

Impediments and Means to Overcome Impediments Facing Agricultural Extension Services on the Operations of the Farmers in the Eastern Cape of South Africa

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ABSTRACT This study investigated a base level of understanding of the operational core values of the agricultural extension services on the operations of the farmers. Data was collected through self-administered questionnaires and the use of random sampling. Data analysis was conducted using descriptive statistic. Findings from previous literature revealed that there are impediments faced in the operations of the farmers. The field survey confirmed that extension officers have inadequate skills; they lack necessary competence and knowledge of technology and extension methods to perform their duties successfully and professionally. The significance of extension in agricultural system is essential in improving agricultural performance. The present findings identified the need for solutions to the impediments faced by the farmers in the developing countries by providing an insight for further research regarding the institutional weaknesses and policy issues. The implications of the findings are that unless the limitations named above are resolved, farmers in the developing nations will continue to experience poor economic growth and development. Recommendations to overcome these impediments are suggested.

INTRODUCTION

The agricultural extension officers play a vital role in assisting and supporting farmers in order to improve and promote their agricultural productivity in the economy. The role of agricultural extension officers in assisting and supporting farmers in order to increase their farm produce cannot therefore be over-emphasis. "By accelerating the diffusion process of improved technology, extension can bring about a faster growth of yields and rural incomes that would occur in the absence of extension (Ali et al. 2011). The agricultural extension service operates from the background belief that increased agricultural productivity depends primarily upon the acceptance of improved cultural and technological change at the rural farm level and that peasant farmers can achieve higher farm yields only if they adopt recommended scientific farming techniques in place of their traditional practices. Asiabaka et al. (2001) and World Economic Forum (2013) reported that for farmers of different agricultural zones to adopt a new technology, they must be aware of the technology, have valid and up to date information on the technology, the applicability of the technology to their farming system and receive the technical assistance necessary for the technology".

The "successful adoption of improved farming techniques is given to the rural farmers in order to acquire the required knowledge and understanding of these technologies; a process most effectively accomplished by the agricultural extension service through extension officers (Obinne and Anyanwu 1991; Rogers 1995). The field level extension agents are the lifeline of the agricultural extension system although they may appear to be the last in the chain of command, as they are directly responsible for the dissemination of extension messages to farmers within their catchments areas. According to Duvel (2003), the effectiveness and efficiency of extension is a direct function of the competencies of the extension staff as agricultural research agendas remain largely academic unless extension workers provide input in terms of the identified and yet unresolved field problems confronting the farmers".

Rivera (1989) previously reported that "agricultural extension has been criticized in South Africa" for not doing well enough and not being relevant. Bembridge (1988) and Duvel (2001) expressed their view that these weaknesses faced by the agricultural extension officers are due to lack of clear and justifiable mission and development policy that provides guidelines as to the nature, purpose and direction for extension.

Extension workers are faced with problems that need to be adequately dealt with in order for them as extension officers to effectively and efficiently perform the required duties. There are various constraints that hinder extension workers to adequately perform their duties which ultimately lead to poor performance and low efficiency. However, “preconditions for extension agents to be effective include ability to communicate well, good attitude to extension work, and frequency of contact with farmers and manners of discharging their field responsibility, which are examined from both the viewpoint of the farmers and the extension officers. The proposition is that the accomplishment of extension service goals depends primarily on the effectiveness of the extension agents achieving the programme objectives. Therefore, this study is conducted to examine the perception of farmers on the efficiency of extension agents” and also to appreciate and understand the contributions which extension officers have made in trying to disseminate knowledge towards empowering the rural farmers.

