

Increasing Agricultural Production and Productivity among Smallholder Farmers in Uganda through Agricultural Extension

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Abstract: Agricultural extension offers an opportunity for increasing production without any significant quantitative increases in the basic factors of production: land, labour and capital. In Uganda, agricultural extension is undergoing major reforms. These reforms include privatization of funding, delivery of extension, and decentralization of authority to lower levels of government, including delegation to NGOs and farmer organizations. Although various governance reform approaches have been adopted to improve agricultural extension service provision, major knowledge gaps remain regarding why desirable results have not been achieved. This article has identified the major challenges affecting delivery of agricultural extension services in Uganda and concludes that agricultural extension in Uganda is still under transition with numerous challenges that require multifaceted approaches to overcome.

Keywords: Agricultural extension, Uganda, decentralization of authority

INTRODUCTION

In the developing world, three out of four poor people live in rural areas where most of them depend directly or indirectly on agriculture for their livelihoods. In such populations, the provision of economic services such as agricultural extension is essential if development is to be attained through agriculture [1]. Extension has been defined as the conscious use of communication of information to help people form sound opinions and make good decisions [2]. The adoption of technologies and better practices is the core of extension interventions. Agricultural extension offers an opportunity for increasing production without any significant quantitative increases in the basic factors of production: land, labour and capital. It serves primarily to improve entrepreneurship and managerial ability. The performance of the agricultural sector in SSA has not been satisfactory and lagging behind its population growth[3]. Achieving agricultural productivity growth will not be possible without developing and disseminating improved agricultural technologies that can increase productivity to smallholder agriculture[4]. Investment in extension services is thus critical in the improvement of agricultural productivity and increasing farmers' incomes[5]. Consequently, sub-Saharan African (SSA) countries have been implementing various agricultural extension programmes to improve agricultural production and productivity, farm income and rural livelihoods.

In Uganda, agricultural extension is undergoing major reforms. These reforms include privatization of funding, delivery of extension, and decentralization of authority to lower levels of government, including delegation to NGOs, farmer organizations, and other grassroots control[1]. Following the agricultural policy reforms, the government has been implementing the Plan for the Modernization of Agriculture. One component of the plan has been the National Agricultural Advisory Services (NAADS) program whose goal was to increase market oriented production through empowering farmers to demand and control extension services. However, extension programs have the reputation of being largely ineffective in Africa[6,7], adding very little to the productivity of farmers. This reputation is no exception in Uganda as evidenced by the Ugandan government's suspension of NAADS in September 2007 on the grounds of implementation failures. In February of 2008 NAADS was reinstated as a part of the "Prosperity for All" program. Following its reinstatement, NAADS was charged with the task of designing and implementing effective agricultural extension services aimed at increasing the productivity of Ugandan farmers. This equally did not achieve the desired results culminating into another suspension in July 2014 to allow for additional programme adjustments. This culminated into deployment of army officers to "oversee" implementation of NAADS in what is called Operation Wealth Creation. However, Operation Wealth Creation, an initiative of the current

president has received criticisms for having no required technical expertise. Inputs are distributed without any technical support from qualified agricultural extension staff. To many, the role of the army remains unclear [8]. Although various governance reform approaches have been adopted to improve agricultural extension service provision, major knowledge gaps remain regarding why desirable results have not been achieved. The aim of this article was therefore to establish the major challenges affecting delivery of agricultural extension services in Uganda with a view of generating recommendations for improvement.

MAJOR STAKEHOLDERS IN AGRICULTURAL EXTENSION IN UGANDA

Three major groups of actors/stakeholders in Agricultural extension have been distinguished. These include politicians/policy makers, extension service providers and citizens/clients[9]. These actors can sometimes have divergent or even conflicting interests. Understanding the role and interest of each stakeholder may provide insights into management and delivery of agricultural extension services in the country.

Politicians

Politicians are the makers of agricultural policy. They also provide an oversight role to public servants including extension officers. In Uganda, politicians exist in all levels of governance ranging from the President, ministers, Members of parliament, Resident District Commissioners and Local councils. Local councils are found in villages, parishes, Sub counties and district levels. Ministers and Resident Commissioners are presidential appointees while members of parliament and local councils are elected. It is worth noting that Uganda's political governance structure does not emphasize academic qualifications. The only required qualification is Uganda Advanced Certificate of Education (UACE) or its equivalent for President, Members of Parliament and District council chairpersons. The rest of the positions are normally filled by persons some of whom have not had any formal education. As such, they normally supervise technocrats with very superior academic credentials and whose reports they may be unable to comprehend. However, they are entrusted with the planning and budget functions. This category is also affected by clientelism, the excessive tendency to provide public services to clients in exchange for political advantage. This, in turn, leads to inequality in service provision and the associated clashes with extension officers [1]. It is known that partisan politics, political interference and dominance of politicians in governance impede effective extension services[10].

