



A Review on Current Status of Agricultural Extension Service in Nigeria

S. Hamisu^{1*}, A. M. Ardo², M. M. Makinta³, L. Garba⁴ and G. Musa⁵

¹Department of Crop Production Technology, College of Agriculture, Zuru, Kebbi State, Nigeria.

²Department of Forestry Technology, College of Agriculture, Zuru, Kebbi State, Nigeria.

³Department of Agriculture, Damboa Local Government Area of Borno State, Nigeria.

⁴Emir Sani Sami Staff Secondary School, College of Agriculture, Zuru, Kebbi State, Nigeria.

⁵Department of Agricultural Technology, College of Agriculture, Zuru, Kebbi State, Nigeria.

Authors' contributions

This work was carried out in collaboration between all authors. Author SH designed the study, managed the literature searches, wrote the protocol and wrote the first draft of the manuscript. Authors AMA, MMM, LG and GM finalized the design, protocol and checked the draft report. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJAAR/2017/34875

Editor(s):

(1) Chandra Sekhar Mohanty, CSIR-National Botanical Research Institute, Rana Pratap Marg, Lucknow, Uttar Pradesh, India.

Reviewers:

(1) Magoro Madimetja David, Tompi Seleka College of Agriculture, Republic of South Africa.

(2) Uddin Irenonsen Oyaimare, University of Nigeria, Nigeria.

(3) Md. Abiar Rahman, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Bangladesh.

Complete Peer review History: <http://www.sciencedomain.org/review-history/20074>

Review Article

Received 16th June 2017

Accepted 11th July 2017

Published 17th July 2017

ABSTRACT

This study reviewed on the current status of agricultural extension in Nigeria. Numerous extension approaches have been used in Nigeria. The basic and essential task of agricultural extension has been and still is: The exchange and means of sharing information, knowledge and skills for improved livelihood regardless of its organization. In a changing world and its environment, however, the context and hence the challenges in agricultural extension service changes; such as: improvement in agricultural production, environmental degradation, biotechnology, HIV/AIDS; reduced government support for public research and extension; entrance of private service providers; increasing private sector involvement and development of information and communication technology in extension service. The conventional development paradigm (T & V, University extension approach, ministry of agriculture approach, commodity/ sectoral agency

*Corresponding author: Email: saadubena@gmail.com;

extension, non-profit organizations or NGOs.). These old styles of agricultural extension services has an assumption that its primary task is to convey a superior technology to local farmers either as adopters or rejecters of innovations, but as the originator of technical knowledge of improved practices. There is now a rival view of extension represented by the participatory approach to development. The bottom-up views of strategies is an emerging paradigm in development thinking and practices. It was recommended that a demand-driven (private) extension service be institutionalized to thrive along with the UAES, which has often been seen as part of the social services rendered by government for the farming populace. It was also recommended that a legal legislative action be put in place, which would, among other things, define the responsibilities of the various tiers of government towards financing agricultural extension services in Nigeria.

Keywords: Current; status; agricultural extension; service; Nigeria.

1. INTRODUCTION

1.1 Background to the study

The term "Extension" is derived from a Latin word "Extendere" means "to extend". The Oxford English Dictionary of current English defined extension as: "an additional part", "addition or continuance" or enlargement. [1] defined extension education as an out of school voluntary adult education program, using teaching and learning principles, concerning peoples livelihood, carried out in systematic way in an atmosphere of mutual trust and respect. Also, extension is defined as "the extending of or a service or system which extends the educational advantages of an institution to persons' unable to avail them in a normal manner" [2].

The concept of agricultural extension differs from one country to the other and from one agricultural agency to another. For instance, in Australia and New Zealand, it refers to as agricultural advisory work, while in USA it is a cooperative extension service. Consequently, its definition depends on the objective of the organization providing the services [3]. Agricultural extension as a service or a system which assists farm people, through educational procedures, in improving farming methods and techniques, increasing production efficiency and income and bettering their levels of living and up-lifting the social and educational standards of rural life [2].

