

# Features of agricultural extension models and policy in selected sub - Saharan Africa countries

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*Abstract:* This paper reviews the features of agricultural extension models and policy in selected sub- Saharan Africa countries. This is based on the premise that the discussion of extension policy in SSA countries can not be isolated from the extension models that are applied in these countries. While the models are direct products of the type of policy that has been adopted, the policy dictates the models to be used in each country. A major problem of organizing agricultural extension in developing countries is the absence of a legal and policy framework for providing the service. Putting in place a legal and policy framework is one basic new and indispensable way of conducting extension in the developing countries. It will help streamline the confusion currently existing in the effort to transfer agricultural knowledge to farmers, particularly in the areas of service provision, programme development and funding. In literature, the present forms of extension policy are Provisional Extension Policies, decrees and proclamation and legislated extension policies. Factors driving extension policy are population, natural resources and environment. Increasing population will demand more resources from extension in forms of skills, training, diversification of livelihoods and pressure on natural resources. The paper recommends that SSA countries adopt the legislated extension policies option for the improvement extension service delivery and reduce the contradictions in extension models.

*Keywords:* *agricultural extension models, policy, service delivery, effectiveness, extension systems, approaches*

## Introduction

Agricultural extension programmes are very diverse from an international perspective as most are managed as public sector agencies, and some nongovernmental organizations (NGOs) while many private firms and private organizations conduct

extension programmes. In a competitive production environment, occasioned by the globalization policy, extension services must be oriented to markets and overcome the exclusive focus on production that ignored market demand and profitability as was the constraint of many past extension programs. Varied extension services are needed to help farmers remain competitive and profitable, diversify production, produce for niche markets, and move to higher-value products and more value-added production (Oladele *et al.*, 2004).

A broader rural livelihoods approach requires extension services to deliver information on local organization development, micro- enterprise and non-farm employment, environmental issues, rural infrastructure, social programs, rural health and education, and other non-agricultural issues. Poverty alleviation-targeted extension services will have to address social and organizational constraints to innovation facilitating rural financial services, obtaining secure land tenure, improving management of community resources and the problem of HIV/AIDS (Davis, 2008).

The majority of the population in Sub-Saharan Africa consists of farmers and their families, a rural population which is expanding rapidly, notwithstanding urbanization, and has limited access to health and education services. Reducing poverty and social inequalities, ensuring food security, the sustainable use of natural resources, and participatory development, are overall objectives to which extension policies can make a significant contribution. These objectives highlight the fact that extension systems must be accessible and useful to the poorest, and address the special concerns of women farmers and young farmers (Rivera and Alex, 2004).

Table 1 describes various extension models that have been adopted in many SSA countries. It shows that most African countries today are experimenting with reforms to existing extension systems. The models that have been practiced include: Rural Development and Extension programme, Farmer Field School, Participatory management Approach, National Agricultural Extension and Research Programme Support Project, Participatory Demonstration and Training Extension System, Pluralistic Extension System including, Ministry, private Companies, NGOs, Unified Agricultural Extension System, University based extension system, Participatory Extension system, Ministry based approach, Commodity based approach, community extension, Cyber Extension system, Farming System approach, Commercialized extension system and Community participation approach.

For instance, Ghana modified their extension system in 2003, based upon a 1997 policy to decentralize (Anderson, 2007). Existing models are typically a general or modified T&V model housed in the Ministry of Agriculture, although many countries are using multiple models with pluralistic service providers Sasakawa Global 2000 (SG-2000) works closely with extension and is currently working in Ethiopia, Mali, Nigeria, and Uganda. The increasing number of players and stakeholders makes the issues of coordination and regulation crucial, and underlines the need for the

