

Redefining the Nigerian Agricultural Extension System for Effective Agricultural Transformation

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Abstract

Redefining of agricultural extension service delivery has been considered lately as an essential option to remedy the decline in efficient organization, administration and delivery of extension due to so many challenges facing effectiveness of the system. Agriculture is an important sector of the economy with high potentials for employment generation, food security and poverty reduction. These potentials has remained largely untapped which has led to the dwindling performance of the sector both domestically and in the international trade over years. The Nigerian government seeks to exploit these potentials through her Agricultural Transformation Agenda (ATA). The major challenges of Nigeria's agricultural extension and advisory services have been identified to include: lack of a legislated agricultural extension policy, compounded by policy somersaults; grossly inadequate and untimely funding; poor leadership and coordination, low private sector participator, very weak Research-Extension-Farmer-Inputs Linkages system and driven by ineffective top-down, supply-driven, extension approaches. The Nigerian agricultural extension system should properly fit into the ATA road map to address the critical challenges of agricultural extension and advisory services to transform it into a participatory, demand-response, market-oriented and ICT driven service that will provide for all the extension needs of all actors along the targeted commodity value chains of interest. Three key features are essential; inclusion of all farmers as target beneficiaries; effective identification of farmers' extension service needs, and an accountability system to provide better agricultural extension services to farmers. Compelling evidence among the BRIC nations (Brazil, Russia, India and China) was found that market-orientated agricultural policy reform leads to higher rural incomes, increased agricultural productivity and reduced rural poverty, with countries such as Brazil and China leading the way in achieving these outcomes. The opportunity to reposition extension practice in Nigeria has never been greater-if the people within the Extension System can find the courage to change themselves and then to change the organization.

Keywords: agricultural extension, Delivery service, Agricultural transformation

Introduction

Redefining of agricultural extension service delivery has been considered lately as an essential option to remedy the decline in efficient organization, administration and delivery of extension due to so many challenges facing effectiveness of the system. The existing agricultural extension practice in Nigeria is characterized with many short falls such as grossly inadequate and untimely funding, very weak Research-Extension-Farmer-Inputs Linkages system and driven by ineffective top-down, supply-driven, extension approaches, poor targeting of women, youths and vulnerable groups, lack of synergy with the donor-supported projects domiciled within the ADP among others. These challenges have necessitated the transformation of the Nigerian agricultural extension system.

Agricultural Transformation is defined as a doubling of production, processing, and marketing of principal arable and tree crops, aquaculture, and livestock. The vision in the transformation strategy is to achieve a hunger-free Nigeria through an agricultural sector that drives income growth, accelerates achievement of food and nutritional security, generates employment and transforms Nigeria into a leading player in global food markets to grow wealth for millions of farmers. In order to achieve this vision, the usual approach to agricultural sector would change.

Agricultural transformation in China, Vietnam, Brazil and Thailand has led to a dramatic growth in their agricultural sectors over the last three decades with annual growth rates of 2.6, 2.0, 1.8 and 1.4 % respectively. In effect, a significant impact on poverty reduction was experienced. In

Africa, Malawi became self-sufficient in food production within one year by focusing on an agricultural transformation. (FGN, 2011)

Extension is an essential component for agricultural transformation in Nigeria. Extensionists in agriculture must identify problems and opportunities for farmers, and then seek practical improvements at the level of the farmers' technology. Transformation agenda is to create an enabling environment for increased and sustainable food production. Towards achieving a successful agricultural transformation, policies regarding agriculture extension service delivery need review.

Perspectives of Agricultural Extension in Nigeria

Within the last four decades the conception and role of agricultural extension in Nigeria has received its ideas

from abroad. Some of these ideas were requested and accepted in haste with the result that most of them have been improperly defined and poorly understood by agricultural and rural development policy makers and administrators. This scenario was brought about mainly by the unstable political system in the country with each incoming government looking outside for a new way to effectively handle the myriad of rural development problems. The result has been the burgeoning of many different agricultural and rural development agencies with a variety of approaches to the pertinent issues (Ogunsumi and Abegunde, 2011). However, research and extension in Nigeria has been widened in scope and organizational involvement.

Government organised agricultural extension strategy include the National Accelerated Food Production Project (NAFPP) which was introduced in 1972, Agricultural Development Projects, ADP (1975), the Accelerated Development Area Project, ADAP(1982), and Multi-State Agricultural Development Projects, MSADP (1986). Other programmes were the Operation Feed the Nation Programme, OFN (1976), the River Basin Development Authority, RBDA (1973), the Green Revolution Programme, GRP (1980), the Directorate of Food, Roads and Rural Infrastructure, DFRI (1986), the National Directorate of Employment, NDE (1986), the Nigeria Agricultural Insurance Scheme, NAIS (1987) and the National Fadama Development Project, NFDPP (1992). In recent years, the Poverty Alleviation Programme, PAP (2000), and National Economic Empowerment and Development Strategy, NEEDS (2004) were introduced. Specifically the National Special Programme for Food Security, NSPFS was launched in March 2003.