Problem Statement

Despite the fact that agricultural extension officers bringing qualitative services to the farmers to be more effective, the extension officers in South Africa are still failing to perform well in servicing farmers. It is important for farmers to build their own capacity and competency in the field of agriculture so that they can be able to improve their productivity. Impediments and means to overcome impediments facing agricultural extension services on the operations of the farmers will be investigated. The needs of the extension officers to visit the farmers and their abilities to utilise adequate knowledge, technology and extension method to perform their duties effectively and efficiently will be assessed. In addition, the study attempts to investigate from the farmers’ perception about extension workers service delivery to them. Given the scenario of assessment of the role of the extension officers in supporting and assisting farmers to improve their productivity in Alice district, there is a need to examine the problems and reasons behind the impact of extension services usefulness within Nkonkobe Local Municipality (NLM); to what extent could the extension officers enhance the farmers’ performance in improv-

ing productivity? What are the snags affecting the farmers from communicating effectively with the extension officers? Do both the farmers and agricultural extension officers have the necessary qualifications, skills and knowledge on agriculture? How could the identified problems facing both the extension officers and farmers be solved?

Research Objectives

This study investigates the aptitudes of extension officers on altering the operations of the farmers. The study therefore examines the farmers’ perceptions on the efficiency of extension officers. The research targeted the extension officers in Alice town and farmers in Sheshegu, Alice district which is the population of the study. It is anticipated that the study could provide practical solutions to the observed factors that influence the efficiency of the extension officers on the operation of the farmers.

Theoretical Framework

The term ‘extension’ is generally known and clearly understood by the agricultural extension officers who work in the extension organization and services yet it is not well understood in the wider community. In fact, there is no single definition applicable to all situations and for one to fully appreciate the role of extension officers; the meaning of extension has to be clearly defined. The term ‘extension’ can be define as a continuum, where a narrow approach of information is seen on one side and a wider approach where extension overlaps with adult education and community development on the other side of the continuum (Duvell 1998). These include a phase of preparation where needs and motivation are included in the equation; consequently people are to be taught how to think and not to think. Farmers are then assisted in preparing themselves on how to overcome problems in future by themselves. The underlying principle is to assist farmers to help themselves. Swanson and Claar (1984) define agricultural extension as “an organized, non-formal educational activity, usually supported or operated by government, to improve the productivity and welfare of rural people”.

Furthermore, “agricultural extension can therefore be defined as a set of behaviour of

demonstration, information, communication and technical training geared towards spreading to farmers new technologies in comparison with current production, processing and management practices (Lindley 2000). In most cases, these technical messages are usually devised and proposed by research institutes such as National Agricultural Centre (NAC), though occasionally ventures of Non-Governmental Organization (NGOs) are also insightful. Extension is thus a simple function that utilizes tools such as technical briefs and demonstration plots. To achieve mass dissemination of innovative and consistent technologies in a preponderantly illiterate environment, extension services rely on a huge crop of field agents who work directly with farmers in their villages” with the use of radio broadcasting, but to a very restricted extent. It is staff-intensive (Lindley 2000), although extension agents possess “relatively low level of training and limited capacity for agronomic and economic analysis, they are supervised by technical staff and agricultural engineers who provide them with training and convey to them the messages developed by the research centers. At the same time, extension agents are supposed to inform their supervisors, and through them the researchers, of any technical problems expressed by farmers and their reactions to proposed technologies. According to Lindley (2000), his idea is that extension and research should be expressed in such a way that research efforts respond to farmers’ impediments and prospective.

Experiential Evidence

The majority of farmers in “sub-Saharan Africa countries confirmed that lack of confidence in extension workers was one the major impediment confronting them. In fact, this is the more reason why Opio-Odongo (2000) states clearly that agents are often instructed to broadcast recommendations from research stations, which are formulated with little regard for smallholders. Extension fieldwork, on the other hand, demands location specific, flexible and often quick decisions and actions. In sub-Saharan African countries extension tends to lose its sense of mission. This is because policy objectives tend to exceed the resources available to achieve them, as a result leading to excess on agents. The effectiveness of agricultural extension work highly depends on the availability of extension

professionals who are qualified, motivated, committed and responsive to the over-changing social, economic and political environment. In this respect, Anderson and Feder (2003) note that adoption of technology by farmers can be influenced by educating farmers about such things as improved varieties, cropping techniques, optimal input use, prices and market conditions, more efficient methods of production management, storage, et cetera to do so, extension agents must be capable of more than just communicating messages to farmers. Nevertheless, many extension staff in Africa countries lacks the competences as in skills, knowledge, attitude and resulting behaviour they need to be effective in their work with farmers (Lindley 2000)”. Tesfaye et al.’s (2001) research revealed that with regards to extension contact, there was a correlation analysis showing that the extension contact was positively and significantly correlated with knowledge of agricultural packages introduced by programmes.