*Table 1- Extension models adopted in selected SSA countries*

<b>COUNTRIES</b>	<b>EXTENSION MODELS</b>
Angola	Rural Development and Extension programme, Farmer Field School
Benin	Participatory management Approach, Farmer Field School
Burkina Faso	Farmer Field School
Cameroon	National Agricultural Extension and Research Programme Support Project
Ethiopia	Participatory Demonstration and Training Extension System, Farmer Field School
Ghana	Pluralistic Extension System including, Ministry, private Companies, NGOs and Farmer Field School
Kenya	Pluralistic Extension system including, Ministry, private Companies, NGOs
Malawi	Pluralistic Extension system , Farmer Field School
Mali	Participatory Demonstration and Training Extension System, Farmer Field School, Modified Training and Visit Extension System
Mozambique	Farmer Field School, Government led Pluralistic extension
Nigeria	Unified Agricultural Extension System, Pluralistic Extension System including, Ministry, private Companies, NGOs and Farmer Field School
Rwanda	Farmer Field School, Pluralistic extension system
Senegal	Farmer Field School, Pluralistic extension system
Tanzania	Farmer Field School, University based extension system, and Pluralistic extension system
Uganda	Pluralistic, National Agricultural Advisory Services and Farmer Field School
Kenya	Pluralistic and Farmer Field School
Zambia	Participatory Extension system, Farmer Field School
Swaziland	Participatory Extension system, Farmer Field School
Lesotho	Unified Agricultural Extension System, Pluralistic Extension system including, Ministry, private Companies, NGOs
South Africa	Ministry based approach, University based, Commodity based approach, community extension and Cyber Extension system
Botswana	Farming System approach, National Master plan for Arable Agriculture and Dairy Development
Côte d'Ivoire	Ministry of Agriculture (MINAGRA) led pluralistic system and Farmer Field School
Namibia	Ministry based, Commodity based approach, Community participation approach
Madagascar	Ministry based approach, Training and Visits Extension System Commodity based approach
Zimbabwe	Ministry based approach, Commercialized extension system Community participation approach
Mauritius	Ministry based approach, Training and Visits Extension System, Commodity based approach, The community extension type

government to remain involved in extension in order to ensure food security, regulating food quality and safety, and environmental conservation, among others. The discussion of extension policy in SSA countries can not be isolated from the extension models that are applied in these countries. While the models are direct products of the type of policy that has been adopted, the policy dictates the models to be used in each country.

Several reasons have been adduced for the ineffectiveness of extension service delivery and systems in sub- Saharan Africa. This led to different approaches and applications. FAO (1997) reported that all national governments should develop and periodically review their agricultural extension policy, which should include the goals of agricultural extension, the responsible agencies and personnel, the clientele to be served, the broad programmatic areas to be addressed, and other relevant guidelines. It was further stated that, in cooperation with the donor community, should engage in policy dialogue with national governments to stress the importance of agricultural extension in national agricultural development and the need to have an explicit, formally enacted, agricultural extension policy. In many countries, the problems of establishing or maintaining an effective agricultural extension service can be traced back to the lack of a realistic policy or an unstable policy framework for guiding the mission of the extension system - contradictions in the areas of the functions of extension, the clientele to be served, financing extension, changes in organizational structure and programme priorities, rapid turnover of the extension staff, and the proliferation and lack of coordination between different organizations that undertake extension work are some of the common problems that highlight the issue of extension policy. In addition, extension must be responsive to changes in the agricultural sector, the drive toward market reforms, and shrinking government budgets.

A sound agricultural policy is indispensable, and an agricultural extension programme is more likely to succeed if the conditions for growth in agriculture and related industries are in place. Extension is only one aspect of agricultural policy. Also, agricultural policy is largely a matter of a proper broad economic policy. Countries need sound and effective policies that will guide all the key players wishing to be involved in extension service delivery. Generally, the poor organisation among the many smallholders has meant that farmers have not been very effective in effectively lobbying the government for more responsive service institutions in the areas they reside and farm. A major problem of organizing agricultural extension in developing countries is the absence of a legal and policy framework for providing the service. Putting in place a legal and policy framework is one basic new and indispensable way of conducting extension in the developing countries. It will help streamline the confusion currently existing in the effort to transfer agricultural knowledge to farmers, particularly in the areas of service provision, programme development and funding (Akiyama, *et al.* 2003).