Extension service providers

These can conveniently be categorized in to public sector, Non-governmental organizations, private sector and farmer based organizations. These will now be discussed in turn.

Public sector

The public sector is represented by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), Local Governments, Public Research institutions, Public Universities and other tertiary educational institutions. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) has five major departments comprising Animal production, Livestock Health and Entomology, Fisheries resources, Crop production, Crop protection and Farm development. In addition there is Plan for Modernisation of Agriculture (PMA) Secretariat as well as the National Agricultural Advisory Services (NAADS) programme. MAAIF and Local Governments recruit and manage traditional extension officers in the field of agriculture, veterinary sciences, fisheries, forestry and so on. The public research institutions under National Agricultural Research Organization (NARO) are the developers of agricultural technologies. Examples of public research institutions include: National Crop Resources Research Institute (NaCRRI), National Livestock Research Institute (NaLIRI), and National Fisheries Research Institute (NaFIRI). Zonal Agricultural Research and Development Institutes are also available. Public Universities carry out research, provide agricultural training and participate in direct extension through community outreach programmes. These universities include Makerere University, Kyambogo University, Busitema University and Gulu University. Other agricultural training institutions for example Bukalasa Agricultural College and numerous farm schools exist.

Non-Governmental Organizations and other Donors

In Uganda, the growth of the NGO sector goes back to the 1970s and 1980s, when many NGOs came in to fill the gap left by the collapse of the government. Some of these NGOs are identified with a particular church or religion and others are associated with a particular commodity. Most NGOs in Uganda are funded by international non-governmental organizations and bilateral donors, and recently the government of Uganda started partnering with NGOs in providing funding for development projects [1]). Prior to decentralization of agricultural extension system, many NGO were already active in the field delivering extension services to farmers. The liberalization of the public sector that opened the way to private firms' involvement in agricultural extension also invited NGOs to increase their role as partners in bringing information and new technologies to farmers. NGOs are assisting the Government of Uganda in its efforts to increase food production and productivity and reduce rural poverty.

Private Sector

The liberalization of service delivery to farmers led to a proliferation of private companies operating at the grassroots level, and the provision of channels for information and service delivery to farmers. These private firms hired full-time staff to

provide the package of services required for the production and marketing of their commodity of interest. In many instances the government contracts private firms to offer services to the people. Examples of such firms include Mukwano Oil Industries, BIDCO Uganda Ltd, Agricultural Development Company. Whereas the emergence of numerous private extension organizations is not a problem, what appear to be problematic is the lack of effective coordination and monitoring and evaluation of their efforts. Clear guidelines need to be developed as new partnerships between the government and the private sector are created.

Farmer Based Organizations and Cooperatives

A great diversity of civil society organizations including cooperatives, producers' organizations and farmers associations mostly related to agriculture and rural activities exist in Uganda. For example cooperative movement has played a substantial role in the way farmer organizations have evolved in Uganda. Because of its wide-spread network, cooperative have become one of the major participants in input and product markets in rural areas reaching most of the villages [11]. Overtime these cooperatives evolved into a more powerful organization known as the Uganda Cooperative Alliance (UCA) that stood as a serious government partner in rural development. With regard to producer organizations, the government with the support of the Donor community, promoted the constitution of an association to bring together farmers and the existing organizations. The Uganda National Farmers Association UNFA was constituted in 1992 and an institutional platform for dialogue with the government was created [11].

Citizens/clients

These are the users of agricultural extension services. In order to get better services, the citizens through "client power" can hold extension service providers directly accountable. This is the so called short route. They can also exercise their voices to encourage politicians to exercise their oversight role over service providers with the goal of improving service delivery in the long route [9]. In Uganda, structures such as District and Sub county farmers' forums have been created for this purpose.

MAJOR CHALLENGES AFFECTING AGRICULTURAL EXTENSION IN UGANDA

Disaggregated agricultural extension policy

Agricultural extension in Uganda has evolved over time through transformation into unsustainable service for several reasons. There was no policy on agricultural extension until the establishment of NAADS [12]. Even then, the transformation of extension did not build on the strengths of the past, relied upon advice from mostly foreign experts and has been mainly donor funded. Although the policy and mechanisms to empower the farmer to demand, control

and pay for extension services are now in place, farmers still seem to lack the capacity to manage extension services. Transforming a broad mass of smallholder farmers from subsistence production to commercial farming requires a focused and clear agricultural policy. Unfortunately, the record of agricultural performance in the region over the last two decades is very weak, which indicates that the agricultural policies pursued over a long period have been deficient[13].

