

Abdu-Raheem K. A.⁴⁸ & Worth S. H.⁴⁹

Correspondence Author: K Abdu-Raheem Email: kamalabduraheem@yahoo.com

ABSTRACT

As part of a larger study encompassing sub-Saharan Africa, this paper, the second in a sequence of papers, focuses on West Africa. National extension policies of the region – explicit or implied – were evaluated by means of a framework published by the FAO to guide extension policy formulation. Of its nine components three anchor the framework – mission and goals, approach and functions, and clientele – and were used in this appraisal. Unexpectedly, the study found that only one country of the 17 nations constituting West Africa has a legislated (i.e. formally adopted) national extension policy. Implied policies were, therefore, garnered, where feasible, for the rest via government publications (e.g. agricultural project reports) and published researched studies from academic and recognised developmental institutions.

Broadly, the assessment observed that West African extension missions and goals focussed on improving profitability of agricultural business and increasing output volumes and market share and achieving objectives such as enhancing quality of life and agricultural development. In terms of approaches and functions, the study found that public sector extension in West Africa is undergoing transformation including decentralization and outsourcing extension services in the context of adopting a pluralistic system of extension delivery. While up to six models of extension are commonly applied in the region, the dominant context is pluralism encompassing public, private and NGO-based services. The dominant clientele were stated to be women and small- and medium-scale farmers. However, entrenched barriers limiting women's participation are still insufficiently addressed.

The study concludes that it is vital for West African governments, perhaps cooperatively, to develop and establish formal extension policies that will manifest their vision, mission, goals and methods to provide a stable framework within which targeted clientele and be purposively supported in the pursuit of sustainable agricultural development.

Keywords: Extension, extension policy, West Africa, mission and goals, approach and function, clientele

1. INTRODUCTION

The importance of agriculture as a viable driver for economic development and sustainable livelihood is widely acknowledged. In Africa for example, agriculture employs not less than 65% of the total labour force, while accounting for about one-third of the gross domestic

⁴⁸ Postdoctoral Fellow (Agricultural Extension and Rural Resource Management, University of KwaZulu Natal) and Lecturer, Department of Agricultural Economics and Extension Services, Ekiti State University, Ado-Ekiti, Ekiti State, Nigeria. Email: kamalabduraheem@yahoo.com

⁴⁹ Agricultural Extension and Rural Resource Management, School of Agricultural, Earth and Environmental Sciences, University of KwaZulu Natal, Pietermaritzburg, KwaZulu-Natal, South Africa. Email: worths@ukzn.ac.za.

product (World Bank, 2008). Despite this substantial contribution of agriculture to the economy, the labour productivity in agriculture remains low in sub-Saharan Africa. The average value added per worker in 34 sub-Saharan Africa nations is US\$ 318, relative to the global average of US\$ 1,000 for the same period (Rosen & Shapouri, 2012). This lagging pace of Africa undoubtedly constitutes a major contributing factor to the entrenched poverty ravaging the region.

With specific reference to West Africa, the main focus of this paper, agriculture is particularly essential to the economic growth and development. The sector provides employment for an average of 60% of the labour force, while delivering not less than 80% of the food requirements for the teeming population of about 300 million people in the region (World Bank, 2011). Agriculture also serves the main source of raw materials for processing and manufacturing companies, thereby contributing about 15.3% to export of goods and services in ECOWAS (International Monetary Fund-IMF, 2010). With the exclusion of crude oil exportation from Nigeria, agriculture contributes not less than 30% of the export earnings, while accounting for about 21% of the regional import bill (United Nations Economic Commission of Africa, 2010). Also, the average contribution of the sector to the Gross Domestic Product (GDP) of West African countries is 35%, albeit with noteworthy disparities among the countries. Notwithstanding all these contributions, the productivity and yields of agriculture in West Africa are generally low as compared to those of other developing regions of the world. The cereal production levels of all the West African countries, except for Ghana, are still below the 1990 cereal production levels for Latin America and South Africa. (FAO, 2012). This unfortunate condition has been attributed to a number of factors, including: poor levels of mechanization, inadequate fertilizer usage, insufficient access to improved seed, dependence on rain-fed agriculture, and poor management of water.

