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Assesement of Nigeria Agricultural Extension Services

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Abstract:- The Nigerian agriculture is growing sluggish with low production and productivity. This may be due poor agricultural and advisory service in the country. An overview of public and private agricultural extension service in promoting agricultural production and productivity for Nigerian economic growth is offered in this study. Major factors of agricultural extension were recognized and described in this paper. Major constraints to effective extension service delivery in improving agricultural productivity and production were discussed. Absent of legislative policy, weak funding and diversification, low level of private sector participation, low knowledge of extension personnel and weak capacity of extension organization were the major problem to agricultural extension in Nigeria. This study concluded that lack of legislative policy and poor funding were the major constraints to extension agricultural extension service. the study recommended that the challenges identified in the study should be given priority while implementing the agricultural extension policy.

Keywords:- *Private and public extension, extension delivery, constraints, Nigeria.*

I. INTRODUCTION

Nigeria is the most populated nation in Africa, with 223,804,632 million people (UN Projection, 2023), it has an economy of US $481 billion in 2015 (World Bank, 2017), the largest on the region. In spite of abundant natural resources, there is much poverty, with about 40 percent (80 million) of Nigerians living below the state poverty line, which cannot spent up to 137,430 naira/year (World Bank, 2020). As of 2021, 45 percent of all death of under-five children were malnourished and projected of 2 million suffer from severe acute starvation (UNICEF, 2022). Life expectancy was at 54 years in 2019 (World Bank, 2020). A projected 50 million youth are jobless today (IFPRI, 2017) contributing to social insecurity. Agriculture is the largest sector of the Nigerian economy with 70 percent of the population employed in agriculture. Agriculture pays 23 percent of GDP (FMARD, 2016). Agriculture contributes 75 percent of all other export earnings (FMARD, 2016). However, less than one percent of cultivated land is irrigated, significantly depressing total land productivity (FAO, 2016). Despite 77 percent of the land in Nigeria being offered for agriculture, Nigeria spends NGN 1.3 trillion (approximately US $4.1 billion) annually in food imports (Matsilele, 2017; Elebeke, 2017). Support to agriculture and extension services has gone up and down in response to the overall frame conditions and economy.Agriculture represents only two percent of the domestic budget, despite Nigeria's membership in the Maputo Declaration where they committed to fund agriculture at 10 percent of its total budget (FMARD, 2016).

The first State Policy on Agriculture was adopted in 1988, but not legislated. The policy was then reviewed in 2001. Since 2001, a number of agricultural programs have been announced by the successive political administrations. However, they seem to have been largely unsuccessful in improving food security or livelihoods (CTA, 2011). In 2012, the Nigerian government announced the Growth Enhancement Support Scheme (GESS), which launched an e-Wallet system to distribute fertilizer supports directly to farmers through mobile money to avoid the graft and losses that had previously happened. However, e-Wallet has 15 million subscribers, several million of whom are women farmers (Adesina, 2017).

In 2016, the central government of Nigeria launched a subsequent policy to the Agriculture Transformation Agenda called the Agricultural Promotion Policy, or the Green Alternative, which highlights the need to fund, organize and increase quality of extension services across the nation. Moving trends in the enabling environment of Nigeria include the increase of mobile phone use as well as the attraction of more private-sector agricultural business. Mobile phone penetration in Nigeria is at 94 percent, with smart phones at about 30 percent penetration and feature phones at 70 percent diffusion (Adepetun, 2017). However Nigeria has also moved toward the privatization of input markets. During the time that AkinwumiAdesina was the Minister of Agriculture (2010 – 2015), "the total of seed companies operating in Nigeria improved from just 11 to more than 100. The new fertilizer market mobilized five billion naira from private financiers during this time" as well and major global players such as Syngenta and Sasumastarted doing business in Nigeria (Adesina, 2017).However, the study purpose was wants to examine Nigerian agricultural extension service. The objectives of the study are

- To analyses Nigeria public and private agricultural extension service.
- To examine constraints associated with agricultural extension service in Nigeria.

