Table 2), which is in line with what was also reported during the focus group discussion and findings from other researchers like Nwaogu and Akinbile (2018).

Technical roles

Results in Table 3 show that, on average 83% of the interviewed respondents perceived technical roles as important. This was also indicated during the FGDs as one of the most important roles of AEOs although some of them miss technical knowledge on control of newly emerging issues for example pests and diseases. These findings are reflected on the specific aspects investigated under technical roles where by 95% and 94% of the respondents regarded technical roles like testing of seed germination, and control of plants and crops pests, respectively as important in extension service delivery. This implies that more emphasis should be put in imparting AEOs on technical aspects for proper functioning of their activities including the newly emerging ones. These findings are in agreement with those of Nwaogu and Akinbile (2018) who reported that AEOs perceived the technical roles as important.

Table 3: Distribution of the AEOs according to their perception towards the importance of technical roles (n=100)

Role category	% level of importance		
Technical	**I**	**M**	**NI**
Testing of seed moisture content	81	9	10
Testing of seed quality	89	3	8
Testing of seed germination	95	2	3
Maintain productive plants/trees	87	10	3
Manage the daily activities in agricultural experiments	81	13	6
Control plants and crops pests	94	3	3
Collect and keep records of crop production per week, month and year	87	10	3
Collect and keep rainfall data in an area	75	12	13
Identify and supervise agro-input suppliers	78	10	12
Collect and keep crop prices per week, month and year	81	11	8
Collect and keep experimental data	77	20	3
Disseminate new research findings to farmers	88	5	7
Participate in agricultural research	85	10	5
Identify and conserve water catchment areas	72	20	8
Technical roles the average perceived level importance	83	10	7

Source: Field Survey (2020)

Advisory roles

The advisory roles investigated in this study include advising farmers' groups on making better decisions to increase agricultural production and advising farmers on how to practice diversified agriculture. The study findings (Table 4) show that, on average 95% of the AEOs respondents perceived the advisory roles as important. This implies that the advisory roles were highly perceived as important compared to other roles investigated in this study, which signifies the need of facilitating AEOs to perform these roles. The study went further to investigate the level of perception towards specific advisory roles. It was found that, almost all interviewed respondents (98%) indicated that the role of advising smallholder farmers groups on making better decisions to increase agricultural production as very important. On the other hand, 91% of the interviewed respondents they also perceived the role of advising farmers to practice diversified agriculture very important in extension service delivery.

Administrative roles

The administrative roles investigated in this study include collection of taxes in their areas, co-ordination and supervision of different programmes like Tanzania Social Action Fund -TASAF), performing leadership roles like Ward Executive officer (WEO) or Village Executive Officer (VEO), tree planting, conduct evaluation of buildings, roads and other infrastructure in the area. The study results in Table 4 show that, only 44% of the interviewed respondents perceived the administrative role as important. This is also reflected to individual advisory roles investigated whereby less than half of interviewed AEOs, perceived advisory roles to be important in agricultural extension service delivery. For example only 44% and 40% reported that coordination and supervision of different programmes, and other roles like serving as a ward or village executive officers, respectively as less important.

Table 4: Distribution of the respondents according to their perception towards the importance of advisory and administrative roles (n=100)

Role category	% level of importance		
Advisory	**I**	**M**	**NI**
Advice farmers' groups on making better decisions to increase agricultural production	98	2	0
Advice farmers on how to practice diversified agriculture	91	6	3
Advisory roles the average perceived level of importance	95	4	1
Administrative			
Collect taxes in the area	35	24	41
Coordinate and supervising different programmes (e.g. Tanzania Social Action Fund -TASAF)	44	21	35
Work as a leader (e.g. Ward or Village Executive Officer-WEO or VEO)	40	20	40
Conduct evaluation of buildings, roads and other infrastructure and tree plantations in the area	30	25	45
Administrative roles the average perceived level of importance	44	22	34

Source: Field Survey (2020)

Generally, the study findings show that majority of interviewed AEOs perceived their roles as important in improving performance of agricultural extension system. Advisory was regarded as the most important role (95%). This was followed by other roles like organization (93%), educational (90%) and technical roles (90%). Administrative was the least role perceived to be important by few AEOs (44%) (Table 5). This is probably due to the fact that most of administrative roles performed by AEOs are not directly related to agricultural extension officers' work. For example tax collection, working as a Ward Executive Officer or Village Executive Officer. These findings imply that in totality, AEOs perceived various roles assigned to them as important in extension service delivery.