In addition, the challenges further affecting agriculture on global and local scales include: population growth escalation, climate change effects, land tenure issue, increasing number of HIV/AIDS-infected farmers, and issues concerning market liberalisation and access. Amid these challenges, the importance of agricultural extension in advancing agricultural developments, particularly in West Africa, seems currently downplayed both practically and in literature and governmental reports. A recent account from the Worldwide Extension Study (2011: 1) categorically indicated a “lack of information on extension for several West African countries”. This paper seeks to help redress this on the premise that extension is particularly important to the success of any national agricultural production endeavours; and its constant re-evaluation and re-invention should be given high priority by governments.

Effective engagement of extension in agricultural development requires a change of extension approach from the singular, narrowly defined model of public provision of technology transfer services, which is widely acknowledged to have outlived its usefulness as a sole strategy in achieving effective and competitive agricultural development. Extension, in the current dispensation, faces challenges of tackling objectives ranging from: promoting environmentally sustainable agricultural practices (Alex, Zijp & Bylerlee, 2002); responsively and efficiently linking of farmers to local and international markets; reducing the defencelessness of the rural poor and enhancing their voices (Farrington, Kidd and Beckman, 2002); viewing agriculture as part of an all-embracing set of rural growth strategies, including non-farm employment and enterprise expansion (Rivera, Qamar & Crowder, 2001); pairing technology transfer with other services relating to both input and output markets (Neuchatel Group, 2002); the need to develop competence among farmers,

including not only training, but also reinforcement of innovation developments, establishment of linkages between farmers and other organizations, as well as development of institutional and organisational supports to strengthen the bargaining power (Sulaiman & Hall, 2003).

In view of all these responsibilities for extension, this work posits the necessity and the need for an overarching national institutional framework of action in the form of extension policy in any given country. In line with this suggestion, the FAO Global Consultation on Agricultural Extension argued that: “*all national governments should develop and periodically review their agricultural extension policy. The policy should include the goals of agricultural extension, the responsible agencies and personnel, the clientele to be served, the broad programmatic area to be addressed and other relevant guidelines. In developing national agricultural extension policies, representatives of all major groups of farmers should be directly involved and other relevant agricultural organisations should be consulted. By pursuing a comprehensive policy, countries can expect the extension system to contribute to increasing agricultural productivity and farm incomes, and to improving the quality of life of most rural farm households in pursuit of the general goal of growth with equity*” (Swanson, 1990: 11).

In response to this, this paper determines the existence of national extension policies in West African countries and evaluates their various contents. Elements suggested by the FAO as “issues that extension policy should address” will be used as the framework for evaluation (FAO, 1998: 6). In cases where no formal policies exist, extension policy will be gleaned from various government documents available online regarding agricultural, rural and extension policies and those concerning agricultural, rural, research and extension projects to determine the de facto policies.

2. FRAMEWORK TO EVALUATE EXTENSION POLICIES

To effectively evaluate extension policy, the study reviewed and then settled on a workable framework for the evaluation. The FAO (1998) suggested a detailed framework of the policies’ mission and goals, approach and functions, subject-matter coverage, geographical coverage, clienteles, organizational issues, staffing issues, funding arrangements, and its stability. However, the Neuchatel Group (1999) suggested that mission and goals, approaches and functions, and clientele were the most critical elements of consideration in any evaluation of multiple policies. These, then, were used as the functional framework for this study. The details of the framework are set out in Table 1.

A second part of the framework considered the nature of extension policy extant in each country. Three forms of formalised national extension policy occur in industrialized, unindustrialized and transitioning nations, namely: legislated; decreed/ proclaimed; and provisional (FAO, 1998). However, many countries have no formal extension policy. Thus, for these countries the study adopted the idea of *de facto* policy, the substance of which was extracted and otherwise inferred from germane documents published either by the nation state itself themselves and/or from some other credible sources such as the FAO and IFPRI. This extraction procedure was also used for those nations where provisional policy was reported to be existing, but where no copy or summary thereof could be located.⁵⁰

⁵⁰ With the exception of Rwanda, for all the countries stating they had provisional and proclaimed policies, no copies or summaries could be found; and, thus, *de facto* policies were determined.