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II. AGRICULTURAL EXTENSION SERVICE IN NIGERIA

Nigeria agricultural extension services include transferring knowledge to farmers, advising and educating farmers in their decision making, enabling farmers to clarify their own goals and possibilities, and stimulating desirable agricultural developments. Traditional public-sector extension services use a variety of extension programs to overcome barriers to technological adoption without much success (Anderson and Feder, 2004;Anandajayasekeram*et al.*, 2008, Aker, 2010). Historically, agricultural service delivery in developing countries started with production-oriented limited extension services for export crops. The attention was diverted in the fifties to food production and improved farming techniques (Anandajayasekeram*et al.*, 2008).

The development of the Nigeria economy heavily depends upon the speed with which agricultural growth is achieved. The rate of agricultural growth in Nigeria in turn depends on the speed with which the current subsistence oriented production system is transformed into a market orientated production system. Among the many institutional support services that need to support the transformation process, the agricultural extension service plays a critical role, since it contributes to the development of the skill and knowledge of farmers to adopt new and improved technologies (seed varieties and animal breeds, implements, chemicals and practices etc.), and the methods and processes with which the skill development and access to information are realized. Presently, extension is mostly provided by the public sector, operating in a decentralized manner where extension information is implemented at the district level. The public sector is the single most important player, especially in terms of inputs, at the local level for smallholders. The private sector and NGOs (known to have many innovative and participatory approaches), while becoming increasingly important, are often left out of extension initiatives. Nigeria has an impressive infrastructure for extension, including dedicated extension offices or ADPs in each state, a large number of agricultural research institutions and extension training programs, a system to connect them all, the REFILS and an extension workforce of 7,000 public agents (28 percent female) and an unknown number of private extension agents employed by agribusiness companies and non-governmental organizations (FMARD. 2016). Most of these public initiatives were established with World Bank funding in the 1990s and have since suffered from lack of funding and coordination in times of both economic growth and recession. With renewed focus and political will, these important assets can be leveraged for important extension. Falling of oil price a few years ago, the government is taking a fresh look at agriculture as the second alternative to the economy, particularly as a source of foreign exchange. Some actors are hopeful that this is a golden moment for agricultural reform.

III. PROBLEMS OF AGRICULTURAL EXTENSION SERVICE IN NIGERIA

The extension services bridge the gap between researchers and farming population for the acceptance of innovation in other to improve their livelihood (Anderson and Feder, 2003). Different studies show that farmers who have regular contact with extension agent are more willing to change than those who do not have extension contact (Ogunlana, 2004; Anderson, 2007; Kassie*et al.*, 2009). Lack of extension support, preferential treatment within extension organization, and inadequate motivation/incentives from the government has a detrimental effect on extension information delivery (Anderson, 2007). Insufficient facilities and the monetary limitation stop the movement of an extension officer thereby preventing the spread of information (Anderson, 2007). This concern brings critical difficulties with information delivery and extension activities which resulted to some of the extension agents have to seek alternative income source for their survival (Anderson and Feder, 2004). Lack of motivation among extension officers will cause them to be unwilling in committing their tasks (Anderson and Feder, 2004). Furthermore, the poor extension infrastructures in most of developing nations around the world are among factors that hinders the delivery of extension message (Anderson, 2007). However, nearly all farmers within developing countries are in geographically spread out villages where movement links is awful. These make extension agent to find it difficult to reach farmers and show them the benefit of technological innovation. Agricultural extension and advisory services play an imperative role in agricultural improvement and can contribute to improving the livelihood of the farmers and other people in rural areas (Umeta*et al.*, 2011).Linking smallholder farmers with require agricultural information can help to drive sustainable productivity and profits, improve livelihoods and increase household incomes. Information access by smallholder farmers is generally considered a critical part of long-term development strategies that may reduce poverty andhunger in rural communities. There are several other factors affecting access and use of agricultural information and performance amongst smallholder farmers. Studies by Barrett (2008) and Chapoto*et al.* (2013) outlined key factors including; location, farm size, economic and linkages to financial services, ability to manage water resources, costs of inputs, transaction costs, price volatility, access to and adoption of production technologies. Small-scale farmers have learnt agricultural activities in emerging countries (Kameswari, *et al.*, 2011; Siyao, 2012; Angelucci*et al.*, 2014). However, their agricultural production is described by low yield (Traore*et al.*, 2011; AGRA, 2014) due to lack of use of agricultural inputs (Kinyangi, 2014). Farmers need farm information to fulfill their farming needs. Thus, better choices are made by knowledgeable farmers, who in turn are answerable for improving agricultural productivity. The transfer of farm information is done by extension services. Nevertheless, there are very few extension officers to serve large number of farmers (Sanga*et al.*, 2013).