According to [4], agricultural extension involves the conscious use of communication of information to help the farmers to form sound opinions and make good farm decisions. The current models of extension approaches being used in Nigeria include some of the following:

training and visit (T&V) extension, University operated extension, Ministry of agriculture operated extension, Commodity/Sectoral agency extension, Special program for food security (SPFS), Sasakawa Global 2000 (SG 2000), Community based agricultural and rural development approach (CBARDA). The farmers' field school which is now being introduced, the latest one, which is still under incubation, is the participatory approach extension service.

The training and visit (T&V) extension, vigorously promoted by the World Bank in more than 50 countries, and religiously adopted in Nigeria. More than ninety five percent (95%) of the agricultural extension services delivery in Nigeria is provided by the government through the state agricultural development project (ADPs) using the T&V approach. Even though the T&V system was finally abandoned in the late 1990s by its promoters, the system still remains the most popular extension strategy in Nigeria. Despite, it's proven lack of fiscal sustainability and its inadequacy in meeting the demand of farmers, and its inconsistency with the growing emphasis on the role of the state as a facilitators rather than a provider of public service [5]. The current trend in extension is tilting towards reduced emphasis on uniform message as provided by the Training and Visit (T&V) system but rather to involve other stakeholders (including farmers and private sector) in gaining more ground [6].

The importance of agricultural extension in agricultural development is widely acknowledged, particularly in developing countries such as Nigeria where by in most developing countries, agriculture is the main source of livelihood [7].

In addition, [8] observed that since Kenya's independence in 1963, agricultural extension services have largely been provided by

government. This is equally true in Nigeria where public participation has been into all aspects of this economy including direct agricultural production [9,10]. The main objective of this study was to make a reviewed on current status of agricultural extension service in Nigeria using literature reviews.

2. AGRICULTURAL EXTENSION SERVICES IN NIGERIA

In Nigeria, extension services are delivered and funded by the government (public). The three tiers of government, Federal, State and the Local government play varying roles in the delivery and funding. The Federal government provides coordination, policy direction through the Federal Ministry of agriculture and natural resources, which is carried out by the National Food Reserve Agency (NFRA) formerly known as project Coordinating Unit (PCU). It was initially known as Federal Agricultural Coordinating Unit (FACU), which was merged with its sister department, the Agricultural Projects Monitoring and Evaluation Unit (APMEU) and called Project Coordinating Unit (PCU). The FACU and APMEU were established together with the state ADPs and the World Bank support in the early 1980s. The ADPs are the State institutions with the mandate to carry out extension services to raise agricultural production and improve rural living conditions. The ADPs are the extension arm of the State Ministry of Agriculture and Rural Development [11].

The 774 Local government authorities were created under a 1976 Law, to decentralize development program to the local level. The decree establishing them specifies that they should have major responsibilities for delivering extension services [11]. Despite the fact that, all Local government authorities have agricultural department and some staff, there is no indication that extension delivery is one of their major activities. This may be related to the dominance of the ADPs with the huge financial backing by the World Bank, Federal and State governments.

The ADPs started in three pilot sites, Funtua, Gombe and Gusau in 1975 known as enclave projects [12]. Their activities then included road and Dam construction, rehabilitations and maintenance of rural roads, provision of production inputs, in addition to the provision of technical advisory services to farmers. The overwhelming successes recorded influence the establishment of six more enclave at Ayangba,

Lafia, Bida, Illori, Ekiti-Aroko, and Oyo north between 1979 and 1982 [12]. This led to the creation of the first set of state wide ADPs in Bauchi 1981, Kano in 1982, Sokoto in 1983 and Kaduna in 1984 [13].

One of the strong mechanisms in extension delivery is a linkage between agricultural research, extension and the farmers. Training and Visit (T&V) extension system remain the basic strategy for public extension delivery; the Research-Extension-Farmers-Inputs-Linkage-System (REFILS) is the management mechanism being used to bring together stakeholders in agricultural development as equal partners [12]. The institutions involve include the ADPs, National Food Reserve Agency (NFRA), a department under the Federal Ministry of agriculture and Water Resources (FMA & WR) responsible for the coordination of the multilateral Donor supported Agricultural Development Projects (ADPs). The National Agricultural Extension Research and Liaison Services (NAERLS), is the planning and coordinating agency for agricultural extension liaison nationwide and for conducting research on technology transfer and adoption [14]. Zonal REFILS activities are coordinated by zonal coordinating research institutes. The institute for Agricultural Research (IAR) of Ahmadu Bello University, Zaria, is responsible for the North-west zone. Lake Chad Research Institute (LCRI) Maiduguri is in-charge of North-East zone.

