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# IMPACT OF AGRICULTURAL EXTENSION ON FOOD SECURITY AMONG SMALL SCALE FARMERS IN WARENG DISTRICT, KENYA

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ABSTRACT: Agricultural extension is one of the effective tools in attaining the millennium development goals related to the reduction and eradication of extreme poverty and hunger in developing countries like Kenya. Despite that extension services were practiced for many years in Kenya, it is evident that these services have declined rapidly. This paper aims to find out the impact of extension on food security among small scale farmers in Wareng District. A survey of 120 smallholder farmers was used in the study. Though there was difference between farmers in different wealth categories, the mean difference is larger at the present compared to the past. Generally extension have played role in improving the living status of farmers in the study area. However, agricultural extension services seems to have an impact on improving food security in the country and increase the wealth gap between farming households and also replace local landraces with improved varieties. The study recommends that the Kenyan government should develop a new and expanded policy agenda for agricultural extension and communication for rural development focusing national attention on food security and income generation of the rural poor.

**KEYWORDS**: Food security, extension, crops, livestock's, agriculture

### INTRODUCTION

Extension is both a political and an organizational instrument implemented to facilitate development and it is ranges from transfer of mono-crop technology to participatory problem solving educational approaches, which aims at reducing poverty and enhancing community involvement in the processes of development (Rivera and Qamar, 2003).

Agricultural extension works in a wider knowledge system that embraces different components of which research and agricultural education are some (Rivera, et al 2001). The Extension services mainly involve the passing of agricultural information to the farmer. These messages are what constitute information which the farmer absorbs and tries to implement in their farming practices.

It may not always be possible to precisely quantify the contribution of extension services to livestock development but an effective extension information service contributes significantly to livestock production. An effective extension information service is one that meets the farmers' needs and the content of the information is specific, simple, and useful (Gundu, 1985).

According to Jones and Garforth (1997), agricultural extension is important because in the first place, information about good or new agricultural practices in a particular environment from research station or farmers experience can be assembled synthesized and made available to use. Secondly, this information can be used especially for educational purpose to further investigate it or to disseminate knowledge.

Thirdly, it results in creation of organizational and administrative setup which can make dissemination of technologies easier. Natural calamities such as famine, crop failure and

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problems like soil degradation and economic crises can also result in immediate initiation of extension work.

Kenyan agriculture is majorly dependent on rainfall and subsistence-oriented. Most of the outputs come from small-scale farmers who undertake traditional farming practices using traditional farming tools. There is a significant variation in terms of land form, soil types, climate, farming practices, etc., which provides the country with different types of livestock and a variety of food crops, vegetables and fruits.

Although agriculture is the most important sector in the country's economy, Kenya is still experiencing food shortages since the 1970s and millions of people have been suffering from hunger.

In the last three decades, information on the performance of Kenyan agriculture indicates that there is a wide gap between food supply and demand and the agriculture sector is still unable to produce adequate amounts of food to meet the growing human population in the country.

As a response by the government to narrow the gap between food supply and demand, a collaborative agricultural project that follows extension approach was initiated by the government.

Government involvement at different level is important in relation to agricultural sector improvement. According to Rivera et al (2001), governments of developing countries are confronting new extension challenges: on the one hand, there is a need to increase production to provide food for all citizens, raising the income of the rural population and reducing poverty; on the other hand there is a need to manage the natural resources in a sustainable way in a rapidly changing world with new technologies developed all the time.

Therefore, it is important that policy-makers are aware of the key role that extension service plays in the national economy development before modernizing and reforming the existing agricultural system (Qamar 2005). Though achievements in crop improvement in the last 20 years are undeniable, poor farming families' needs are unaddressed.

#### MATERIALS AND METHODS

The study used a survey research method where qualitative research design was used. The research instruments comprised of interview schedules and documentary reviews. A sample of 120 smallholder farmers from Wareng District and eight key informants from the Ministry of Agriculture were interviewed. Documentary sources were also used alongside the interview schedules. It entailed going through documents like policy reports, annual reports, work plans and agricultural reports.

## **RESULTS**

The findings of the study indicated that smallholder farmers in Wareng District have been receiving extension information despite that it is not sufficient to them. It was established that there were few extension officers in Wareng district and the ratio between the extension officers

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and the residents of Wareng is big. The study established that provision of extension services is not satisfactory as most of the farmers' needs are not met.

The study also reveals that a majority of farmers in Wareng District lack adequate information. The study proposes a framework for the delivery of livestock information that provides for information that is not only current but timely and real-time. The study further revealed that despite the little extension information that they normally receive, it has boosted their production because they are educated on the variety of seeds, the methods of planting, weed control and the right chemicals used to combat pests and diseases.

The study revealed that when the extension officers visited them frequently, their production shot up for that year. This shows that extension services impacts the agricultural production and thus have an impact on the food security of the residents.

#### RECOMMENDATIONS

There is need for the government to establish alliances with all sectors in order to develop programmes to improve food security and income generation among the poor. A rural agricultural extension/communication strategy should be tailored to embrace issues that include but go beyond those of production and access to food, thereby requiring linkages and collaborative efforts with other organizations, public and private.

The study further recommends that the government should build a platform to promote dialogue and cooperation among relevant institutions and programmes in all sectors with the aim of developing an extension and information services network for food security and income generation.

Encouraging private extension service providers to develop a multisectoral integration in order to complement public sector goals. Furthermore, improving staff capacity of both private and public sector management to carry out coordinating activities will improve on the . There are areas of agricultural extension advice which are best suited to private sector provision (Smith 1997).

In conclusion, agricultural extension is a crucial element in agricultural growth and productivity. Despite the fact that agricultural extension services in Kenya are underfunded to undertake the activities required for achieving food security there is need to invest in extension services in order to improve food security of the district and the country at large.

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