Table1: Framework elements, descriptions and criteria for measurement of agricultural extension policies

Elements	Descriptions	Criteria of measurement				
Nature of the extension policy	Classification of the various extension policies based on their degree of formality and informality	<ul style="list-style-type: none"> Legislated Decree/Proclamation Provisional <i>de facto</i> 				
Mission and goals	<p><i>Definition:</i> <i>Mission:</i> Broad enduring statement of purpose that distinguishes the organization and identifies the scope of its operations (Smith, Ronald, Paula and Kerry, (n.d.), citing Pearce, 1982)</p> <p><i>Goals:</i> Changes required to fulfill mission & move toward vision; Long-range change targets</p> <hr/> <p><i>Function</i></p> <ul style="list-style-type: none"> Articulate organisation’s uniqueness Build shared sense of purpose Shape employees’ focus Communicate strategic direction Guide strategic planning. Portend resources to be committed <hr/> <p><i>What to look for in an extension policy:</i></p> <ul style="list-style-type: none"> Establish the primary and secondary focuses of the policy 	<p><i>Mission:</i></p> <ul style="list-style-type: none"> Agricultural Development Human Resource Development Sustainable Agriculture Rural Development <p><i>Goals:</i></p> <ul style="list-style-type: none"> Improve Profitability Increase Production Provide Stability of production Social Development 				
Approaches and functions	<p>Approach (function): “the style of action within a system” (FAO, 1990: np)</p> <hr/> <p><i>Dimensions defining approaches</i></p> <ul style="list-style-type: none"> Farm enterprise: Commodity specific/ Whole farm system Clientele: Target category/ All households Means of influence: Enforcement/ Problem-solving Objectives: Technology transfer/ Human resource development Scale: Individual/Group Scope: Information only/Material inputs also Payment: Clients pay/ Free service Direction: Top-down/ Bottom-up 	<ul style="list-style-type: none"> Pluralistic extension Ministry-based Decentralization/Devolution Privatization Contracting in and out Demand-driven/Participatory T & V ICTs FFS Project-based Commodity-specialized 				
Clientele	<p><i>Clientele:</i> refers to the different groups of consumers of extension services.</p> <hr/> <table border="1"> <thead> <tr> <th><i>Relationship with Extension</i></th> <th><i>Defining characteristics of clientele</i></th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> End-users of technology Beneficiaries Clients Sponsors Stakeholders Partners Co-learners </td> <td> <ul style="list-style-type: none"> Gender Age Scale of farming Level of education Level of existing technology Resources available Dependence on common property resource </td> </tr> </tbody> </table>	<i>Relationship with Extension</i>	<i>Defining characteristics of clientele</i>	<ul style="list-style-type: none"> End-users of technology Beneficiaries Clients Sponsors Stakeholders Partners Co-learners 	<ul style="list-style-type: none"> Gender Age Scale of farming Level of education Level of existing technology Resources available Dependence on common property resource 	<p><i>Range of clientele</i></p> <ul style="list-style-type: none"> Women Youth Farmer organisations Small-scale farmers Medium-scale farmers Large-scale farmers Landless farmers Specific-commodity farmers
<i>Relationship with Extension</i>	<i>Defining characteristics of clientele</i>					
<ul style="list-style-type: none"> End-users of technology Beneficiaries Clients Sponsors Stakeholders Partners Co-learners 	<ul style="list-style-type: none"> Gender Age Scale of farming Level of education Level of existing technology Resources available Dependence on common property resource 					

Clientele in Table 1 denotes the diverse groups of customers of extension services. The variety comprises of women, youth, farmer organisations, small-, medium-, and large-scale farmers, as well as landless and specific commodity farmers. These groupings are consequential to the outlining features of clientele such as gender, age and scale of farming. It is admitted that the different clientele may have diverse operational relationship with extension agents, however, the nature of such relationship types is outside the considerations of this paper and the range presented in Table 1 is used.

3. COUNTRIES INCLUDED IN THE STUDY

The United Nations scheme of geographic regions (2013) identifies 17 countries as constituting the West Africa. However, only nine of these countries were found to have

sufficient information available to be included in the study. These were Benin, Burkina Faso, Gambia, Ghana, Guinea, Liberia, Nigeria, Senegal and Togo. Countries in the Sahel region (i.e. Cape Verde, Guinea Bissau, Mali, Mauritania, Niger), as well as Saint Helena Island, Cote d'Ivoire and Sierra Leone were excluded from the study.

Table 1 also deliberates the mission and goals of extension policy. This effort determined that the universal mission of most national agricultural policies in West Africa centres on agricultural development, human resource development, and sustainable agricultural and rural development. Similarly, the principal goals were found revolving around enhancing profitability of agricultural trade, growing the volume of productivity and market share, providing stability in terms of food obtainability and production through all time of the year, and for non-monetary shared purposes like improving environmental health and value and overall advancement of the quality of life for the masses.