Despite the fact that AEOs perceived various roles assigned to them as important, they have been blamed for not performing their roles as mandated. This is due to the fact that the smallholder farmers produce low yields, suffer from the problem of post-harvest handling, processing and poor access to markets that adversely affect their livelihood as indicated above. Therefore this study went further to investigate the Agricultural extension officers' perception towards the extension work in general. The following section provides the description on the same.

Table 5: Distribution of AEOs according to their perceived level of importance

Role category	Average % of perceived level of importance		
	Importance	**Moderate**	**Not Important**
Facilitation	88	8	4
Organizational	93	6	1
Intermediation	78	15	7
Educational	90	8	2
Technical	90	8	2
Advisory	95	4	1
Administrative	44	22	34

General perception of AEOs towards extension work

While the previous sub-sections highlighted the perception of extension officers towards various roles mandated to perform, this sub-section provides a description of extension officers' perceptions towards the extension work in general. A five point Likert scale was used to gather information on AEOs perceptions as follows: 1=Strongly agree (SA); 2=Agree (A); Undecided (U); Disagree (D); and Strongly disagree (SD). For the case of reporting the results, strongly agree (SA) and agree (A) were grouped together as agree (A) and undecided remained as (U), while disagree (D) and strongly disagree (SD) were grouped as disagree (D). Table 6 summarizes level of perception of AEOs on extension work.

Table 6: Distribution of respondents according to their perception towards extension work in general

Statement	% level of perception		
	A	U	D
Overloaded with non-extension tasks	50	7	43
Lack of adequate management	45	18	37
Shortages of AEOs which leads to attend many farmers	91	4	5
Lack of in-service training	85	5	10
Inadequate logistics and other supports for AEOs	82	5	13
Disappointing due to farmers' lack or shortage of working capital	80	8	12
Poor perception towards extension work	72	8	20

Source: Field Survey (2020)

Overloaded with non-extension tasks

Non-agricultural extension tasks in this study termed as all activities and efforts not directly related to agriculture or livestock production and other aspects of the agricultural and/or livestock value chain, but which are important to the farm families and to an organization as well. These include tax collection, serving as Ward and Village Executive leaders. This can lead to AEOs not to perform roles as stipulated in their job description and may develop different perceptions on their roles. Findings of this study show that half (50%) of the AEOs respondents perceived the extension work as overloaded with non-extension tasks (Table 6). The study concur with that of Belay and Abebaw (2004) in south west-Ethiopia who reported that often AEOs were required to be involved in various non-extension activities. Petrovic *et al.* (2008) found that AEOs were in charge for many other duties, including administrative tasks and there were no strict division between extension work and other work/tasks. This can be one of the reasons that AEOs are blamed that their output in extension work is not visible. Maoba (2016) study in Germiston and Gauteng Province-South Africa asserted that AEOs have being criticized by some famers for not being visible, effective and efficient when doing their job.

Lack of adequate management

In this study less than half (45%) of the AEOs respondents perceived extension work as it lack adequate management (Table 6). Inadequate management may result to employees having a different view on their work and failing to work at the expected level and can also lead to high staff turnover rates, with the most valued employees looking elsewhere for work. For example, in agricultural extension activities, AEOs may develop different perception on their roles which can lead to poor productivity. The problem of inadequate management of extension work is also noted by Petrovic *et al.,* (2008) in his study conducted in Serbia on "Problems in the extension work and farmers" needs. He reported that agricultural extension officers perceived extension work as lacking adequate management.

Shortages of extension personnel

The study findings in Table 6 show that, most (91%) of the AEOs respondents perceived extension work as faced with shortage of extension personnel which leads to available AEOs attend many farmers. Similar findings were reported by Bilonkwamanagara (2008) in his study in the Njombe District, Tanzania. He found that there were inadequate number of AEOs in the study area, hence they were not able to reach every farmer and few farmers receive agricultural extension services. This implies that shortage of extension personnel can be one of the source that cause their efforts in work not being visible. During the FGDs one of the participant said that:

"Due to lack of enough extension personnel in the District, majority of the extension personnel do attend farmers in more than two villages, which have large numbers of farm families, either some of the personnel have two or more wards to attend."

