

## Review

# Trends in agricultural extension services in Africa: Option for new approaches

J. O. Saliu<sup>1\*</sup>, P. C. Obinne<sup>2</sup> and S. I. Audu<sup>1</sup>

<sup>1</sup>Department of Agricultural economics and Extension, Kogi State University, Anyigba, Nigeria.

<sup>2</sup>Department of Agricultural Extension and Communi`cation, University of Agriculture, Makurdi, Nigeria.

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Many developing countries are now at various stages in the process of economic liberalization, privatization and decentralization. This implies that technical programming, personnel management and budget appropriations for extension delivery will no longer be the same as they used to be under centralized public extension service delivery. Liberalization has bred different actors in extension delivery such as the public agencies, private service providers, produce organizations and Non-Governmental Organizations (NGOs). It is therefore important to find out the methods utilized by the current facilitators of extension activities and how the activities are funded. This paper thus examined the current approaches to agricultural extension in South Africa, Nigeria, Uganda and Madagascar. Findings revealed the following approaches: (1) partnership extension services, (2) people centered participation, (3) farmers organizations and (4) fund mobilization through shared responsibility among all the stakeholders. These approaches covered a significant part of each of the countries examined. However, time must be giving if the approaches are to stand the test of time. Effort must be intensified to see how the benefit from the approaches in the enclave coverage can be extended to every part of the nation. Enabling environment like development of viable markets, communication and other infrastructural facilities can be provided for the exploration of these approaches.

**Key words:** Actors, private service providers, non-governmental organization, public agencies.

## INTRODUCTION

Sub-Sahara Africa consists of farmers who mostly reside in rural communities. The rural population is expanding rapidly while accessibility to health, education and even food is becoming increasingly difficult. For instance, about 800 million people in the developing world do not have enough to eat and out of this figure, about 180 million live in Sub-Saharan Africa (Sofi, 2001). This gloomy picture is emerging in a fast changing environment where most developing countries are at various stages in the process of economic liberalization. Economic liberalization means removal of all sort of economic restrictions such as price control on farm produce, government withdrawal from economic activities such as

input supply, marketing and even direct agricultural production while decentralization is a means of transferring selected public responsibilities to regional, state or local level institutions by the national government. This implies that technical programming, personal management and budget appropriations for extension delivery can be delegated to other stakeholders like farmers co-operatives, private service providers, non governmental organizations, public agencies and so on (Neuchattel Group, 1999). The main public actors in most of the African countries are the National Agricultural Extension Services while private actors such as input suppliers, purchasers of agricultural products, private trainer-adviser, outreach agencies and private media are now participating in activities geared towards agricultural programme (Neuchattel Group, 1999). This development is springing up at a time when many developing countries are less

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\*Corresponding author. E-mail: [josalieu@yahoo.com](mailto:josalieu@yahoo.com).

able to continue providing all the extension services expected of them as a result of financial limitations. For instance, Arokoyo (2003) asserted that the decentralization of agricultural farm radio programmes in Nigeria took place at the same time as the privatization of state radio broadcasting stations. These stations then started to charge commercial prices for radio broadcasting time slots. Many of the decentralized farm radio programmes, with much smaller budgets than those of the former national programmes, could simply not afford those prices. As a result, most Nigerian farm radio programmes have been discontinued. Since the inception of this wind of change, extension delivery has undergone various permutations informed by the experiences on ground in each country. It is in this circumstance that agricultural extension is expected to provide farmers with necessary education, skill and technical information to enable them take effective farm management decision for accelerated agricultural development. It is therefore important to know the various coping strategies adopted by these developing countries. We may also ask what effect has this change on the agricultural policy of the said countries? Who are the current facilitators of extension activities in these countries? What role have the farmers assumed in the planning, managing and implementing extension activities? Who provide fund for extension activities in African countries? This becomes essential to address the issue of inadequate farmers' involvement and high cost of Training and Visit (T & V) Extension System, which the national government in some of the developing countries like Nigeria can no longer afford as a result of the withdrawal of donor agencies, economic liberalization and decentralization. As such, this paper attempts to analyze the current trend and approaches to agricultural extension delivery in Africa to meet the interest and needs of the farmers as it has become obvious that T & V Extension System no longer meet the diverse interest and needs of farmers (Charles and Williams, 2005).

