

# **IS THE 'TECHNICAL EXPERT' ROLE OF FARM FORESTRY EXTENSION AGENTS FADING? RECENT EXPERIENCES FROM AFRICA AND IMPLICATIONS FOR FUTURE EXTENSION PROGRAMS**

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## **Abstract**

The conventional meaning of extension has been changing to accommodate challenges presented by changes in extension policies and dwindling extension resources. Staffing rationalization programs have led to drastic reductions in number of extension staff. Financial resources for extension have dwindled to halting levels. The emerging trend is that institutional arrangements for extension services are being founded on facilitation, participatory and local capacity building principles. The challenge at hand is how to integrate responsibility of extension staff into community-driven extension approaches; yet the staff are accustomed to top-down extension service.

We have analysed recent forestry extension experiences in selected countries in Africa. Factors on which the analysis has been based are: institutional arrangements for forestry extension with a focus on the role of extension staff, and extension policies and approaches. The roles of extension agents are changing. Participation of communities in extension is intensifying. Lack of clear methods for practical application of concepts like participation, empowerment and facilitation is hindering progress. But, where these concepts have been applied practically, communities have demonstrated a capacity to be responsible for extension service delivery. Extension workers will however continue to be important for successful community-driven extension but with new roles including being marketing agents and networking facilitators.

## **Introduction**

In Africa, small-scale rain-fed agriculture continues to be the main source of livelihood security for most households. Promotion of technologies to improve production like farm forestry is particularly relevant to sustainability of the farming systems and livelihood security. The concept of livelihood security as applied in this paper refers to the ability of farmers to meet their food and nutritional needs, economic ability to provide education for children, good housing, good health, access to quality water and a habitable environment.

Since inception of promotion of farm forestry in most African countries in the early 1970s, the main perceived beneficiaries have been the small-scale farmers. It is this category of farmers who have limited economic ability to switch to substitutes of wood products. Because of economic constraints, use of yield increasing inputs is limited. Trees and shrubs with scope for improving soil productivity have been promoted. Medicinal plants have become equally important, as health services have grown to attract premium fees. Growing a variety of trees on-farm has therefore become an important strategy for sustaining livelihoods as well as protecting and conserving forest resources and creating a healthy environment.

A review of forestry extension experiences was done as a basis for analyzing the evolving farm forestry extension approaches, and implication of the emerging changes to the design and implementation of future farm forestry extension programs.

Experiences from 13 countries; namely Uganda, Botswana, Lesotho, Ethiopia, Eritrea, South Africa, Namibia, Zambia, Zimbabwe, Malawi, Burundi, Tanzania and Kenya were reviewed. We anticipated that results from this analysis will generate debates and contribute to development of effective community –driven farm forestry extension.

Indications are that community-driven farm forestry extension is relatively new in most countries in Africa and have evolved to pragmatic forms in the late 1990s. Changes in institutional structures and policies are fostering the sharing of extension responsibilities between extension agencies and community members (MOARD, 1999; Kachala and Banda, 2000,). Communities are being mobilized and empowered to take lead roles in extension.

## **Extension policy and conditions**

### ***Historical perspective***

Policy guides decisions on allocation of resources. Extension policy determines how an extension program is designed, the target group, approaches used for implementation and participants in the process.

Attempts to address and contain causes of land degradation and arrest recurrent poor agricultural productivity for example have been guided by single sector-based policy and development intervention approaches. An illustrative case is the study by Rocheleau et al. (1995) on the Ukambani land degradation control in eastern Kenya.

The sector-focused model influenced the design of farm forestry extension projects. Hence during the early 1980s, such projects relied on a policy of service and material inputs delivery by providing free tree seedlings, paid cost of

training, cash-pay for planted seedlings, and technical information to encourage farmers to adopt farm forestry. Many examples on extension experiences in a bibliography by Kaudia (1992) and other writings indicate that extension agencies relied on a supply-push extension policy (Smith, 1994, Enters and Hagmann, 1996). Extension workers had the role of delivering messages as prescribed to farmers who were assumed to be ignorant and needed the prescriptions to solve their farming problems. This situation has been changing. Extension service provision is no longer the domain of traditional forestry extension departments. Efforts to improve farm forestry extension to achieve extensive adoption has started drawing the attention of major agencies in this field like the International Center for Research in Agroforestry (ICRAF). A recent workshop on scaling up the impact of agroforestry research by ICRAF yielded a list of conditions for successful extensive adoption of farm forestry (Cooper and Denning, 2000). The conditions referred to as fundamentals for scaling up the impact of innovations point to new roles for extension workers.