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The private extension service comes on board, to give support in training and orientating farmers (Adebayo, 2004). Their aim was to fill the extension gap between farmers and public extension services in addition to make profit. However, that brings another challenge to the farmers as the private extension deliver their services for profit making. However in comparative study between private and public extension services in Nigeria was found that the majority of the private extension officers are retired agricultural staff and self-employed graduates and they have a mutual understanding with farmers which makes the majority of the them preferred information from private extension workers (Orokoyo*et al.*, 2006). This trust is due to their efficient service delivery (Saliu and Age, 2009). A study of the role of private extension service in agricultural development found that the private extension programmed have promoted agricultural production and kept agricultural skills in the rural area (Yahaya and Luka, 2012). Though agricultural non-governmental organizations (NGO) have promoted information dissemination and reduce the gap between the public extension workers and current farmers (Adedeji*et al.*, 2013). With all the participation of Private, NGOs and public extension service in the country, yet the farmers' extension agent's ratio is wide. Therefore an efficient use of ICT may reduce the farmers' extension ratio and subsequently will deliver information within the shortest possible time at lower cost.

IV. PRIVATE EXTENSION SERVICES

The private sector has woken up to the need and the opportunity to complement the public sector in providing extension services to farmers, for either improving farmer production to off taker or generating demand for agricultural inputs they sell. Quality inputs are in high demand and there is a dearth of seed companies, creating an opportunity for the private sector. The private sector increasingly views extension services as a corporate social responsibility and as a way to increase brand loyalty with the farmers. Successes have been seen in out-grower schemes in which a processing company organizes farmers, provides inputs and training. This shift is a changing attitude from previous decades where the government was expected to provide all extension services. Whether it be in the formal space with input suppliers (e.g. Syngenta); farmer organizations (e.g., cooperatives); output side (e.g., Tomato Jos); private mobile operators (e.g., Vodacom), or the informal space with large number of traders that the majority of farmers likely engage with on a regular basis, there are a large number of private sector actors. These are namely Notore for fertilizers; Stallion Rice Company, Dangote and Olam for rice production; BabbanGona for maize production (sold on to Nestle) and rice production; Heineken for sorghum production; Arla Foods for dairy cooperatives; Syngenta for a variety of inputs; and the public and private commodity exchanges (Africa Exchange) for storage and handling. Harvest Fields trains sprayer service providers as well as farmers directly on crop protection and through CropLife (an international agricultural industry association).

British American Tobacco has also been successful at providing end-to-end services and training to farmers including credit, inputs and off-take (CTA, 2011). Due to the uncoordinated effort among these entities, as well as the lack of a national registry, it would be challenging to catalog all private actors within EAS; the important thing to note is that it is a growing sector and an important example of pluralism within extension and advisory services. Some activities are carried out independently by these private sector actors, and some are supported by donor projects. Olam is working with USAID Markets II and IFAD. Stallion and Harvest Fields are working without donor support. Notore worked with DfIDPropCom, but also works on its own. BabbanGona has also received donor support. Several seed companies have worked with Sasakawa Global 2000, including Premier Seeds, Dizengoff, Manoma Seeds and Maslaha Seeds (SAA, 2017). There is limited coordination directly between the private sector and the government on extension. The main platform to provide an opportunity for formal engagement with the private sector is the Research-Extension-Farmer-Input Linkage System (REFILS) through its Annual Extension Review and Planning Meeting, which brings all the major actors in EAS together with NAERLS as the convener of this meeting. However, experience has shown that other than the input dealers (seeds, agrochemicals and fertilizers), the private sector hardly ever participates in this activity convened by NAERLS. Another major activity that NAERLS convenes is the Annual Agricultural Performance Survey (APS). The APS brings together several collaborators, including the Central Bank of Nigeria (CBN), the National Bureau of Statistics (NBS), the National Meteorological Agency (NIMET), the Federal Ministry of Agriculture and Rural Development (FMARD) and twelve agricultural research institutes.