High illiteracy levels among farmers

Agricultural extension practices aim to educate the farmer. Undoubtedly, a research and extension programme will be more effective and more successful with an educated farming community. The traditional framework with its predominance of aged, illiterate farmers offers limited scope for effective extension work. In agricultural extension education, the tasks which seem simple to the extension officer who has mastered them may appear to be very difficult, and perhaps not worthy attempting, to illiterate farmers who have not had the opportunity of understanding them thoroughly.

Disoriented attitudes of peasants

The Ugandan farming community is predominately peasants practicing subsistence agriculture with a small fraction that can be regarded emergent farmers. Like Semana[14] argued, such a population is unlikely to respond sustainably to the farmer owned extension system now being promoted in Uganda. These farmers' attitudes and desires have largely been influenced by their society's culture. In many communities, it is customary for farmers to scatter seed and plough it into the soil and people have grown to believe that that is the only correct way of planting [15]. Even if the benefits of other methods have been explained to them, their strongly held attitudes make it difficult for them to change. Many of the older farmers seem to be inherently convinced that their traditional husbandry practices are better and more paying, and that they are more knowledgeable about farming than the young agricultural officers and extension workers who have acquired their knowledge in colleges or universities[16]. This belief is often strengthened by the few unfortunate instances of poor stands of crops and disease animals on demonstration farms organised by agricultural extension workers.

Poor extension approaches

It is necessary to ensure that extensions services offer relevant and high-quality information to their clientele[8]. Agricultural extension involves teaching and learning and as such the extension worker like a teacher needs to prepare and teach well so as to stimulate the farmer to learn and understand. The farmer as a learner on the other hand should have interest and the willingness to learn. This mix should all be governed by the philosophy of extension thus: start from where people are with what they have. By so

doing, the farmers are helped to help themselves [14]. This requires identifying their level of farming knowledge, attitudes, socio-cultural system, problems and needs, farm tools, any other capital available to enable them do better farming using their own efforts and resources following the principles of extension.

Inadequate and inexperienced extension workers

Shortages of qualified and experienced staff to deliver agricultural extension services and inadequate training opportunities to develop professional and technical expertise in many Sub-Saharan African countries including Uganda have been highlighted [17]. Extension agents are not only limited in numbers, but they also lack the skills required to form and supervise groups. As a result, they tend to work with male farmers and those that are better-off. The extension officers should be well trained to impress the farmer with their superior knowledge of agriculture, be well paid, and be provided with adequate transport. With regard to in-service training, the training departments of the Ministries of Agriculture and non-governmental organizations (NGOs) generally organize in-service training programs for extension staff. However, these trainings do not adequately prepare extension staff to deal with complex agricultural problems. In addition, low pay and salary payment delays that constrain staff recruitment and retention in the Local Governments exacerbate the problem.

Limited farmer participation and the gender dimension

Merely intensifying the extension service and increasing the number of extension officers may be futile; the farmers themselves could serve as more effective extension agents. Any extension programme can only be successful if supported by efforts to provide technological services that will be profitable at the farm level and encourage the farmer to adopt innovations, and enlist the active participation of the farmers themselves. On the other hand, gender has been suggested to be determinant in seeking out extension services. Males are more likely to seek out extension services than females. Traditional gender roles seem to constrain women from seeking agricultural advice[8].

CONCLUSION AND RECOMMENDATIONS

In conclusion, agricultural extension in Uganda is still under transition with numerous challenges that require multifaceted approaches to overcome. There is need to conduct a thorough analysis of the human resources in terms of numbers, qualification, and skill mix required for improving agricultural extension. The number of agricultural extension agents could be increased in various ways including, hiring staff on a contract basis for specific programs, contracting NGOs that work in the agricultural sector, contracting private sector companies that can provide extension services, and establishing public-private partnerships. The problem of political

interference could be reduced by strengthening the role of agricultural extension staff in improving the knowledge and skill base of the farming population rather than by using extension agents mainly for implementing subsidized input programs. Engagement of women's associations to serve as a bridge between extension workers and women farmers is essential. There is a critical need to gender-sensitize extension providers and to create programs that specifically empower female farmers to proactively seek agricultural information and advice needed to enable them establish and manage agricultural enterprises so as to improve farm production and productivity. Hostels established on research stations to bring farmers, extension officers and research workers together in free discussion would be ideal way of educating all three and eventually improving the level of agricultural productivity.

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