Concerning the approaches and function element in Table 1, literature is replete with several descriptions for extension approach, such as specified in Bolliger, Reinhardt & Zwellweger, 1994, Hagmann & Shultz, 2000, and Leeuwis, 2004. When considered from various literature, the term “approaches” appeared problematic in its explanation, thoughtfulness and usage. The works of Blum (2007), Worth (2006), and Abdu-Raheem & Worth, (2011) used the term as synonymously discussing general modes of extension such as linear, advisory, facilitation and learning. Contrariwise, writers like Rivera (1988), Axinn (1998), Gemo, Eicher & Teclemariam (2005), and Davis (2008) denoted the conception as denoting detailed models such as Pluralistic, Training & Visit (T&V), and Farmer Field Schools (FFS) shown in Table 1. This work takes on the latter, more explicit, viewpoint.

4. INTERROGATING EXTENSION POLICY IN WEST AFRICAN COUNTRIES

The outcomes from investigating the extension policies in West African countries are offered in this section.

Table 2: Analysis of agricultural extension policies of West African countries

Concepts	Components	Gambia	Ghana	Liberia	Nigeria	Benin	Guinea	Senegal	Togo	Burkina Faso
Policy Form	Legislated			✓						
	Provisional	✓	✓		✓		✓	✓	✓	✓
	Decree & Proclamations					✓				
	Extracted/Implied	✓	✓		✓	✓	✓	✓	✓	✓
Mission	Agricultural Development	✓		✓	✓		✓	✓	✓	✓
	Human Resources Devt	✓	✓	✓			✓	✓		✓
&	Sustainable Agric & Rural Dev			✓						
	Improve Profitability	✓		✓	✓		✓	✓	✓	✓
	Increase Volume	✓		✓	✓		✓	✓	✓	✓
Goals	Provide Stability				✓		✓	✓		
	Non-Monetary			✓						
	Pluralistic Extension Provider		✓	✓	✓		✓	✓		✓
Approaches & Functions	Ministry-based		✓			✓				✓
	Decentralization/ Devolution	✓		✓	✓		✓	✓		✓
	Privatization	✓		✓	✓	✓	✓	✓		✓
	Contracting in and out			✓	✓		✓			✓
	Cost-sharing			✓						
	Demand Driven/ Participatory	✓	✓	✓	✓		✓	✓		✓
	Free-for-service									
	T & V		✓							✓
	ICTs		✓	✓			✓	✓		
	FFS	✓		✓	✓		✓	✓		✓
	Project									
	Commodity-specialized	✓	✓							✓
Clientele	Women	✓	✓	✓	✓			✓		
	Youth	✓	✓	✓				✓		
	Farmers Organization		✓	✓			✓			✓
	Small-scale Farmers	✓	✓		✓			✓		✓
	Medium-scale Farmers	✓	✓	✓	✓			✓	✓	
	Large-scale Farmers		✓					✓		✓
	Landless Farmers		✓					✓		
	Specific commodity farmers		✓					✓		✓

Forms of national extension policies in West African countries

Table 2 presents the evaluation of results for the extension policies in West Africa. It uses the framework of nature of extension policy, mission and goals, approaches and functions, and clientele as described in Table 1.

The study primarily documented the presence of extension policy in the nine West African countries comprised in the study, as well as the nature or form of its existence. As presented in Table 2, only one of the nine countries possesses a legislated extension policy; seven assert having a provisional extension policy; and one claims to have a policy by proclamation.

However, except in the case of Liberia which functions on a legislated policy, it was not possible to locate prints of the provisional and proclaimed policies. Thus, for the purpose of this study, Benin, Burkina Faso, Gambia, Ghana, Guinea, Nigeria, Senegal and Togo have de facto policies.

Discovering only one formally published national extension policy among the West African states is an attestation, to an extent, to the findings of Oladele (2011) who indicated only three from among 27 sub-Saharan Africa nations covered in his inquiry as operative on legislated type of extension policy. He revealed the bulk were running provisional type of policy.

This paper stresses the imperative that all national governments in West Africa develop nation-wide structure in form of officially embraced policy to direct extension delivery. This is consistent with the assertion made by the Secretariat of the Pacific Community (2010: n. pag.) that, “the absence of clear policy frameworks has resulted in services which lack a clear understanding of what their core functions should be, how they should allocate scarce resources, what training extension officers require to carry out their role effectively, and how they can work better with other partners, including the private sector, and with new technology to improve their services”.