Some private agencies have embarked on agricultural extension services largely towards a specific clientele system of their choice. Some of the agencies are: The Nigerian Tobacco Company, oil companies such as Shell Petroleum Development Company, and religious organizations such as the Catholic and the Anglican churches. Some non-governmental organizations, NGO's such as the Leventis Foundation also operate some extension services.

(Salawu *et al*, 2008). Some other private enterprises, agencies and non-Governmental organizations (NGOs) playing supportive role in research and extension delivery in Nigeria include; Sassakawa Global 2000 and Women in Agriculture (WIA), Practicing Farmers Association of Nigeria (PFAN), Farmers Agricultural Development Union (FADU), Farmers Agricultural Supply Company (FASCOM) and Evangelical Church of West Africa (ECWA). The National Seed Service (NSS) is charged with the general supply of certified seeds to farmers but there are private seed companies that compliment its role and take care of her shortcomings. Such companies include; Premier Seed Nigeria Limited, UAC Seed Company, Alheri Seed Limited, Pioneer Seed Company, Sun Seed Company, CANDEL, etc. with their enterprising network of sales and marketing gimmicks to catch the farmers' attention with their range of seeds.

Many international organisations have been involved in agricultural extension, agricultural and rural developments in Nigeria for decades. Notable among these are the World Bank, International Fund for Agricultural Development, IFAD, United States Agency for International Development, USAID, Technical Centre for Agricultural and Rural Cooperation ACPECCTA, and Food and Agriculture Organization, (FAO) of the United Nations (Salawu *et al*, 2008). Some international research centres and networks have made their presence known and supportive in Nigeria in the area of research and extension delivery. Some of them have established collaborative efforts with the NARIs and other relevant agencies. Some of the international research centres are; International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria, International Fertilizer Development Centre (IFDC), International Livestock Research Institute (ILRI), International Crops Research Institute for Semi-Arid Tropics, International Fund for Agricultural Development (IFAD), Food and Agriculture Organization (FAO) of the United Nations and United National Development Programme (UNDP). Others include; Centro Internacional De Mejoramiento De Maiz Y Trigo, Int (CIMMYT), Mexico, West and Central Africa Maize network (WECAMAN), United States Agency for International Development (USAID) and Semi-Arid Food Grains Research and development Agency SAFGRAD).

Challenges of Agricultural Extension in Nigeria

The tragic weakening of the agricultural extension system in Nigeria has resulted in a situation where it is difficult for agriculture in Nigeria to prosper. Nigeria is seriously handicapped without an effective extension system. The roles of transferring and disseminating agricultural technologies are bugged with so many problems. These include:

- Continued use of predominantly top-down, non-participatory, supply-driven extension systems/approaches.
- Poor targeting of women, youths and vulnerable groups
- Lack of synergy with the donor-supported projects domiciled within the ADP
- Inadequate and poor quality of staff
- Inadequate and irregular funding
- Poor infrastructures and inadequate working tools including mobility for the ADP field extension staff.
- Poor Development Support Communication (DSC)

- Generally poor conditions of service and a non-existent career ladder for the ADP Staff
- Multiplicity of extension approaches and lack of co-ordinated /networking amongst the extension providers.
- Misplacement of subsidy priorities.
- Negative political influences in extension management.
- Lack of low cost credit facilities that small scale farmers can easily access and poor loan recovery rates when available.

Agricultural Extension in BRIC nations

Compelling evidence among the BRIC nations (Brazil, Russia, India and China) was found that market-orientated agricultural policy reform leads to higher rural incomes, increased agricultural productivity and reduced rural poverty, with countries such as Brazil and China leading the way in achieving these outcomes. (Australian Government, 2011). For the 1978-2004 period, agricultural output was found to have grown by 4.6 per cent in China, 4.0 per cent in Indonesia and 2.5 per cent in India with a contributing factor being the reduced rates of growth of rural populations in China and Indonesia due to improved absorption rates into other sectors of their economies, which contrasts with India's expanding rural population.

Lesson from China showed that to sustain and strengthen the extension system so that it can play an important role in agricultural development, significant reforms were carried out. The first reform was to establish a new type of extension system that combines (1) technology experimentation, (2) demonstration, (3) extension, (4) training, and (5) commercial services (mainly supplying inputs). Over-scattered extension agencies have been merged to build technical strength by using all available resources. The priority of reorganization is to set up "County Agricultural Technology Extension Centers " (CATEC) by merging different stations of crop cultivation, plant protection and soil/fertilizer, and research institutes of county agricultural sciences and others. Another goal was to improve and set up "Township Agricultural Technology Extension Stations" (TATES) and at the village level create "Agricultural Technology Demonstration Households" (ATDH). Some villages, especially in developed areas, have also established service organizations. (Yang, 1993)

This new system has four basic features:

- It's under the leadership of government agricultural departments/bureaus.
- The system has two key functions-to provide technology extension and social services to the farming community.
- It has CATECs as its focal point and works through supporting extension and farmer organizations at the townships and village levels.
- The system is implemented by state extension personnel and by technicians paid by farmers and collectives (townships and villages).