Policy is defined as a plan or course of action as of government, political party or business. It is a course of action, guiding, principle or procedure considered expedient, prudent or advantageous, adopted by an individual, government business etc. Policy is aiming at achieving agricultural goals, address broad based extension constraints, transfer technological information to the farmers and ensure effective ways of delivering improved extension services. The main objective of the policy is to reduce poverty, building strong economy, strengthening food security and increase production.

The provision of extension services particularly in SSA has had different views among farmers, planners, economists and practitioners among others. While farmers view extension as a form of assistance to help improve their know-how, efficiency, productivity, profitability, and contribution to the good of their family, community, and society, the politicians, planners, and policy makers consider it as policy instrument to increase agricultural production, to achieve national food security, and, at the same time, help alleviate rural poverty. In addition, some economists view extension as a policy instrument that will contribute to human capital development and economic growth; therefore, resources allocated to extension are viewed as an economic investment which must produce competitive economic returns. To the practitioner, agricultural extension enhances and accelerates the spread of useful know-how and technologies to rural people. These activities are expected to lead to increased and sustained productivity, increased income and well-being of farm people, and to the promotion of national food security and economic growth. These objectives are to be achieved through non-formal education and training programmes and two-way technology transfer and feedback systems where extension has an important contribution to make to agricultural and rural development (World Bank, 2005).

### **Forms of extension policy in SSA**

In literature, the present forms of extension policy are Provisional Extension Policies, decrees and proclamation and legislated extension policy, which are often driven by factors such as population, natural resources and environment. Increasing population will demand more resources from extension in forms of skills, training, diversification of livelihoods and pressure on natural resources. Agricultural extension policy is a part of national development policy in general and of agricultural and rural development policy in particular. Hence, agricultural extension is one of the policy instruments which governments can use to stimulate agricultural development (Jones, 1986). Each country should have a comprehensive agricultural extension policy which provides for coordination with research, education, input supply, and credit and marketing systems, as well as some flexibility to reflect the dynamic nature of the agricultural sector. The policy should include the mission and goals for agricultural

extension, the responsible agencies and personnel, the clientele to be served, the broad programmatic areas to be addressed, and other relevant guidelines. This should be developed through a multi-stakeholder process, however, the development of extension is dependent on agriculture in most SSA countries which is often tied to government stability and system of government.

*Provisional Extension Policies:* This is the most common form of extension policy in most developing countries. In the absence of more formalized extension policies, or at the time when the formally enacted policy has been suspended, a provisional or ad hoc policy comes into play. Decrees and proclamations are policies issued by the head of state which does not go through the process of consultation and debate involving various stakeholders and beneficiaries. In Nigeria, during military regime, extension services were based on Directorate of Food, roads and Rural Infrastructure (DFRRI) and Better life for Rural Women among others.

*Legislated extension policies* are embodied by the country's highest law-making authority (e.g., congress or parliament) are common in many developing countries. Countries that have enacted extension policy through legislative action tend to have well-organized, financially stable extension systems that have sustained effectiveness and a cumulative impact. Examples of legislated extension policies which have worked well include the following: The Smith-Lever Act of May 8, 1914 that established the Cooperative Extension Service in the United States, the Japanese Agricultural Promotion Law of 1948 created and provided funding for Japan's Cooperative Agricultural Extension Service, the Agricultural Extension Law of 1957 and Rural Development Law of 1962 in South Korea and the 1956 law that created the Department of Agricultural Extension as one of nine departments of the Ministry of Agriculture and Cooperatives (Contando, 1997; APO, 1994; Rogers, 1995). Also, Zimbabwe's Department of Agricultural Technical and Extension Services was established by law in 1981 but eventually collapsed and gave way to other forms of extension policy.