### **Emerging changes in extension policy and strategies**

Some of the notable changes include:

1. Change in policy from material delivery and incentive package provision to demand-driven extension,
2. Extension agents taking a position of being facilitators of extension and not “expert marketing agents” or “messengers”,
3. Reduced resource allocation to extension (both financial and staff), and
4. An approach based on the principal of gradual coverage of a target area.

These changes and their implications are elaborated on in the case studies.

The emerging conceptual framework for extension can be simply described as one of cost-sharing and community capacity-development for sustainability and market oriented production. Hence ideas and courses of action are discussed and mutually agreed upon between the extension agents as “*technical experts*” on one hand and the farmers who are the “*recipients*” of the services on the other hand.

Participatory extension is however challenging. Methods for empirical application of the concept are largely lacking. Case studies in the following section illustrates some of the current experience.

### **Experience with community-driven extension approaches**

Differences between countries are notable regarding the extent to which community-driven farm forestry extension is developed and operational. In countries like South Africa and her former “colonies” -Lesotho, Botswana, Swaziland, Mozambique and Namibia - where industrial forestry has been

predominant, extension has been oriented to commercial production of trees as described by Arnold (1998). In this case representatives of companies which contract the farmers to grow trees deliver seedlings and other production inputs. Farm forestry in this case is a business activity (Arnold, 1998; Mabena, 2000). In frontline states neighboring South Africa (Zambia, Malawi, Zimbabwe and Tanzania), extension workers from government and non-governmental agencies have continued to play the role of “messengers” and “technical experts”.

In Malawi, Kachala and Banda (2000) report that the new forest policy published in 1996 encourages community participation. The Social Forestry Training and Extension project funded by the European Union since 1999 seems to be the pioneering project with a focus on community-driven extension approach. The approach of this project has been to train Village Natural Resource Management Committees to serve as farm forestry extension facilitating agencies (Kachala and Banda (2000). In Zimbabwe, the Forest Extension Division of the Forestry Commission has had a lead responsibility in forestry extension especially after the setting up of the Rural Afforestation Project in 1982. But Choruma (2000) indicates that as yet, a comprehensive framework for farmers to take a responsible role in extension is lacking.

The situation in Zambia, reported by Tembo (2000) indicates that most projects still use the supply-push extension model. The Soil Conservation and Agro forestry Extension Project (SCAFE) in Zambia applies a participatory approach with aspects of farmer facilitation. Farmers raise their seedlings but the project provides technical advise on the growing of trees for soil conservation. Uganda is said to have set up the necessary policy and institutional framework at the community level for community participation in development. Through the decentralization policy, resources for development are allocated for control by local communities through local councils. It is plausible that under such conditions, community-driven extension programs will evolve.

Overall, there are few projects with practical experience with community-driven extension. In the following section, two case studies are described to illustrate the application of community-driven extension concept.

## **The Extension case studies**

### **Case study 1: The Training of Resource Persons in Agroforestry for Community Extension (TRACE) Approach by CARE Kenya**

#### ***Background***

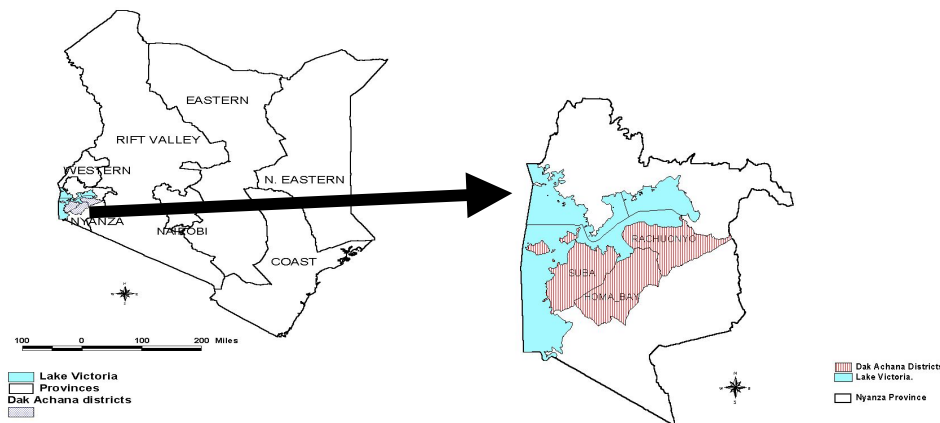
CARE International in Kenya (CARE Kenya) is a not-for-profit non-governmental organization. Between 1993 and 1996, CARE Kenya embarked on extension methodology development through iterative consultations with communities. It is during such consultations that community leaders suggested an organizational