Hence, Azimi (2007) identified “ranking findings of competencies that may be the basis of the focus in providing pre-training and in-service training to the extension personnel. The findings show an obvious trend in the thinking of the respondents regarding as to what extension competencies should be given emphasis in the capacity building of extension personnel. Based on the results gained, it is obvious that communication skills and knowledge are the main keys to build high competency among” agricultural extension officers.

Sustainable Livelihoods (SL) Approach

The SL Approach was adopted in this study because the strategic plan for South Africa “National Department of Agriculture (NDA) (2001) clearly highlights that poverty, wealth and livelihoods agendas are very important in their vision and identify extension services, whether state, private, or NGO-based, as one of the key partners in the realization of these objectives. SL approaches provide a useful learning framework, and have positive implications for extension. Christoplos et al. (2000), Scoones and Thompson (1994), Neuchatel Group (1999) and Roling (1995), all confirmed the significance of SL approach to extension. The SL approach developed by Department for International Development (DFID) is a way of thinking about the

objectives, scope and priorities for development in order to address poverty (Ashley and Carney 1999). According to Chambers and Conway (1992), the term 'livelihood' comprising the capabilities, assets and activities required for a means of living. Capabilities, in this context refer to a household's ability to cope with stresses and shocks, and the ability to find and make use of livelihood opportunities. Assets refer to the basic material and social resources that people have in their possession (Scoones 1998). Activities can be defined as the ways in which capabilities and assets are combined to achieve livelihood outcomes. A livelihood is considered sustainable when it can cope with and recover from stresses and shocks sustain or improve its capabilities and possessions, both at present and in the future without considering the natural resource base (Chambers and Conway 1992). The SL approach includes six important principals, namely: people centre, holistic, dynamic, and building on strengths, macro linkages and sustainability".

SL approaches propose that nurturing "sustainable livelihoods are the key to poverty alleviation, wealth creation and sustainable development". Chambers and Conway (1992) and Ashley and Carney (1999), all confirmed that the relevance of livelihoods also include people and their capabilities, social "assets and activities required for a means of living. Chambers and Conway (1992) express that a livelihood is sustainable when it can cope and recover from stresses, shocks and support or augment its capabilities as well as assets both at the present and in the future".

Finally, "the strength of the approach facilitates an understanding of the underlying causes of poverty by focusing on various factors at different levels, and that determine poor people's access to resources or assets of different kinds, and thus their livelihoods" (Carney 1998).

RESEARCH METHODOLOGY

The study used the descriptive research design and survey research method of data collection. The study was conducted on selected agricultural extension services on the operations of the farmers in Sheshegu in the Eastern Cape Province of South Africa. In this study, 4 extension officers and 4 farmers were selected using random sampling method. This type of method

enables the researchers to randomly choose the respondents from the population. The procedure involved in random sampling was very easy and was done manually and the results are representative of the population. The study used this form of method as it allowed equal participation from all members of the population without any form of bias. Data for the research study was collected through self-administered questionnaires. The research instrument used contains two developed questionnaires. One was for the farmers and the other was for the agricultural extension officers. Questions related to the impediments facing agricultural extension services on the operations of the farmers are usually insightful. The questionnaire consisted of structured questions which made it easy for the respondents to indicate their views. Data analysis was conducted using descriptive statistics as the statistical tool to confirm the authenticity of the data collected.

RESULTS AND DISCUSSION

In this study, data is interpreted in two sections, firstly for agricultural extension officers and secondly for farmers and stating the responses below.