It is important to note that countries that have enacted extension policy through legislative action tend to have well-organized, financially stable extension systems that have sustained effectiveness and a cumulative impact (Hanyani-Mlambo, 2000). Table 2 gives a summary of extension policy adopted in different countries of SSA.

Table 2 give a description of the extension policy in selected SSA countries. From a list of 27 countries under review, only four countries can be indicated as having the Legislated form of Extension policy, which is the best option of the different forms of extension policy. While arguments have been put forward in terms of prevalent socio-cultural milieu of different countries and home-grown solution and application of extension system, the consequent contradictions in the extension coverage, missions and goals of such countries left nothing to be desired from the political rhetoric.

In the Democratic Republic of Congo, the face of the declining contribution of

*Table 2 - Extension policy adopted in selected SSA countries*

<b>COUNTRIES</b>	<b>EXTENSION MODELS</b>
Angola	Provisional Extension Policy
Benin	Provisional Extension Policy
Burkina Faso	Provisional Extension Policy
Cameroon	Provisional Extension Policy
Ethiopia	Provisional Extension Policy
Ghana	Provisional Extension Policy
Kenya*	Provisional Extension Policy/ Legislated Extension policy
Malawi	Legislated Extension policy
Mali	Provisional Extension Policy
Mozambique	Provisional Extension Policy
Nigeria	Provisional Extension Policy
Rwanda	Provisional Extension Policy
Senegal	Provisional Extension Policy
Tanzania	Provisional Extension Policy
Uganda	Legislated Extension policy
Kenya	Legislated Extension policy
Zambia	Provisional Extension Policy
Swaziland	Provisional Extension Policy
Lesotho	Provisional Extension Policy
South Africa	Provisional Extension Policy
Botswana	Legislated Extension policy
Côte d'Ivoire	Provisional Extension Policy
Namibia	Provisional Extension Policy
Madagascar	Provisional Extension Policy
Zimbabwe*	Legislated Extension policy / Decree and proclamation
Mauritius	Provisional Extension Policy
Democratic Republic of Congo	Provisional Extension Policy

the agricultural sector, the Government prepared, with the support of donors, a strategic framework for the development of the agricultural and rural sector. Interim Poverty Reduction Strategy Paper (I-PRSP) and the Emergency Multisector Rehabilitation and Reconstruction Programme (EMRRP). The DRC is currently using the Decree and Proclamation policy. In Zimbabwe, the government gave away the legislated option for the commercialization and privatization of extension services which is Provisional Extension Policy (Hall and Kuiper, 1998). In Madagascar, agricultural sector suffered from discriminatory policies. The structural adjustment policies since the mid-1980s have improved the market framework by removing most

of the market distortions through a devaluation of the Malagasy franc, a reduction in import barriers, market liberalization and privatization of public enterprises. However, these policies have not been enough to stimulate growth in rural areas. The reduction in public investments and the declining efficiency of these funds, the lack of an emerging private sector, the worsening terms of trade in rural areas, the degradation of the natural resources base and the large risks have led to little supply response in agriculture (Minten *et al.*, 2006). The form policy that is being currently use in Zambia is the Provisional Extension Policy, whereby the national agricultural sector policy has been implemented, which is guiding all the key players wishing to be involved in extension service delivery. The current policy in South Africa is the Provisional Extension Policy though attempts were made to consult various stakeholders. The overall aim of Government policy is to withdraw from direct involvement in agricultural production and to encourage the private sector to expand to provide the services that farmers require. The national economic policy objectives articulated in the RDP, and now encapsulated in the Growth, Employment and Redistribution (GEAR) strategy.