However, participation from the private sector has been almost non-existent, although starting to be beginning. There are a few reasons for negligible involvement of the private sector with NAERLS. The Institute has not proactively engaged the private sector through its market information services (MIS), which involves regularly collecting and disseminating market prices of commodities in selected markets in all the geopolitical zones. Additionally, the extension research conducted by NAERLS has not looked at the activities of the private sector. For NAERLS to have strong engagements with the private sector, it will really have to go beyond the provision of regular, routine public services, which may mean appraisal of its mandate (USAID, 2017). Rarely, a company representative will come to NAERLS' meetings, but there is no ongoing active partnership. Some government staff expressed the notion that since quality inputs are so lacking in Nigeria, a company does not have any incentive to engage in extension to convince farmers to buy their products as long as the products are off decent quality. Many private sector companies and the donor projects working together (USAID, 2017). The company sees extension as a strategic play to understand their consumers' needs and better market their products. There are two known exceptions to the private/public divide. The first is the Anchor Borrowers Program initiated by the Central Bank of Nigeria.

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Problems relating to agricultural extension strategies are likely to have a major impact on the success of adequate agricultural productivity and food security in Nigeria. Analysis of some studies (Iwuchukwu and Igbokwe 2012; Akinbamowo 2013; Obiora and Emodi 2013; Hamisu*et al.* 2017) and information from FMARD (2012) found that numerous factors are accountable for the ineffectiveness and limited impact of agricultural extension policy in Nigeria. These as follows; absence of a legislated extension policy and policy inconsistency (FMARD 2012; Akinbamowo 2013; Obiora and Emodi 2013), funding complications and weak diversification (Iwuchukwu and Igbokwe 2012; Hamisu*et al.*, 2017), a low level of participation by the private sector in the delivery of extension services (Iwuchukwu and Igbokwe, 2012), weak synergy across government levels (FMARD 2012; Inegbedion*et al.*, 2018), weak capacity and low knowledge of extension personnel (Issa 2013; Suvedi, *et al.*, 2017) and inadequate manpower for the effective delivery of services (FMARD 2012; Obiora and Emodi, 2013).

The federal government launched quite a lot of programs to improve agriculture and food security, including providing Extension services for the first time and distributing subsidized agro-chemicals. Several World Bank-funded ADPs were initiated with state governments in 1975, and more added in 1980. The ADPs were well received and spread rapidly, reaching nationwide coverage by 1989. All ADPs included a self-governing project management unit, an adaptive research component, an input delivery system, a rural infrastructure component for rural feeder roads and water supply, and a systematic extension delivery strategy. The management of the ADPs was well organized with the federal government, and some consider this period to be the pinnacle of agricultural extension in Nigeria (CTA, 2011). The extension agent coverage was one agent to 1,000 – 1,500 farm families (FMARD, 2012). However, as there was no plan to sustainability or transition the ADPs, once the World Bank withdrew funding in 1995, the whole system rapidly declined (CTA, 2011; FMARD, 2012).

In 2001, the National Policy on Agriculture was revised and explicitly mentioned extension for the first time (FMARD, 2012). Although extension had always been a critical responsibility of the government, no policy had explicitly recognized it as such until 2001. The revised policy indicated that states had primary responsibility for extension and that this must gradually regionalize to local governments, while the federal government should cooperate with them. Funding for extension was intended to be shared among thethree tiers of government (Local State and Federal and FCT) (CTA, 2011).

V. CONCLUSION AND RECOMMENDATION

The studyconcluded that absent of legislative policy were the major problem to agricultural extension in Nigeria. This study recommended that major issues of the study should be given priority. Agricultural extension policy should be legislated and implemented for agricultural growth and development of Nigeria.

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