Mission and Goals

The mission declarations of national extension policies in West Africa, as presented in Table 2, generally target agricultural and human resource development, which is most often translated into concentrating on improving profitability and volume of agricultural production. This tendency to translate these into essentially agricultural production goals is likely due to the pressure created by the significant level of food insecurity and poverty in West Africa, coupled with the dominance of smallholder farmers in the agricultural landscape (Salami, Kamara & Brixiova, 2010). Notwithstanding the immediate urgency, however, extension intervention needs to go beyond the shorter-term offering of technical assistance relating to farming, to contextualising services within a broader livelihood framework in which the farmers function to produce more sustainable change. Abdu-Raheem and Worth (2011) maintained that agricultural extension, through building farmer capacity to manage their farming enterprises, manage their social and environmental sustainability contexts and to deliberately engage in scientific enquiry (learning) can profoundly help realise sustained enhanced food security and enriched livelihoods for smallholder farmers.

While not necessarily cross-examining the rightness of the general mission and goals of extension policies in West Africa, the absence of any explicit reference to environmental sustainability, except in the case of Liberia, constitutes a great concern given the pressure globally placed on natural resources. Paying attention to environmental sustainability as an integral part of the mission and goals will not only help realise enhanced productivity and profitability for poor farmers, but will also assist in preserving the natural resource base upon which the aggregate livings of these farmers mostly hinged.

Approaches and functions

As presented in Table 2, agricultural extension in West Africa is deployed in a variety of ways. These include decentralization, privatization, demand-driven/participatory approach

and outsourcing of extension services in the context of adopting pluralistic system of extension delivery. Eicher (2007: 5), while recognizing that about six extension models are commonly being adopted all over unindustrialized countries, noted that “virtually every developing country now has a mixture of public, NGO and private firms delivery extension system assistance to smallholders”. The recognition and common adoption of a pluralistic model is conceivably the utmost necessary change in African agricultural extension (Davis 2006; Birner & Anderson, 2007).

Pluralism as an approach recognises the important distinctions existing among farmers, farmers’ needs and requirements and farming systems, and the inevitability to address these variations by means of diverse methodologies, services and service providers. With the embrace of pluralism, farmers enjoy access to a broadened collection of service options, thereby resulting in value-added quality of services to farmers. Rivera and Alex (2004) observed in literature increasing justification for less involvement of governmental in extension activities within the context of pluralistic delivery. However, they argued that in a pluralistic system the governmental role only changes in form of extension delivery; in reality the governmental role does not diminish. Extension institutions – public, private or otherwise – will continuously need governmental support of certain critical services, ranging from response to tragedies, risk bearing and sharing, regulation, quality control, system harmonisation, and promotion of reform.

Decentralisation is another strategy widely practiced as a part of reforming extension in West African nations. The mostly common use of decentralisation retains the public sector and public funding features of traditional centralised extension, but redistributes responsibility for extension delivery and reassigns it to local, district, and/or county, governments. Key inherent challenges of decentralisation, however, are lack of financial sustainability, the propensity to use extension agents for jobs outside their responsibilities, and the trouble in linking with research (Anderson & Feder, 2004).

Concurrently with decentralisation, few countries have also implemented privatisation of extension services in which system farmers share with the state responsibility for funding extension services. This lightens the financial burden ordinarily exclusively shouldered by the public (Anderson and Crowder, 2000). However, there appear to be varying forms of privatisation with correspondingly varying depths of governmental involvement. Kidd, Lamers, Ficarelli & Hoffmann (2000: 97) indicated that the contemporary privatisation expressions “vary from a complete withdrawal of state interventions, to a commercialisation and cost-recovery approach (via levies, user charges and contracting public sector services), to an increased involvement of the public services in income generating activities, which includes the sale of seeds, surplus land and produce as well as the sale of publications and other materials”. Eicher (2007: 6) nevertheless argued that insufficient evidence exists to date as to whether small farms, by being responsible for any of these costs, can ever “buy their way out of poverty”.