Uganda as an example of legislated extension policy in SSA, the National Agricultural Research Organisation (NARO) is the apex body for guidance and coordination of all agricultural research activities in the national agricultural research system in Uganda. NARO is a Public Institution established by an act of Parliament comprises of the council as its governing body, committees of the council as its specialised organs, a secretariat for its day-to-day operations with the semi autonomous public agricultural research institutes under its policy guidance. The government has been implementing the Plan for the Modernization of Agriculture. One component created in 2001 is the NAADS program mentioned above, which has the goal of increasing market-oriented production through empowering farmers to demand and control extension services. NAADS is an innovative public-private extension approach. The main components of NAADS include decentralization, outsourcing, farmer empowerment, market orientation, and cost-recovery (Anderson, 2007).

## Conclusion

The paper has shown that extension policy is lacking in many SSA countries and this has to a very large extent responsible for the ineffectiveness of extension systems in SSA countries. It has also led to an indefinite search for a workable extension system in Africa. The different forms of extension policy were examined and prescription was made for the extension policy to be adopted in order to make extension service work for diverse population end-user and stimulate the much expected food security and improved livelihoods in the lives of the majority of rural population in SSA countries that are continuously dependant on agricultural extension services.



## References

- Akiyama T., J. Baffes D.F. Larson and Varangis P. (2003). *Commodity Market Reform in Africa: Some Recent Experience*, Policy Research Working Paper 2995, World Bank, Washington DC, March.
- Anderson J. R. (2007). *Agricultural advisory services*. Background paper for World Development Report 2008. Agriculture for Development. Washington, DC. The WorldBank.
- Asian Productivity Organization (APO). (1994). *Agricultural extension systems in Asia and the Pacific*. Tokyo: Asian Productivity Organization.
- Contado T.E. (1997). *Formulating Extension Policy*. Chapter 12 in *Improving agricultural Extension: A Reference Manual*. Swanson B.E., Bentz R.P. and Sofranko A.J. (eds). FAO Rome.
- Davis K. (2008). *Extension in Sub-Saharan Africa: Overview and Assessment of Past and Current Models and Future Prospects*. *Journal of International Agricultural and Extension Education* 15 (3): 15-28.
- FAO (1997). *Improving agricultural Extension: A Reference Manual*. Swanson B.E., Bentz R.P. and Sofranko A.J. (eds). FAO Rome.
- Hall M.H. and Kuiper D. (1998). *Commercialization and Privatization of Agricultural Extension: The New Zealand Experience*. *Journal of Production Agriculture*, 11, no 1, 135-140.
- Hanyani-Mlambo B.T. (2000). *Re-Framing Zimbabwe's Public Agricultural Extension Services: Institutional Analysis And Stakeholders Views Agrekon*, Volume 39, Issue 4 December 2000 , pages 665 – 672.
- Jones G. (1986). *Investing in rural extension: Strategies and goals*. London: Elsevier Applied Science Publishers.
- Minten B., Randrianarison L. and Swinnen J. (2006). *Global Retail Chains, International Trade and Developing Country Farmers: Evidence from Madagascar*. Open Access publications from Katholieke Universiteit Leuven urn:hdl:123456789/120440, Katholieke Universiteit Leuven.
- Oladele O.I., Koyama O., and Sakagami J.I. (2004). *Africa in search of extension system: Experience from Nigeria*. *Journal of Food, Agriculture & Environment Finland* 2 (1): 276-280  
<http://www.world-food.net/jfae/index.php?url=2003/issue1/>
- Rivera W. and Alex G. (2004). *The continuing role of government in pluralistic extension systems*. *Journal of International Agricultural and Extension Education* 11(3): 41-52.
- Rogers E. M. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press.
- Sasakawa Global, (2000). *Agricultural Extension Services in Sub-Saharan Africa*. (<http://www.saatokyo.org/english/safe/index.html>)

Swanson B. (Ed.) (1990). Global Consultation on Agricultural Extension: A report. Rome, FAO.

World Bank (2005). Agricultural investment sourcebook. Washington, DC. The World Bank. Available: [www.worldbank.org/agsourcebook](http://www.worldbank.org/agsourcebook)