Demographic Characteristics of Agricultural Extension Officers

In terms of the gender distribution, the result indicates that, seventy-seven percent (77%) of respondents were males and twenty-three percent (23%) were females. This disproportionate show a wide disparity and a need for concern in increasing the number of females' extension staff to keep balance in gender in order to attend to the clients accordingly. In terms of the age, twenty-five percent (25%) were within the age of 25 years to 33 years old, twenty-five percent (25%) were within the age range of 34 years to 42 years old while fifty percent (50%) were above 43 years old. Examination of educational level of respondents revealed that seventy-five percent (75%) had at least a matric education and twenty-five percent (25%) had a bachelor's degree. The level of education within the extension service is not high in terms of the number of officers to have obtained tertiary education. There are few extension officers who have attained university degree. The level of education

within the extension services clearly needs to be increased, as the success or failure of the extension services to improve conditions for farmers depends largely on the level of education of advisory officers. Well educated and trained advisory find it easier to introduce new methods and technologies.

With regards to work experience 50 percent had been in the current position for more than 3 years and another twenty-five percent (25%) had 2 years in the current position whereas the other twenty-five percent (25%) had less than one year in the current position. This reflects a well experienced group of extension professionals.

Demographic Characteristics of Farmers

In terms of gender distribution of the farmers, the findings revealed that seventy-five percent (75%) of the farmers were females while twenty-five percent (25%) were males. In terms of the age distribution of the respondents, the studies indicates that the highest number of people involved in farming were within the age group of 34 to 42 years. This constituted seventy-five percent (75%) of the respondents and twenty-five percent (25%) were in the age group 43 years and above. From the findings in this study it can also be concluded that participants were at economic productive years of life 34 years to 42 years. The educational level of the respondent shows that twenty-five percent (25%) of the farmers reported attained matric, seventy-five percent (75%) of the other farmers reported that they attained education levels not included in the questionnaire. They reported that they had not completed their matric. This shows that most farmers do not have high educational qualifications. This implies that extension guides, bulletins and technical papers cannot be read by the majority of the respondents if this is the method of information dissemination by extension officers. In term of the farmers' reliance on agriculture, the result indicates that all the farmers were engaged in mixed farming.

In terms of the agricultural extension services and extension workers on service delivery to the farmers, the result indicates that, the agricultural extension officers' work under the Department of Agriculture and Land Affairs which falls under the Nkonkobe local municipality in Alice. The impact of agricultural extension services on farmers operation is measured in terms of field

work, interactions with farmers, office work and the problems that they face in carrying out their jobs.

The response obtained from the respondents concerning the Agricultural extension workers interaction with the farmers on the field work shows that twenty-five percent (25%) reported that they rarely visited farmers in their home communities. Two extension officers representing 50 percent reported that they visit several times per year. In addition, only one respondent indicated that one officer visit per month. This indicates that most of extension workers visit their constituencies once per month or less. The respondents were also asked about their interactions with farmers who come to visit them in their offices. Two respondents representing 50 percent indicated that they do not often interact with farmers who are visiting, one respondent reported that he interacts with farmers several times per year while twenty-five percent (25%) reported that they do visit farmers several times per month. Extension services flourish on extension contact and a study by Tesfaye et al. (2000) revealed that extension contact is positively and significantly correlated with knowledge of agricultural packages introduced by programmes from three different research centers. Coincidentally, it appears that the distribution of interactions with farmers, either in the villages or in the office, is very similar, and that only twenty-five percent (25%) of extension workers regularly interact with farmers. Furthermore examination of the data however, indicates that at least three extension officers are not meeting with farmers on regular basis, which then raises the question about their effectiveness as field agents.

Due to the fact that there are few agricultural extension officers employed at the Department of Agriculture and Rural development, findings revealed that all the extension officers have more than fifteen farmers that they have to attend to. This gives them a huge burden because it is tiresome work. In terms of transport, few transports were available thus making it difficult to reach the farmers. Extension officers are located in Alice town and the farmers under study are in Sheshegu village which is about twelve kilometers from their offices. Only one car was in use therefore, it was disadvantageous to them performing their jobs.