Conversely to the decentralised ministry-based approach that is popularly gaining adoption among East Africa states, Table 2 shows that a few countries like Benin and Ghana still retain the centralised ministry-based extension systems. This centralised system of extension provision has been criticised severely and consistently for its lack of efficiency. Evidence is, however, currently lacking on whether there are on-going efforts towards reformation of extension management in these countries. Nonetheless, this study suggests it as a necessary step for national governments in these states to re-evaluate their extension organisation,

management and approaches based on the needs of their general clientele profiles and the mission and vision of their agricultural and national development objectives. What is clear from Table 2 is that the tendency is toward pluralistic extension services, comprising a combination of public and private service provision with varying degrees and forms of centralisation.

Irrespective of the approach – decentralisation, ministry-based, privatisation, or pluralistic – being employed by West African nations, the majority have adopted the Farmer Field School (FFS) method to delivering extension. The FFS model is a community-based learning arrangement first introduced in Asia in the wake of Green Revolution as a remedial reaction to misuse of insecticides on irrigated rice fields (Gallagher, Braun & Duveskog, n.d.). It was introduced to sub-Saharan Africa in the mid-1990s (Davis, 2008); and currently, about 27 sub-Saharan states are practising it (Braun, Jiggins, Röling, Van Den Berg & Snijders, 2005). The learning technique in the model is practical and participatory, with a profound objective of developing field school participants into “confident [integrated pest management] experts, self-teaching experimenters, and effective trainers of farmers and extension workers” (Wiebers 1993: 32). FFS is an iterative and intensive learning process aimed “bringing better yields, fewer problems, increased profits and less risk to their health and environment” (Braun & Duveskog, 2008: 6 citing Dilts, 2001). Its adoption is consistent with the decentralised and demand-driven approaches adopted by the West African states. But, it is less consistent with the singular focus on increased volumes adopted by most West African countries. This suggests there might be a disconnection between high level intention and on the ground practice.

Owing to its high implementation cost (relative to more traditional extension approaches), a major query raised about the FFS model is its financial sustainability. Quizon, Feder & Murgai, (2001a & b) submitted that the intense training activities per farmer taught are expensive. This often translates into less farmer coverage on a nationwide scale (Anderson & Feder, 2004). This suggests the necessity for a careful cost-benefit evaluation of FFSs to determine when and where it is justified particularly in terms of marginal returns, and whether states (particularly West African countries) can carry on funding it subsequent to the withdrawal of external aid.

Consistent with the adoption of the FFS approach, Table 2 shows that demand-driven/participatory approaches are similarly broadly employed among West African states. This is also consistent with current trends in extension transformation which place emphasis on demand-driven approaches to extension provision (Neuchatel Group, 2006). ‘Demand-driven’, necessarily, implies that services are supplied in line with people’s requests. It operates on two other core philosophies: service providers are accountable to users; and a wide-ranging choice of service providers is accessible and available to users (Neuchatel Group, 2006). ‘Demand-driven’ signifies a departure from standard top-down approach used in most public sector services, and is part of the movement toward responsive governance in public sector reformation.

The demand-driven approach, if not properly and carefully guided, can negatively impact communal benefits. This suggests that exclusive reliance on farmer-led demands, may lead to the provision of services that are of exclusive and often short-term importance to the farmers willing and/or able to pay, without necessarily considering longer-term externalities such as environmental pollution. The Neuchatel Group (2006), nevertheless, maintained that the tendency for self-centred ‘demands’, does not nullify its role as a strategy to deliver public

extension. The tendency can be mitigated with appropriate financial incentives to encourage farmers to request services that will align with longer-term externalities needed to ensure sustainability. In addition, to achieve success with this approach, governments need to discontinue offering those services which could better undertaken and delivered by the private sector, while they assist in establishing policies to empower and strengthen the approach.

As shown in Table 2, the use of information and communication technology (ICT) is another approach that is increasingly being adopted in West Africa. This is not surprising considering the rapid expansion of both the infrastructure and use of ICT (especially the Internet and cell phones) (Aker, 2011). In 1999, fewer than 10% of sub-Saharan Africa's population had mobile phone coverage; by 2008, this had increased to above 60%. This growth translated into an increase in the number of mobile phones subscribers from 16 million in 2000 to 376 million by 2008 Aker & Mbiti (2010).