A second reform to China's extension system was to implement payment for extension services such as "diagnosis and prescription" (clinical services) and "technology contracts." Once a contract is signed between extension agencies and farmers (or sometimes townships and villages), the extension agencies are responsible for technical guidance, input supply and the yield (sometimes for marketing), and pay the loss due to technical failure. Farmers are to do what is required by extension agents and pay the service fee to extension agencies according to the contract after harvest. This extension approach of technology contracts are unique to China, and is popularly applied nationwide.

The third reform to China's extension system is a shift from government monopolized extension to cooperative extension. That means, from the point of finance and organization, government- financed extension agencies are still the mainstay of the system. Collectively financed (paid by townships, villages, and farmers), extension staff and organizations at a grass root level also play an important role. Some related government agencies such as the Department of Education, the Commission of Science and Technology, and the Department of Commerce, associations, farmers' technology clubs, and some agriculture-related enterprises, such as pesticide and plastic film manufacturers, also participate in agricultural extension. But, of course, "cooperative extension" here is different from that of the United States.

In India, the five major guiding elements of the policy framework of extension reform are:

- Reforming public sector extension
- Promoting private sector
- Augmenting media and information technology
- Mainstreaming gender
- Capacity building

The Indian government developed new schemes of extension division of department of agriculture and co-operation. The felt needs for the scheme include:

- Radical overhaul of extension services

- Improvement in sophistication of technology
- Extension service to meet the special needs of farmers

This new scheme entailed

- Support to state extension programme for extension reforms
- Mass media support to agricultural extension
- Agricultural clinic / agricultural business centers
- Establishment of call centers

Key reforms being promoted in India Extension system include

- New institutional arrangement- decentralized decision making
- Convergence of line department-gap filling mode
- Multi-agency extension strategies- encouraging private sector (minimum of 10% allocation)
- Broad based extension delivery
- Group approach to extension
- Gender concerns – minimum of 30% allocation
- Sustainability of extension services-minimum of 10% beneficiary contribution
- Bottom-up planning

Redefining the Nigerian Agricultural Extension System for Effective Agricultural Transformation

In reaction to the worrisome performance of the agricultural sector, the Federal Government has embarked on various strategies aimed at returning the sector to its enviable position in the Nigerian economy. These Governments' efforts have not yielded sufficient desired results, as the country still witnessed increasing high cost of food, general cost of living and perpetual poverty. This calls for redefining of the Nigerian agricultural extension system by the government and extension to focus on better performance of agriculture in Nigeria. One of such recent strategies is the agricultural transformation agenda.

The Nigerian agricultural extension system must therefore be redefined for effective agricultural transformation. This would be achieved through decentralization, pluralism, cost sharing, and cost recovery, participation of stakeholders in development initiatives and the decisions and resources that affect them. The following recommendation will align agricultural extension in Nigeria for effective agricultural transformation agenda:

1. Public financing should be focused on the poor especially on the rural dwellers.
2. Extension should be viewed as not just a service system but of knowledge and information support function for rural people.
3. There should be capacity building and institutional strengthening for qualified service providers and ensure strong links with and modernization of the various components of the formal and non-formal agricultural education system.
4. Although total privatization is not feasible, even for commercial agriculture, the private sector should play an increasingly important role in rural knowledge systems
5. Extension strategy should be executed on long-term resolution and must be taken within a widely shared vision at different levels.
6. Government should redefine extension policy for a pluralistic system.

Conclusion

Global developments are shaping extension even more radically than other institutions in the agricultural knowledge systems. Contributing to this drive to reform extension is the new paradigm supporting market-driven income-generation.

This compilation highlights the fact that the emerging view of extension is no longer simply that of a unified service, but of a network of knowledge and information support for rural people. One of the propositions put forward throughout the compilation is that extension needs to be viewed within a wider rural development agenda; and that the increasingly complex market, social, and environmental demands on rural production systems requires a more sophisticated and differentiated set of services.

From the policy standpoint, this implies that governments need to act in redefining and implementing a coherent extension policy for a pluralistic system. Mainly because of low profitability, agriculture in many parts of Nigeria has become the sector for "the old, weak, sick, and disabled," for "early morning and late evening," or for "employed farmers from poor regions." As a result, agriculture is continually diminishing. Effective measures should be implemented to solve the problems that can't be solved by rural households individually and to keep the farming sector updated by strengthening agricultural extension and rural development.

Even when the government can't afford to finance all extension organizations completely, when there's not much strict supervision or monitoring, and when farmers have little to say in extension, both farmers and

extension agents can cooperate successfully because of the material incentive. Practices show that in China, free extension services aren't only too expensive to be funded by the government and create more bureaucracy in extension system, but also, even with very strict discipline, such services can't guarantee success.

To further vitalize extension organizations and overcome severe funding shortages, extension agencies, should find a way to "self-finance" or "self-develop" by running enterprises themselves. Most of these should be agriculture-related businesses. Rather than just relying on government financial allocation, extension organizations should be able to accumulate economic strength to support or subsidize extension services delivered to farmers as well as to motivate extension agents. The quality of extension is only as good as the quality of its recommendations to farmers.

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