structure to facilitate their participation in extension. The TRACE extension methodology then evolved.

Practical application of the methodology however started with the implementation of the Nyanza Household Livelihood Security Program funded by USAID. The program runs between October 1998 and 2002. It is located in semi-arid part of western Kenya at the shores of Lake Victoria in three districts namely; Homa Bay, Rachuonyo and Suba shown in Figure 1. Inhabitants of the project area are typically small-scale subsistence farmers with freehold entitlement to land. Land owned is on average 2.4 Ha (GOK, 1997).

### ***The TRACE Approach***

The TRACE extension methodology is process oriented. The community entry process is through local administrative leaders (Chiefs). Chiefs are responsible for governing the smallest administrative unit known as a Location. A Location comprises several villages. The Chiefs are introduced to the project activities during a course. Thereafter, Chiefs mobilize community members to organize themselves into groups. During community meetings individuals are elected to form a Locational Management Committee (LMC) this committee reports to a Locational Development Committee, which is responsible for various development activities in a Location. In each Location, 15 groups are selected. The 15 groups are re-grouped into 2 to 3 clusters of farmers with common interest. In areas where the program is not implemented through groups, Village Agricultural Promoters (VAPs) are elected. LMC members elect among themselves farmers who can serve as group resource persons and others as researchers. The latter are known as the Adaptive Research Farmers (ARFs). The former are Group Resource Persons (GRPs). The GRPs are trained as trainers of other members and the community. GRPs are the lead extension service focal providers. Apart from issues in agriculture, the program promotes development of community water points to avail clean portable water and control water borne diseases. The logic is that a healthy, well-fed population will have the necessary ability to pursue economic activities including farm forestry.