The problem of low number of extension staff is supported by Kajigili (2017) who contends that the available number of extension staff based at District, ward and village level is only 8,756 while the required number is 20,374. This implies that there is a shortage of 11,618 extension staff. Kajigili adds that one extension staff was expected to serve a village with 600 farmers (1:600) but in practice the number of farmers has been increasing yearly due to increase in the number of population in the country. Due to this fact it is common for an extension staff to serve more than one village of more than 2000 farmers each.

Lack of in-service training

The study findings presented in Table 6 show that, most (85%) of the respondents perceived lack of in-service training in extension work as one of the most important problems facing extension work. This was also revealed during the focus group discussion where inadequate and lack of training was cited as one of the challenges that hinder AEOs to perform their roles as mandated, hence have poor perception toward the extension work in general. Lack of in-service training has a serious implication to the performance of AEOs since there are so many changes that are taking place in the world and in Tanzania in particular that affect the performance of agricultural sector and therefore need to be understood by AEOs. These include issues related to climate changes, agricultural innovation system, value chain aspects, entrepreneurship and agribusiness, ICTs just to mention few. Most of extension staff operating at village and ward level have certificate and diploma as their highest level of education and the curriculum which they went through was production oriented which excluded value chain aspects. Therefore in-service training is very important to updated AEOs with changes that are taking place. The results are in agreement with FAO (2008) which reported that lack of in-service training for AEOs weakens the knowledge on the job performance. This also may lead AEOs to have different perspectives on extension work which sometimes can be those that can hinder/reduce their job morale.

Inadequate logistics and other supports for AEOs

Most (82%) of the AEOs respondents (Table 6) perceived extension work as being faced with limited availability of logistic support like transport facilities, offices with well equipped facilities to enhance effective performance of extension work. These include inadequate motorcycles, vehicles, information communication technologies (ICT) and others that can assist them to perform their roles smoothly. The findings are supported by Simelane *et al.* (2019) in his study in Eswatini. He reported that the AEOs perceived their extension work as under-resourced which made their work difficult, hence reduced their effectiveness and efficiency. This implies that provision of logistic support to AEOs have great impact on how they regard/consider the extension work, this is due to the fact that availability of logistic support can help them to implement their planned work. Limited availability of logistic support may result to AEOs having different opinions about their extension work.

Disappointing due to farmers' lack or shortages of working capital

The majority (80%) of the respondents

(Table 6) perceived extension work as disappointing due to most of smallholder farmers' lack or face shortage of working capital.Although farmers are recommended to use technologies that are not capital intensive, lack or shortage of working capital may lead farmers not to purchase important farm implements that require money. These include improved seeds, fertilizers and agro-chemicals for example chemicals for controlling American armyworms. This implies that even if extension officers will play their roles of advising farmers to use recommended practices like farm implements but if they don't have capital/money or supported to buy them their efforts will be useless. This situation discourages AEOs and may reduce their efforts of extension service delivery to farmers. These findings are in-line with Petrovic *et al.* (2008) in Serbia who found that most smallholder farmers were not able to apply the advice given by AEOs which required credits for investment.

Conclusion and recommendations

The findings of this study show that most of interviewed AEOs perceived their mandated roles namely advisory, organizational, educational, technical, facilitation and intermediation as important for effective performance of extension advisory services. However the AEOs perceived that the fulfillment of these important roles becomes difficult due to various aspects. These include agricultural extension officers overloaded with non-extension tasks like tax collection that hinder them to perform their technical roles, shortages of extension offers that lead to AEOs serving large number of farm families, lack of in-service training which results to low competence in performing their mandated roles, inadequate logistics such as motorcycles, vehicles, information communication technologies (ICT) and others that can assist them to perform their roles smoothly.

Others include disappointment due to farmers' lack or shortages of working capital. All these have resulted to extension officers being blamed for not performing roles as stipulated in their job description.

Based on these findings it is recommended that there is a need of responsible Ministries and Local Government Authorities to work out with all aspects that affect performance of the AEOs' mandated roles for improving extension service delivery and performance of agriculture in the country. These include ensuring that AEOs concentrate more on their mandated roles and not non - extension work, increase the number of qualified AEOs, providing working tools and equipments like motorcycles, vehicles, information communication technologies (ICT) and others that can assist them to perform their roles smoothly. Use of ICTs can assist them reaching large number of farmers at once. Others include organizing short and long term training to improve their knowledge and skills. Also farmers should be facilitated with necessary facilities for accessing credits, inputs and markets to enable them to perform their farming activities.

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