For the purpose of this paper, Africa is divided into two groups. Well developed agricultural service institutions and less developed agricultural services. Among the well developed ones are Nigeria, South Africa and Egypt, while the less developed agricultural service institutions include Uganda, Ghana, Zimbabwe and Madagascar. South Africa and Nigeria were picked from the well-developed group while Uganda and Madagascar were picked from the less developed group. In essence, this paper examines current trend and approaches to agricultural extension delivery in South Africa, Nigeria, Uganda and Madagascar. The specific issues discussed are:

A review of the activities of the actors involved in agricultural extension in the said countries, participatory approaches adopted by the various agricultural extension stakeholders in the said countries, fund mobilization practices for managing agricultural extension services in

the selected countries.

## **AGRICULTURAL EXTENSION IN SOUTH-AFRICA**

### **Actors Involved in Agricultural Extension**

Prior to 1994, Department of Agricultural Development of the House of Assembly, which was the largest Department, was responsible for servicing while agricultural services for the white in South Africa during apartheid in seven agro-ecological zones. The 'Black agriculture,' was serviced by the departments of agriculture of the Homelands' and independent states. Following the change to a democratic South Africa in April 1994, all agricultural activities fell under one department (Van-Nickerk, 1995). However, the agricultural development remains uneven between the whites who own commercial farms and the black who are subsistence farmers. As such, South African agriculture has a strong commercial production sector which provides a foundation for national food security and even international trade, thus making a significant contribution to the national economy. This success was due to the agricultural policies and extension approaches adopted to date in South Africa (Worth, 2002). Agricultural extension officers or advisers are employed by departments of agriculture, cooperatives and some marketing organizations. A whole host of private firms and non-governmental development agencies also provide advisory services. However, information dissemination through extension services is yet to get to all farmers who will need the information.

### **Participatory approaches**

National and provincial agricultural policies are formulated to address issues of food insecurity and rural poverty. These policies have direct effect on the agricultural extension approach in South Africa. Duvel (2001) observed that the model for extension in South Africa is a technology-centred one. He, however, noted that occasionally technology is transferred in a people-centred way, using people centred participatory (Participatory Rural Appraisal – PRA) methodologies, aimed at reducing barriers to technology adoption and also to adapt technologies and practices to local conditions. It is a popular opinion that PRA being used in South Africa has helped to address the needs of the farmers.

In essence a participatory diagnosis is the farm participatory technique of involving farmers in South Africa. It is therefore, a proclaimed priority of South Africa that development be people-centered (Cruse et al., in Worth, 2002). In this wise, extensions activities are carried out by service providers (Government and Private) and farmers through joint planning and programme implementation. The people-centred policy is enshrined in the ethos of the South African constitution.

## Fund mobilization for extension work

Funding for extension work is popularly based on assets and partnership with private sectors and farmers' organizations. This method ensures availability of fund for extension work throughout the year.

## CURRENT AGRICULTURAL EXTENSION SERVICES IN NIGERIA

### Actors involved in extension work

Nigeria probably has the most elaborate research and extension institution in sub-Saharan Africa, with a population of over 140 million and 71 million ha of arable land. The system comprises of 17 commodity – based research institutes and a special national extension institute, over 45 faculties of agriculture in conventional federal, state and private universities, three universities of agriculture, several colleges of agriculture/polytechnics and three international agricultural research centers viz; International Institute of Tropical Agriculture (IITA), a substation of International Livestock Research Institute (ILRI), (Okwu and Ejembi, 2001). All these institutions collectively and individually serve as the fountain of agricultural innovation for both public and private agricultural extension service providers. In Nigeria, agricultural extension service has been mainly public. Currently the major provider of public sector agricultural extension services, is the agricultural Development programmes (ADPs) in each of the 36 states of Nigeria.