**Figure 1: Location of Project in Western Kenya**

### ***Community capacity building for extension***

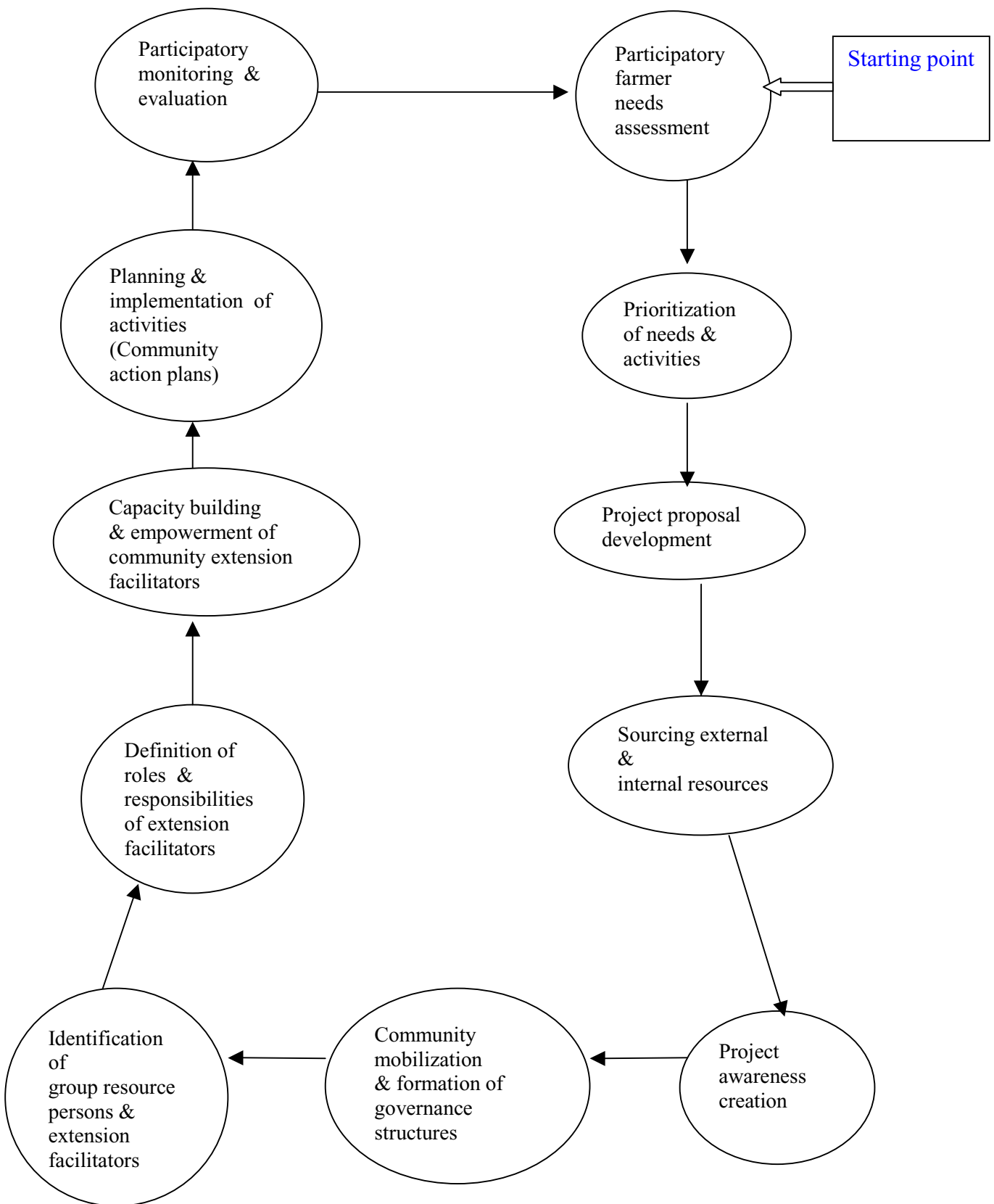
After the community-level local committees and interaction framework have been formed, the LMCs are facilitated to use various Participatory Rapid Assessment (PRA) tools to identify and prioritize subject areas in which they should be trained to acquire the necessary skills and knowledge to undertake adaptive research, adopt and disseminate the promoted innovations. This Training of Trainers approach ensures that the GRPs and ARFs can continue with extension service with minimum external inputs. The GRPs organize and implement training courses for fellow farmers. They provide advisory services on a one to one basis when called upon. The project however continues to provide services in the area of linking the community with other sources of resources, technical information and planting materials for newly introduced crops and fruit trees.

The project operates in one Location for about two years only. Thereafter, activities of the project are phased out to another Location. With time, the target area and about 8,000 farmers will benefit.

Community extension workers of the project are also phased-out from the weaned Locations. However, one community extension worker is retained to continue providing facilitation services. The TRACE process as we have summarized it is illustrated in Figure 2.

A different concept to TRACE but with a similar approach is described in the following section.

**Figure 2: TRACE Extension Approach Process**



## **Case study 2: Mount Elgon Integrated Development and Conservation Project (MEICDP)**

Mount Elgon forest reserve is located in western Kenya. The mountain transcends Kenya into Uganda. It is an important biodiversity conservation ecological system and is comprised of the National Park and Mt Elgon Forest Reserve. Threats from the forest adjacent communities who have relied on the forest for subsistence, game hunting and non-residential cultivation necessitated an intervention. The MEICDP project was initiated in 1998 for a two and a half-year period. The area of intervention was a 10 km belt around the Forest Reserve.

Communities living adjacent to Mt. Elgon are typically a mixture of migrant communities from neighboring Uganda and districts bordering the mountain. The bordering districts are typically large scale farming areas. Maize is the predominant food and commercial crop. Farmers have cleared their lands of trees and even planting on the boundaries of farms is not common. A possible explanation for the expansive land areas without trees but covered with vigorous maize crop or grassland is that it is a new settlement area and most of the inhabitants have not secured legal ownership for the lands. Some of them displaced the original owners and the likelihood of reclamation lingers on. There is no incentive for growing trees. In addition, the individuals can – despite restricted access – obtain the necessary tree products from the Forest Reserve.