With regards to whether the extension agent gets advice on agricultural practices from the

supervisors and most officers, seventy-five percent (75%), felt that superiors did not give them advice. This is due to the fact that most of them have been in this field for many years and thus the supervisor feels that they have adequate knowledge. As a result most of them did not feel that their supervisor was motivating them and therefore are not encouraged in doing their jobs coupled with the large number of farmer they have to deal with. Only twenty-five percent (25%) felt that their superior motivate them. One hundred percent (100%) of extension officers reported towards performing creditably well and these were in the form of awards. These awards entailed cameras and laptops, but they said these were not enticing given the number of problems they have to encounter to ensure they perform adequately at work. This consequence, lead to low morale amongst staff to achieve the rewards offered. One hundred percent (100%) reported that office accommodation was inadequate. Office accommodation is an essential component for staff morale and this is lacking for the extension workers in Alice.

With reference to the problems encountered by the extension officers, the response obtained indicates that, the most common problem faced by extension officers was lack of staff. They said that few people were employed as extension workers with regards to the number of farmers they have to attend to. This problem causes more workload and lack of complete team to do extension work as most of staff positions were vacant. Seventy-five percent (75%) of the respondents felt that this was a major concern in their department. The other problem was the lack of training, how to reach the farmers and how to deal with problems farmers' encountered. This was expressed by 50 percent of extension personnel. The lack of training resulted in a high percentage of extension officers with poor awareness about problems facing. The fourth problem, which was revealed by seventy-five percent (75%) of extension officers, was the lack of information facilities. The information facilities according to them were official/department telephones, computers, and internet facilities. These information facilities at the present time are very important as they help extension personnel in carrying out their work. Therefore, there should be an urgent need to equip them at their offices to haste the work processes.

The majority of the respondents also indicated that they have access to agricultural extension services represented seventy-five percent (75%) respondents and only twenty-five percent (25%) respondents claimed to have no access to agricultural services. With regards to how the farmers get visited by extension officers, 50 percent of the farmers reported that the extension officers only visited them when they had problems. While twenty-five percent (25%) reported that extension officers visits them regularly even if there is no problem. The remaining twenty-five percent (25%) did not have access at to extension officers. The most important aspect of the extension services is farmer-extension contact. More contact between farmers and extension officers means that farmers will adopt relevant farming practices to suit their needs. Cleaver (1993) reveals "that a positive and significant relationship exists between frequencies of extension officer's contact and the adoption of improved farm practices. Undoubtedly, the frequency of contact between extension agents and farmers" is a cause for concern.

Based on the extension services and their improvement on agriculture, the result indicates that (50%) respondents agreed that extension services really helped them. They stressed further that the extension services helped them to achieve higher yields and helped them to know how to combat diseases that attacked their crops. Twenty-five percent (25%) of the farmers said extension contact had no effect on agriculture because there were no improvements to their produce even after extension contact. While twenty-five percent (25%) of the respondents felt that extension has an impact on agriculture because most farmers do not have the relevant information to improve farming practices. In response to the question, "how do you feel about the services provided by extension?" Twenty-five percent (25%) said they were satisfied, 75 percent said they were dissatisfied. This was because the extension officers did not visit them frequently and when they did, they did not help them solve their problems. The extension officers did not have adequate knowledge on how they could help farmers solve their problems.

In terms of importance and quality of extension information, farmers who participated in extension programs or visited the extension office for information were not very impressed by

the quality of information they received relatively to their needs. Fifty percent (50%) percent said that information on agricultural technology which was presented, on how to improve on their farming practices was not up-to-date and accurate, twenty-five percent (25%) said it was not useful, and not easy to understand. The farmers reported that the information presented was not in line with their farming practices and therefore the uses of some technologies that was being presented was not going to be used by the farmers because they did not possess the technology being advocated for. However twenty-five percent (25%) found it to be relevant to their situation.