The pre-ADP Extension Services (The conventional extension system) were presumed to be ineffective and could only provide limited services to the majority of farmers in the basic farming enterprises due to bureaucratic bottlenecks. This formed the basic fact underlying the removal of the extension service from the civil service system and the introduction of ADP in the early 70s has now become the only functional public extension service provider in the country (Ekpere, 1991). The World Bank-ADP approach has been used to re-organize the management of agricultural extension system for effective performance. The main feature is the training and visit extension system which include a single line of command, a well-defined geographical boundary of operation for each extension worker, a supervisor to supervisee ratio of not more than 1:8. Other characteristics include systematic programme of short training courses, removal of all non-agricultural extension functions from the responsibility of the extension worker, effective monitoring and provision of adequate transport facilities. These features ensure flexibility and prompt decision-making devoid of regular civil service bureaucracy. The current public extension service is now known as Unified Agricultural Extension Services. Which means the enlargement of the areas of focus to include ser-

vice in fishery, livestock and women in agriculture. Oyebanji (1994) reported that the performance of the extension services since the inception of this professional system in Nigeria has been encouraging. Extension contacts with farmers have increased, several technologies have been disseminated and adopted by farmers. Idachaba (2005) also asserted that Anyigba ADP (Kogi State, Nigeria) greatly transformed the lives of Igala people through the revolution in extension services delivery. However, some prevailing problems existed and limited the effectiveness of the system. The problems include, insufficient funding at state level, inadequate or non-availability of inputs, poor logistic supports and inadequate staffing.

The issue of poor funding becomes critical after the withdrawal of outside funding as revealed in a study by Agbamu and Okagbare (2005) who explained that the effects of expiration of World Bank funding were noticeable in the inability of Ogun State Agricultural Development Project (OGADEP) to provide enough vehicles and motorcycles for its agricultural extension work, irregular payment of traveling claims, ill-motivated field-staff, reduced training session for village extension workers and reduced monthly technology review meetings. For instance 51.2% farmers were given extension services fortnightly during World Bank assistance when funding sources were 71.5% from World Bank, 15.9% from state government, 6.8% from International Fund for Agricultural Development (IFAD) and 15.9% from Federal Government of Nigeria. But this fortnight extension services fell to 40% after cessation of World Bank assistance. However, OGADEP was still able to make significant patronage by looking inward for survival. The state government increased financial support to 43% IFAD, 44% and FGN 13.1%. The financial inadequacy coupled with the inability of the public extension services to meet the yearning and aspirations of the farmers in a deregulated economy made a number of private organizations to venture into agricultural extension.

### Private extension/participatory approaches

The foremost participants in private extension services are United African Company (UAC), John Holt, Nigerian Tobacco Company (NTC) and Diocesan Agricultural Development Programme of the Catholic Diocese of Ijebu-Ode, among several others who became involved in agricultural production, processing and marketing some decades ago (Adedoyin, 1995). About ten years ago, Green River Project of the Agip Oil Company, Ciba Geigy Agro-Chemical extension outfit, Olam Nigeria Limited, formally Agro-Millers at Makurdi, have been found to inject positive changes in the life of the communities where the programmes are located (Akele and Chukwu, 2004; Isife and Madukwe, 1999).

Informal Private Sector (IPS) is another dimension to extension services. IPS denotes private organizations that provide various extension services in the areas of agro seed, agro-chemicals, agro processing, micro-financing, farm tools and agro-consultancy with the aim of making profit from the ventures. A research conducted by Okoro et al. (2006), in Abia State comparing the effectiveness of agricultural extension services between IPS and Public Extension Services, revealed that most of the IPS practitioners are retired agricultural officials and or self employed graduates with few staff strength. Inputs are sold along with extension services.

Relationship between the IPS operators and farmers is mostly on individual basis. Ninety eight point five seven percent (98.57%) of the farmers got gift like crate of eggs from the IPS as a kind of public relation services. About 85% of the farmers got extension information from IPS while 71.4% of the respondents attributed growth in farm size to the effort of the IPS.

In summary private extension services appear to provide timely and appropriate services in terms of farmers' need. This is in agreement with the whys and wherefores of extension privatization.

Advocates of private extension services belief that it improves efficiency, improves public finance, encourages competition and private sector participation.