The low extension workers to farmer ratio and limited extension resources necessitated formation of a complementary extension service based on community participation. The Community Conservation Teams (CCTs) were therefore formed. The formation was through a process entailing voluntarism or selection, confirmation by community members and endorsement by the Chief.

The CCTs concept is still in a pilot stage of development. Four pilot areas in two districts neighboring Mt. Elgon have been identified for trials. The pilot areas differ in terms of ownership of land. In one of the districts about 20 km from Mt. Elgon, farmers own 50 Ha of land on average. On the periphery of Mt Elgon where land ownership is not yet secure, farmers are new settlers and cultivate smaller areas of land.

The institutional arrangement of the CCTs entails community representation at various levels of collaboration up to a national level. At national level, one member represents CCTs in the project implementation steering committee. The 17 CCT members are divided into teams of four in each of the pilot areas. The CCTs have been trained in PRA techniques and production of Community Action Plans.



## ***The role of CCTs<sup>1</sup>***

The framework for implementing the MEICDP was that active participation by community members is essential for effectiveness and sustainability. Empowering the communities to improve their livelihoods through multiple strategies in farming and non-farming activities was seen as a strong foundation for creating self-reliance at farm level, reduced dependence on Mt Elgon Forest Reserve and hence its conservation. The CCT members are responsible for community education, creating awareness on environmental conservation and promoting Farm Forestry.

However, the CCTs have faced the following challenges:

1. CCT service is based on voluntarism. They are not paid wages. This constraints their operation as commitment is divided between working for self and working for the community;
2. The members are not facilitated with extension resources especially transport. Although each team covers a few villages, they still work long distances to cover the target area;
3. Forest adjacent communities tend to be unwilling to practice farm forestry. Communities were initially less receptive to CCT members. They were considered spies for the government on non-residential cultivators;
4. Without legal recognition, CCT members got into problems with local politicians who questioned their role in the community; and
5. The weak collaboration between CCTs and government extension workers creates conflicts. The government extension workers consider CCTs a duplication of efforts and there are no formal/informal collaboration arrangements<sup>2</sup>.

Despite the numerous constraints, CCT members enumerate various achievements including that communities have started to appreciate the importance of on-farm tree planting. This is indicated by the increasing requests for seeds and seedlings.

The CCT members envision their sustainability through formation of a Community Based Organization (CBO) when the project is concluded. Such a organization would be semi-commercial and problems associated with voluntarism would be resolved. The CBO would fit into the institutional framework of the new Kenya Forestry Bill 2000, which has provided for active

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<sup>1</sup> Based on Focused Group Discussions conducted inn May 2001 with CCT members in Mt. Elgon.

<sup>2</sup> This situation had not been resolved at the time this paper was written.

participation of communities in the management of forests and promotion of farm forestry through CBOs and local environment conservation committees.

### **Discussion: The emerging roles of extension staff**

Extension experiences in Africa indicates that most projects have not practically adopted the concept of community-driven extension. This might be because of the difficulties associated with practical application. The TRACE and CCT extension approaches described in the previous section illustrate that it is possible for communities to take-up responsibility for extension with scope for sustainability. But, extension workers have important responsibility in community capacity development. It is feasible that the community organizations can evolve into extension service firms.

### **Conclusion**

Sustainability of the emerging community-based organizations for extension is yet to be determined. Poverty and weak economic capacity of most farmers in Africa presents a practical challenge to privatization of extension services without the risk of excluding the poor majority and enhancing low productivity.

Extension agents will continue to provide important linkages between communities and sources of resources and technical information. Leaders of community-based organizations that take responsibility for extension need training in community mobilization, empowerment, conflict resolution and management, adult education among other technical skills.

The role of extension agents is in fact not fading but illuminating new dimensions, which should be incorporated in the design and implementation of extension programs. The key areas of responsibility include being networking facilitators, marketing consultants, facilitators of acquisition of extension resources like seeds, and technical information.

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