In terms of the improvements that need to be made, the main problem of extension services was that the extension workers came for a specific problem when called but did not give other suggestions. There was needs for more technical advice like how to deal with the problems they encounter, how to combat diseases that attack their crops and livestock and many farmers expressed the adverse effects like low crop yields and poor farming system due to lack of advice. The study suggested that that there should be more extension workers, more or regular visits from extension workers and to provide farming inputs.

Effect of Agricultural Extensions on Livelihoods

As the findings revealed from the previous section that only twenty-five percent (25%) of the farmers have metric, this shows that most of the farmers have lower educational skills nevertheless, this is not detrimental to their capabilities to improve their livelihoods. Capabilities refer to a person or household's ability to cope with stresses and the ability to find and make use of livelihood opportunities. These are an essential key element in sustainable livelihood approach.

Finally, the extension officers are faced with a number of problems which adversely affected them in order to perform their duties. Therefore, some of these problems include lack of information facilities and transportation. Men comprised the majority of the farmers and their perceptions on extension officers were not good. This was because extension officers made visits once a month and they did not address the problems that farmers were facing. This clearly shows that

extension services need to make improvements so as to ensure that farmers are well catered for.

CONCLUSION

The finding shows that majority of the farmers rely on agriculture and state social assistance for their livelihood and as a result, they derive their resources of survival from both. The respondents who have access to extension services were 75 percent and this is essential for farmers' livelihood. The farmers who have access to extension services and improved their farming practices were fifty percent (50%) and those who did not have access acknowledged the importance of having access to extension services in order to improve their farming practices. This is in line with cleaver 1993 findings as he "stated that a positive and a significant relationship exist between frequencies of extension agent's contact and the adoption of improved farm practices. Undoubtedly, there has been a low frequency of contact between extension agents and farmers" and this is the cause for concern. The findings indicate that extension workers are not doing their work efficiently and that farmers' perceptions about them are relatively bad. These results are consistent with what the earlier researchers obtained in their studies.

There were numerous problems faced by extension workers, namely, the lack of training, lack of information facilities, transportation and inadequate staff. The lack of training resulted in most of extension personnel getting poor awareness about problems farmers are facing. They also showed low levels of educational attainment. Information facilities, according to extension officers are very important as they help extension personnel in carrying out their work. The lack of these facilities is detrimental and there arises a need to have them available at their offices. The number of contacts between farmers and extension workers is grossly inadequate to be able to influence the adoption behaviours of the farmers. Given the seriousness of the weakness in the extension service, including shortage of trained staff and poor conditions of service, one could conclude that the extension service does not have the capacity to effectively disseminate and facilitate the adoption of improved technological innovations to increase agricultural productivity. Extension services are crucial for improving livelihoods and the obstacles hindering its success need to be addressed.

RECOMMENDATIONS

This section focuses on recommendations to improve the efficacy of the extension services in developing countries on how their operations performance can be improved effectively and efficiently. Some of these recommendations on how it could be improved are directed to the government, policy makers and extension officers as well as the Department of Agriculture. These are discussed below as follows:

Fairness in Gender Classification

The concern of gender classification, fairness should be dealt with in the extension services in order to inspire females (women) to develop interest on farming and be part of the key advisory officers. Furthermore, women should be given more opportunities to pursue higher education and acquired degree qualification in agriculture related courses.

Appropriate Office Conditions

The extension officers should be given appropriate office conditions because it affects their motivation. These information facilities at this moment are very important to help extension personnel in carrying out their works effectively and efficiently, so it is therefore an urgent need to adequately equip their offices.

Dual Visit Efforts and Provision of Adequate infrastructure

It is very necessary and important for the extension workers to twofold their visit efforts by providing qualitative services in order to actively and sincerely support the farmers in improving their productivity. In fact, it is on this note that for the extension officers to double their visit efforts, government should make sure that there is provision of adequate transport facilities, as absence of conveyance is a major restraint to farm visits and important contacts with farmers.

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