However, poor road network, inadequate finance on the part of the private extension practitioners, farmers inability to buy inputs and poor educational status of farmers resulting in slow adoption of technologies are the constraints affecting private extension services.

It is important to point out, that, privatization of extension services in Nigeria is still in the form of increased in private sector participation in provision of agricultural extension services and not a transfer of state owned assets to the private sectors. One of the popular farmers organization that could be used to promote extension activities is Apex Farmers' Association of Nigeria (AFAN).

The type of partnership formed by this organization with other stakeholders is not very strong. Nigerian government has no guidelines regulating activities of private extension service providers at the moment.

### **Fund mobilization**

Generally, fund for agricultural extension services are from donor agencies and the three tiers of government (Federal, State and Local Government). Private organizations have not been actively involved in sharing funding for extension programmes in Nigeria.

## **NEW APPROACHES TO AGRICULTURAL EXTENSION SERVICE IN UGANDA**

### **Actors involved in extension services**

Uganda was strongly involved in the use of public exten-

sion services to improve agricultural production. Ministry of agriculture and government agencies adopted the training and visit extension system that was sponsored by donor agencies. Donors were usually inflexible in the way in which they provide funds. In this wise, research and training programmes fell short of meeting the farmers need, efforts were duplicated due to poor coordination between public extension outfit and some Non Governmental Organizations involved in the provision of extension services. Poor road network, unattractive market prices for agricultural produce continued to serve as barriers to effective extension services. With the introduction of liberalization and globalization, a policy that stimulated decentralization and privatization of extension services became popular in Uganda (Mundy and Sultan, 2001).

### **Participatory approach**

Ugandan government has put in place policies that promote decentralization, privatization, liberalization and developed a new plan for modernization of agriculture in the late 90s, (Oryokot, 2003). This policy has stimulated a popular participatory approach called participation through organization. We now have Uganda National

Farmer's Association (UNFA) that has established a "demand-driven, cost-recovery" extension system as an alternative to public sector extension in a number of districts (Carney, 1998). Using this typology of farmers participation, the extension system becomes more farmer led and as such farmers' needs and interests receive more attention.

The new plan developed to modernize agriculture in Uganda is based on two strategic pillars, raising overall agricultural yields and diversifying small holder production patterns into a mix of higher-value, export oriented commodities along with lower-value food staples. This plan was developed by a broad constituency of stakeholders officials and politicians, farmers, Non-Governmental Organizations (NGOs), Civil Society and the Community of donors (SAA, 2001). The new plan places a high priority on agricultural research and extension with particular attention on technology generation and transfer through decentralization of activities. The current position of Ugandan agriculture is that the country has regained its position as the largest coffee producer on the continent, the tea industry has been revitalized, a small export-oriented horticulture industry is emerging and maize exports to Kenya continue to grow (NSAA, 2001). This implies that the agricultural policy of decentralization and participation through organization is working well for Uganda.

### **Fund mobilization**

Fund for extension services in Uganda is now based on partnership with government agencies, farmers organiza-

tions and some non governmental organizations. Farmers now mobilize fund to render information services, advisory, training marketing and credit services. This situation assists to guide research and makes the farmers to be active participants rather than passive recipients of new technologies. However farmers that cannot pay for the annual fees are not likely to benefit from the farmers organizations extension programmes.

## **NEW APPROACH TO AGRICULTURAL EXTENSION IN MADAGASCAR**

### **Actors involved and participatory approaches**

The experience of Madagascar in previous extension approaches (that is teaching and visit extension approach to technology transfer) has not yielded the expected results. Many farmers were left on their own for information on farm inputs. Insufficient funding and inaccessibility to credit by farmers constituted a major problem to extension services in Madagascar. This has led to the current popular support for farmers' organizations, collaboration and diversification strategies embarked upon by some private agencies. For instance, 11 farmers' organizations totaling 132 farmers had collaborated extension work with Project South West (PSW) for production of peapods and another 45 producers' organization benefited from bean seeds production in the mid-west Region.