According to [15], the single most crucial factors that brought about the dismantling of the T&V extension system was the problem of financial sustainability and a generic problem made worse by the high cost of the system. At project closure, most of the ADPs in Nigeria had weak and uncertain funding structure, and were providing poorer service than should expect of such semi-autonomous development institutions. Although they were developed to perform a temporary role, in providing investments and services in line of relatively ineffective line agencies, the ADPs have nonetheless assumed a permanent status which supports the contention that this type of agency was needed to implement the development envisaged under the project. But the structural organization of the ADPs has not been corrected to reflect its new role as a permanent development agency, except in few states. Part of the problem of its temporary status is that majority of the staff, with the exception of those seconded from the Ministry of Agriculture, were on temporary appointment. This weakens

morale of the extension agents, especially after the World Bank withdrawal.

According to [11], after the closure of the World Bank loans in the early 1990s, the tempo of the ADPs activities slowed down drastically resulting in shrinkage of their roles. In some states the ADPs staffs were only paid salaries, which were the statutory responsibility in funding arrangements. Some of this shrinkage is necessary, as the ADPs have often performed activities such as input supply, which the private sector could do better. In this light, funding cuts have had positive effect of compelling the ADPs to review their roles.

The T&V extension system has also been questioned for excluding stakeholders from participation in extension delivery systems. Alternative private service providers like Non-governmental organizations (NGOs), and private sector institutions have the same general objective as the public extension services – serving farm families and rural people but they differ in their general background, specific philosophies and guiding principles, processes and means of implementation. This situation indicates the potential need for other extension models [11].

2.1 University and Research Institutes Operated Extension

Some Universities in Nigeria undertake rural development activities in addition to their teaching and research responsibilities. Typical examples are: the Badeku project of the University of Ibadan; the Okpuje project for the University of Nigeria, Nsukka; the Isoya rural development project of Obafemi Awolowo University and the Zaria aided rural change project for Ahmadu Bello University, Zaria; these projects are initiated to improve socio-economic conditions in selected Villages with manageable small populations [11].

In addition to the extension outfits of the conventional Universities, the agricultural Universities in Umudike, Abeokuta, and Makurdi also engage in extension activities in nearby areas. The University of Agriculture at Makurdi has a cooperative farmer in selected villages. The University of Agriculture at Abeokuta has a formidable Agricultural media resources and Extension Center. The extension outreach of Micheal Okpara University of Agriculture at Umudike was implemented by the College of

Agricultural Economics, Rural Sociology and Extension. The agricultural Research Council of Nigeria (ARCN), a supervisory body to the 18 Agricultural Research Institutes (NARIs), has re-introduced the adopted village concept in all the NARIs. It is now mandatory for each institute to operate at least one adopted village [16].

2.2 Ministry of Agriculture Operated Extension

This dates back to 1893 when a Department of Botanical Research was established at Olokomeji in the present day Ogun state. Later the headquarters of the department of agriculture for the Southern and the Northern Nigeria were established in 1910 and 1912 respectively. Today, there are 37 Ministries of Agriculture (one in each state) and the FCT (Abuja). These were charged with the responsibility of agricultural extension service. In doing this, each Ministry received financial and technical support from the Federal Ministry of Agriculture [17].

Some specific functions of the Ministries of Agriculture include: training of personnel, training of professional staff; training of technical staff and farmers in the production, distribution, processing and marketing of agricultural products, supply of agricultural inputs to farmers; assisting in social development and home – making and youth development [17].

2.3 Commodity/Sectoral Agency Extension

This was aimed at raising the production of a single crop as rapidly as possible, thus commodity Boards were established in strategic areas of the country where production of the commodity was a major occupation, with favorable agro climatic conditions. The commodity Board was semi-autonomous and employed their own staff as well as supplied inputs to farmers at subsidized rates. The clientele of each Board was the farmer growing the specific crop, hence the Cocoa Board, Groundnut Board few to mentioned [17].