The use of ICT-based approach in agricultural extension services began about 2007 through the supply of mobile-based applications offering important information including market demand and prices, meteorological conditions, transportation and agricultural advice through voice, short message service (SMS), radio and internet. Despite its reported growth, there is little empirical evidence of the impact of ICT in agricultural (Aker, 2011). Still the potential is substantial. ICT-based extension can enhance accountability of extension agents to farmers (Duflo, Hanna & Ryan, 2007; Dillon, 2012). It can facilitate credit and savings to farmers (Foster & Rosenzweig, 2010), access by farmers to private information (Baye, Morgan, & Scholten, 2006; Aker, 2010), and the capacity of farmers to manage input and output supply chains (Aker, 2011). In this vein, various ICT agricultural extension programmes have been found in West African countries including projects such as: ICT Support for Agricultural Literacy in Ghana; Esoko in Benin, Ghana and Nigeria; West Africa Agricultural Market Information System in Niger, Ghana and Nigeria; and InfoPrix Benin (Aker, 2011).

Clientele

Table 2 shows that majority of the extension policies focus extension provision towards women, and small- and medium-scale farmers. Smallholder farmers particularly, in terms of production scale, control agricultural production in West Africa; hence, their significance for economic development cannot be overstressed. Enhancing the capacity and productivity of smallholder farmers and their farms is a key to reducing poverty in West Africa (Bahram & Chitemi 2009; World Bank, 2008). Wiggins (2009: 11-12) identified five things that would increase the capacity of smallholder farmers to contribute to poverty alleviation: (1) "Creating a favourable investment climate for farming"; (2) "Investment in public goods that support agriculture, most notably agricultural research and extension"; (3) "Developing economic institutions to allocate and protect property rights, to facilitate trading, to reduce risk and to allow collective action"; (4) enhancing and capitalising on the demand at the farm gate; and (5) supporting farmers in the conservation of their "land, water and other natural resources so that physical production can be sustained". In each of these, extension services has an obvious role to play – and further justifies the focus of extension policy on smallholder farmers.

Despite their importance, significant challenges militate against providing extension services to smallholder farmers: inadequate funds for public extension; poor resourcing; lack or insufficient participation of farmers in planning and design of programmes and technologies;

insufficient coverage of extension throughout the region; and technical challenges in adjusting technology options to circumstances of farmers (IFPRI-World Bank, 2010). Exacerbating the provision of extension to smallholder farmers is the particular difficulty of delivering extension to women due to women's lack of access and control over productive capital and essential technical know-how appropriate for their circumstances (Quisumbing & Pandolfelli, 2010; Swanson & Rajalahti, 2010). Clearly there is a need for national extension policies in West Africa identifying the necessity to prioritise female smallholder farmers, and give particular attention to eradicating the impediments inhibiting women from acting on extension advice.

5. CONCLUSION, RECOMMENDATIONS AND IMPLICATIONS

This work has brought to the fore the significance of the need for apposite national extension policies to ensure effective planning and provision of agricultural extension. It has principally emphasised an outline for rigorous national extension policy, the three crucial components of which are: mission and goals; approach and functions; and clientele. These same components were used to assess the prevailing national extension policies in West African countries.

The study determined that the majority of the West African states do not have official extension policies. In most circumstances the study had to rely on *de facto* policy extracted indirectly. The study suggests that, without recognised policies, it will be difficult to provide farmers dependable and effective support with that operates in a context of long-term sustainability.

The official and *de facto* policies assessed demonstrated that the missions of West African extension concentrates on agricultural and human resource development but in the context of improving profitability and volume of agricultural production. In all of the nations, this appraisal established that the extension services are changing and being reformed. There is movement towards decentralisation, expanding privatisation of extension services and introducing demand-driven, 'for pay' extension, all within the framework of adopting a pluralistic system of extension delivery. Despite the fact that majority of the countries have embraced FFS in their set of services, the principal approach of extension appears still to be technology transfer together with information sharing with a notable increase in the use of ICT. The prime clientele of extension in West Africa are the smallholder farmers, with some attention to offering services to women who are faced with particular challenges in responding extension advice.

Consequently, it would seem that the objective of extension in West Africa is to support smallholder farmers (together with women) to advance their capability to farm through adoption of technology which will then assist them to increase the volume and profitability of production.

To address the sluggish and inconsistent agricultural production growth rate and inequitable household food security suffered in sub-Saharan Africa (relative to the world over), this study suggests that extension policy needs to be formalised to create a stable framework for planning and implementing. It further suggests that the policies offer relevant structures that will genuinely help farmers realise their potential which the past six decades of extension have been unable to accomplish. This is a *sine qua non* to providing the type of agricultural extension that can bring about the desired growth of the agricultural sector in West Africa.

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