Various projects are currently implemented through partnerships with the private sector and NGOs in Madagascar which is believed to increase confidence in the extension service. The partnership style is being supervised by the Ministries of Agriculture, Livestock and Applied Development Research. A number of initiatives have being generated by these relationships. The mode of operation is "tight regulation by contracts" with the different institutions concerned. As many as 20 agents from private sectors have participated in the implementation of the project's activities while 66 NGOs now maintain close partnerships according to their areas of competence and comparative advantage with respect to the project technical consultations.

### **Fund mobilization**

Fund is now being mobilized through the communities participating in extension services and supported with funds from government agencies. The local communities are becoming more committed to project executed in their localities. For instance, 32 communities in 8 agricultural regions recruited out of their own resources and made available for extension services 87 agricultural counselors on a two-year renewable term. In effect, both private and public extension systems are made to compete for extension services (Schorosca and Seck, 2003). Under this approach, provision is made for regular com-

munication and consultation on fund mobilization and extension activities with all the actors involved in the extension process. That is, farmers' organizations' NGOs, Private sector organization, local decentralized community, governments and donors. As a result of this approach, the linkages between farmers, extension agents and researchers have improved and more effective operations have been witnessed in Madagascar. However, many communities are left out of this extension system because the system could not provide for those who could not afford to pay their annual membership fees.

### **SUMMARY**

In summary, Agricultural Extension Service is taking a new dimension in Africa, from complete public services to more private sector involvement. Certain features are common among the operators of this new extension focus despite differences in circumstances and environment.

The four (4) countries reviewed operate:

- i) Partnership extension services which involves so many stakeholders, like the farmers, Non-Governmental Organizations, Private Sectors and even the Government. Though partnership of the above description is not very popular in Nigeria.
- ii) They also decentralize their programmes for more popular involvement of people who were hitherto less involved in extension work.
- iii) The nature of participation is now more people-centred. That is, participation through farmers' organization which is more pronounced among all the four countries reviewed except Nigeria where organized farmers groups are still few and less active in accepting the responsibility of recruiting agricultural extension agents out of their own resources.
- iv) The kind of participation adopted by these countries permitted involvement of stakeholders' right from programme planning to implementation of action plan.
- v) Fund mobilization common to all the nations under review is that of shared responsibility among all the stakeholders. However, Nigeria still needs to mobilize individuals and private organizations to embrace public – private partnership strategy of funding agricultural extension services. If by so doing, it will enable the country to harness more fund for their extension activities.

### **Conclusion**

Economic liberalization has influenced the mode of providing extension services in Africa. The style of decentralization and popular involvement of partners in extension services seems to be new and limited in coverage. Effort must be made to under study these

approaches to see how it can be sustained and extended to every part of the countries in Africa. The flexibility in the ability of any approach to suite different problems exploited by their nation should be taken into consideration.

## Recommendation

1) From the review, countries where partnership with various stakeholders such as Non-Governmental Organization, Farmers Cooperatives, private sector service providers and so on is being practiced seems to enhance availability of extension service to farmers who would have not had the opportunity. It is therefore recommended that effort be made by each country in Africa to liaise with every available stakeholder that will enhance availability and use of agricultural extension services.

2) A bottom-up approach that is people-centred which will enhance popular participation understanding and recognition of farmers' indigenous knowledge and experience as observed in South Africa should be put in place and use for identification, planning and implementation of agricultural extension projects.

3) Based on the findings in the review, unavailability of fund was identified to have disrupted the free flow of extension information to farmers. Fund mobilization through shared responsibility among all the stakeholders will enhance continuous and sustainable agricultural extension programmes. Conscious attempt should be made to mobilize fund from all stakeholders such that farmers can show interest and even sponsor extension programmes as found in Madagascar and Uganda.

4) A policy that would stimulate formation of farmers organization which will encourage self reliance, demand driven and cost-recovery should be put in place by each country. The similitude of this organization is the Uganda National Farmers Association (UNFA) which represents about 90,000 farmers throughout Uganda and serve members with extension information through annual membership fees of 1500 shillings. Another example is federation des organization non gouvernementales du Senegal (FONGS) with about 29 sub groups and 150,000 members in nearly 3000 village groups. FONGS extends services to about 900,000 rural people or about 0% of Senegal's population (Mundy and Sultan,2000).

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