2.4 Extension Work by Registered NGOs

Some registered NGOs employed extension workers to carry out extension work and communication development for their target system. Some of such NGOs are assisted by the government financially. However, they source

their funds from national and international bodies [17]. While, majority of the international NGOs involved in extension delivery are Christian Based International Organization such as ECWA, CRUDAN, and COCIN. The only international NGOs known solely for its extension activities in Nigeria is Sasakawa Global 2000 [12].

2.5 Farmers Organizations Involved in Providing Advisory Services

There are different types of farmers based organization operating in Nigeria. They include farmer cooperatives, farmer and commodity associations, and farmer groups. As part of the cooperative structure in the country, there are Ministries commerce and cooperative in all states. However, the performance of cooperatives, especially farmers' cooperative has been questioned [18].

As a result of the unsatisfactory performance of farmers' cooperative and the call by government for private sector to participate in development activities, several farmers' association sprang up in the nineties. Such as commodity base and registered commodity producer association while others remains general in nature such as: All Farmer Association of Nigeria (AFAN), Federation of Farmer Association of Nigeria (FOFAN), Farmer Association of Nigeria (FAN) etc, most of these associations seeks to represent the interest of their members. As such provision of advisory service, a grass root activity, is not an important part of their contribution [19].

The farmers associations are not directly involved in providing extension services to their members. However, they are indirectly engaged through farmer facilitators in providing technical advice to their members. In addition to this initiative a number of projects in Nigeria are using the group participatory approach. They include National Fadama Programs, Community-Based Agricultural and Rural Development Project (CBARDP), National Special Program on Food Security (NSPFS), Local Empowerment and Environmental Management Project (LEEMP) just few to mentioned [19].

3. CURRENT CHALLENGES FOR AGRICULTURAL EXTENSION IN NIGERIA

Private participation or outright privatized extension has been the subject of widespread

discussion by those considering the challenges of providing an efficient agricultural extension system for farmers in developing countries [20,21,22].

According to [17], Africa's development score card and by implication Nigeria is disturbing. It is characterized by:

- Rising poverty
- Almost 40% of the population lives below the poverty line
- Deepening environmental degradation
- Poor region of the world
- The only region in the world where poverty is projected to rise this century
- Poor information and communication technology linkage

Nigeria remains grouped among the 43 "Low income food-deficit countries" (LIFDCs) in Africa. The National Agricultural Extension Research and Liaison Service (NAERLS) have the challenges not only to meet the nation's needs for sustainable agricultural development and food security but indeed to meet the set millennium goal [17].

4. IMPEDIMENTS TO IMPROVED PUBLIC/PRIVATE COLLABORATIONS

Public/private partnership (PPP) is the policy vogue in Nigeria, not only in agricultural and rural development projects but in other sectors as well [23]. However, it is worthy to note that the PPP concept itself is new to government and the impediment currently hindering the attainment of agricultural policy objectives, if not properly addressed may likely impair the smooth running of the partnership or weaken it. Some of the impediments are:

4.1 Policy Impediment

Little attention has been given to policy instruments and variable such as developmental needs of the people, target beneficiaries, budgetary constraints, employment opportunities, population growth rates, environmental sustainability and other socio-economic needs of the people [24]. The most difficult and challenging policy issue facing the agricultural extension service today is how to secure a stable source of funding [6]. According to them, since the 1980's funding of agro-technology generation and transfer became an increasingly important policy issue. They contended that this is because

of progressive decline in financial support for extension.

Despite the resuscitation of extension in the global agenda and the adoption of the public-private-partnership (PPP) strategy by the present government in Nigeria, the agricultural policy in general and extension policy in particular is still characterized by improvisation and ad-holism. Development planners have indicted policy makers for the lack of sustainability, continuity, realism and consistency. Successive governments have come up with new agricultural policies and programs which were different from their predecessors [24].

Some of the projects/programs implemented over the years include, cooperatives 1935 to date, commodity boards 1945-1985, agricultural research institutes 1964 to date, ADPs 1975 to date, NACRDB 1973 to date, OFN 1979- 1983, presidential initiatives on cocoa, cassava, rice, livestock, fisheries and vegetable oil 1999-2007 [23].

4.2 Strategic Impediment

Providing agricultural extension services to small holder farmers on a sustainable basis requires a well-articulated vision and implementation strategy. The vision will provide framework for a long-term strategic plan to guide the development of sub-component and the involvement of all stakeholders. The vision 2010 provides for that need but the implementation strategies have not been fully articulated [24].

4.3 Structural Impediment

Structural and institutional stability are required for an enhanced and sustainable provision of advisory services. Stability allows for long term strategic planning and commitment of resources on a long term basis. Frequent organizational changes within extension directly impact the organization's effectiveness as well as the collaboration among the various advisory service providers. The Federal Ministry of Agriculture has undergone structural changes three times in the last few years. Currently, it has just been changed from Federal Ministry of Agriculture and Water Resources (FMA & WR) to Federal Ministry of Agriculture and Rural Development (FMA & RD). If the public-private-partnership is to work well in Nigeria a favorable conducive atmosphere for long term commitment of resources by the private sector must be created.

This is done through long term policy instrument and government commitment to those plans [24]. Agricultural extension is crucial to development in the Agricultural sector and overall national development [25]. According to [26], there is need to legislate Agricultural extension policy so that it will be well organized, financially stable for effectiveness and sustained impart.

4.4 Financial Impediments

The most difficult and challenging policy issue facing the agricultural extension service today is how to secure a stable source of funding [27]. For instance, in the early days of the present democratic government 1999-2015, while the National budget has increased by more than 160 percent, the share of agriculture was instead reduced by fifty percent. The commitment by government to fund agricultural Extension service delivery in Nigeria has been a serious impediment to the extension delivery in Nigeria. One of the factors that necessitated the withdrawal of the World Bank from funding the ADPs has been attributed to lack of commitment by government to pay their counterpart fund required for the execution of the project [11].

Agricultural practices must change in tropical Africa in order to achieve the millennium development goals in agriculture. According to him these countries can no longer rely completely on traditional systems that result in poverty and hunger. He maintained that new technologies still lie in Universities and crop improvement centres that require more effective and practical extension services in order to deliver to the growers [28].

More so, the ineffectiveness and inefficiencies, which characterize the public extension service, have given rise to the wide-call for a private sector-driven extension services [29]. Therefore, the need to strengthen the existing extension delivery service in the country to make it more effective and efficient to achieve this onerous task, agricultural extension deserves to be appropriately funded by government as well as all other stakeholders in agriculture in Nigeria [29].

5. CONCLUSION

Agricultural extension is crucial to development in the Agricultural sector and overall national development. There is need to legislate Agricultural Extension policy so that it will be well

organized, financially stable for effectiveness and sustained impact. The fact that extension cuts across all other sub-sectors of Agricultural demands that its coordination, funding, subject matter, staffing, geographical coverage and organization be guided by a framework in which its programs and activities are implemented. Nigeria has to respond to the call of GCAE to formulate comprehensive and well-articulated Agricultural Extension Policy (AEP). The current trend in extension is tilting towards reduced emphasis on uniform message as provided by the training and visit (T&V) system but rather to involve other stakeholders (including farmers and private sector) in gaining more ground.

6. RECOMMENDATIONS

The following are recommendations for this review:

- i. A demand-driven (private) extension service be institutionalized to thrive along with the UAES, which has often been seen as part of the social services rendered by government for the farming populace.
- ii. A legal legislative action be put in place, which would, among other things, define the responsibilities of the various tiers of government towards financing agricultural extension services in Nigeria.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Williams SKT. Rural development in Nigeria. University Ile-Ife Nigeria. Ife Press. 1978;129.
2. Maunder A. Agricultural extension. A reference manual. FAO; Rome, Italy; 1978.
3. Ogumbameru BO. Practical agricultural communication, Daily Graphics Ltd, Ibadan, Nigeria; 2001.
4. Van den Ban AW, Hawkins HS. Agricultural extension. 2nd Edition; Blackwell Science, Oxford Publishers, London. 1998;267-268.
5. Isma'il YI. Current state of agricultural extension in Nigeria: A seminar at Manbaiya House Kano. Organized by Bayero University, Kano, Nigeria; 2009.
6. Robert C, Robert T. Changing incentives for agricultural extension. A review of Privatized Extension Network. 2003;132.
7. Wanga E. Key note address on new perspective in rural extension. Regional Refresher International Course in Rural Extension (ICRE) on: Challenges and Prospects Exertion University; 1999.
8. Nambire E, Omiti J, Muguruievi L. Decentralization and access to agricultural extension. Conference of Agricultural Economics, Gold Coast, Austria; 2006.
9. Adedoyin FS. Policy issues and legislation in agricultural extension delivery in a democratic and parag economy. Proceedings of the 9th Annual National Conference of the Agricultural Extension Society of Nigeria; 2004.
10. Ozor N, Madukwe MC. Strategic for increasing private sector participation in funding agricultural extension services in Nigeria; 2004: The professionals reaction in Enugu state national council on privatization (NCP). Privatization Handbook (3rd Edition). Abuja NCP Secretariat. 2001;114.
11. World Bank. Project coordinating unit. Annual Report on Agricultural Extension Service Delivery; 2004.
12. Arokoyo T. ICTs in transformation of agricultural extension: The case study of Nigeria; 2008.
13. Oladele OI. Effects of World Bank loan withdrawal on the performance of agricultural extension in Nigeria. Nordic Journal of African Studies. 2004;13(2):141-145.
14. United State Agency for International Development (USAID). Agricultural inputs markets in Nigeria. An Assessment and strategy for Development. Sponsored by Federal Government of Nigeria; 2003.
15. Anderson JR. Agricultural advisory service. A background paper for the innovation through science and technology. Chapter 7 in the World Development Report; 2007.
16. Abdullahi YM, Auta SJ, Chikwendu DO, Murtala GB, Ilu IY, Abubakar SZ. Testing participatory agricultural extension in North-Western Nigeria: Needs, prospect and challenges. Proceedings 12th Annual National Conference (AESON); 2007.
17. Udiandeye CU. Current issues in agricultural extension and technology. Keynote at the Department of Agricultural

- Economics and Extension, Faculty of Agriculture, Bayero University Kano, Nigeria; 2009.
18. Giwa RI. Assessment of viable cooperative in Northern Nigeria. Funded by EEC-Nigeria Cooperative Project; 1992.
 19. Abdullahi YM, Auta SJ, Akpoko JG. Characteristics of farmers organization selected state of Nigeria: A need for reorientation and empowerment. Nigerian Journal of Agricultural Extension. 2003;14.
 20. Kidd A, Lamers J, Ficarelli P, Hoffman V. Privatizing agricultural extension. Journal of Rural Studies. 2000;16:381-401.
 21. Rivera W. Agricultural and rural extension worldwide options for institutional reform in developing countries. Rome F.A.O; 2001.
 22. Katz E. Innovative approaches to financing extension for agricultural and natural resources management. Conceptual Considerations and Analysis of Experience. SWISS Centre for Agricultural Extension; 2000.
 23. Federal Ministry of Agriculture and Water Resources. National Food Security Program. Abuja; 2008.
 24. Asiabaka CC. The need for agricultural extension policy in national development. Keynote Address Presented at the 13th Agricultural Extension Society of Nigeria (AESON); 2008.
 25. Koyenikan MJ. Issues for agricultural extension policy in Nigeria. Journal of Agricultural Extension Society of Nigeria. 2008;2:52-62.
 26. Contado TE. Formulating extension policy in improving agricultural extension: A reference manual. Swanson et al. (Eds), Rome, FAO; 1997.
 27. Agwu AE, Chukwuone NA. Funding of agricultural extension in a democratic and deregulated economy: The cost sharing approach. Journal of Agricultural Extension. 2005;8:90-98.
 28. Ene-Obong Efiom Ene-Obong. Tailoring tropical African agriculture towards the millennium development goals: A plant breeder's perspective. Third Inaugural Lecture, Michael Okpara University of Agriculture, Umudike. 2007;28-29.
 29. Ozor N, Madukwe MC. Strategies for increased private sector participation in funding agricultural extension services in Nigeria: The professionals reaction in Enugu State. Journal of Agricultural Extension. 2005;8:7-15.

© 2017 Hamisu et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

*The peer review history for this paper can be accessed here:
<http://sciencedomain.org/review-history/20074>*