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## **POLICY BRIEF**

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# **Enhancing Access, Accountability and Empowerment Through Decentralization and Participation: Agricultural Extension Service in Western Kenya**

**By Elizabeth Nambiro and John M. Omiti**

### **Decentralizing Extension Provision**

Agricultural extension service involves educating farmers on improved farming techniques to increase farm productivity and income, promote socio-cultural, recreational and intellectual opportunities, and consequently to improve the welfare of rural dwellers. Through the nineties, established modes of extension provision began to shift in favor of extension models that expressly involved farmers in the design or prioritization of services offered. This reorientation of extension toward participatory processes was catalyzed by the increasing realization that effective and sustainable extension programs could only be achieved if the end-users (farmers) took on a more active role and became proactively engaged in seeking and disseminating the resources relevant for the specific constraints that they face.

In Kenya, this evolution in the structure of the extension system coincided with the structural adjustment reforms of the nineties aimed at liberalizing the economy. Where previously the provision of agricultural extension services had been the preserve of the State, the pressures of liberalization forced the government to take a secondary role. New players such as NGOs and CBOs arose to fill the vacuum, and larger producer organizations such as the Horticultural Crops Development Authority, the Kenya Tea Development Agency, Coffee Cooperatives etc., were forced to take responsibility for assuring their members had access to suitable extension advice. In its diminished role, the government decentralized

its extension efforts to the divisional level in an attempt to cater to those farmers without access to the new providers of extension support.

In 1994, the government drafted the National Agriculture Extension Policy (NAEP) which became operational in 2001 through the National Agriculture and Livestock Extension Policy (NALEP). In keeping with the increasing emphasis on participation and accountability, NALEP's mandate has been to promote a national extension system that is more responsive to the needs and realities of its clients and to facilitate effective coordination among the key stakeholders in the industry. It is not immediately clear, however, how to most effectively operationalize such a goal. To do so, one must have a sense of the factors that influence one's access to extension, an understanding of the impact that decentralization has had on access and participation, the value that farmers place on receiving extension services, and so on.

This study seeks to investigate the factors that influence farmers' access to extension advice and to identify the relative efficacy of various extension delivery mechanisms. The authors focus their study on the Ikolomani and Municipality divisions of Kakamega District in Kenya's Western Province.

## Preferences of Extension Delivery Channel

One of the principle objectives of this study was to get an understanding of farmers’ awareness of the various extension delivery mechanisms available to them as well as their perception of the variation in the quality and affordability across these channels. Respondents were presented with four choices of extension and information delivery systems that covered all possible sources and were asked to rank them on the basis of quality (proxied by the likelihood of receiving advice from trained personnel) and affordability. The four choices given were: Public, which includes any service provided by government extension agents or research institutions; Private, made up of agrovets and privately employed animal health assistants (AHAs); CBOs, which include NGOs, CBOs, and other non-governmental non-profit agencies; and Media which comprises any relevant information source from newspapers, pamphlets, radio, or television. The table below presents the responses received.

## Rankings of Extension Services Delivery Channels

| Extension service delivery channel | Ranking by descriptors |               |
|------------------------------------|------------------------|---------------|
|                                    | Quality                | Affordability |
| Public                             | 1 (73.0)               | 1 (70.0)      |
| Private                            | 2 (19.0)               | 3 (12.0)      |
| CBOs                               | 4 (2.0)                | 2 (20.0)      |
| Media                              | 3 (16.0)               | 4 (8.0)       |

Figures in parenthesis are % of respondents that ranked the delivery channel first.

As expected, public delivery channels were the most affordable as they often are provided at no cost to the client. Interestingly, and somewhat unexpectedly, public delivery channels were also ranked first for quality. This is important as it suggests that government extension agents are highly regarded by farmers and are therefore more likely to be sought out for advice and that such advice, once given, is relatively more likely to be operationalized by the farmer.

Delivery of extension by CBOs and other like organizations was surprisingly perceived to be of the lowest quality among the four sources. Given that such organizations also offer fairly affordable services, and that they are at the forefront of efforts to emphasize demand-driven extension, the respondents’ expression of limited confidence in these

is puzzling and raises interesting questions for further investigation. Why exactly do CBOs have such a relatively poor reputation? Are CBOs and similar organizations truly underperforming as this suggests, or do misconceptions regarding their role in extension persist that serve to weaken their effectiveness?

## Factors Influencing Access to Extension

Enhancing farmer’s access to sources of extension advice is an integral part of extension policy. To carry out such an objective effectively, it is necessary to have an understanding of the factors that influence one’s access to the relevant sources. To this end, the authors regressed two separate measures of access on several variables to control for households level effects. The first measure focuses on the determinants of accessing demand-induced extension and is captured in a dummy variable equal to one if the particular household received extension advice in the past year as a direct result of proactively seeking out the service. The second measure focuses on the factors influencing the receipt of supply-led extension and is captured in a dummy variable equal to one if the sample household received unsolicited extension advice in the past year. Probit regressions were run to test the effect that the covariates had on the probability that a household accessed demand-induced or supply-led extension.

Twenty-nine percent of the total sample of 110 respondents indicated having sought extension advice. Factors significantly influencing the likelihood of accessing demand-induced extension include the household’s distance from the town center and their access to a telephone. As expected, the closer one is to the source of extension, the more likely one is to seek out its services. The positive and significant relationship between phone access and seeking out extension services could be explained by its facilitation of direct communication that allows meetings to be scheduled in advance and farmers to ensure that the extension provider is available before making a visit.

The sex of the household-head also proved to be a key determinant for seeking out extension. Male household heads are significantly more likely to seek out extension. This suggests the possibility of male-bias in extension demand. If traditional gender roles constrain women from seeking agricultural advice, efforts to emphasize a demand-driven extension system must include mechanisms to address the prevailing gender-based demand differential.

Forty-one percent of the sample benefited from supply driven extension services suggesting that a majority of extension efforts continue to come from agents directly seeking out farmers. Households with access to a radio, a television or a telephone were more likely to be visited. The age, education level, and sex (male) of the household head was also positively and significantly related with the probability of an extension visit. These results provide an indication of the characteristics of households that are often overlooked by extension agents.

### **Willingness to Pay for Extension**

Some countries' response to reductions in public funding of extension services has been to commercialize extension services. However, the commercialization of extension services is only possible if farmers are willing to pay for these services. Where extension services have previously been provided free of charge, it can be difficult to establish the latent commercial demand for agricultural extension information.

Toward that end, the authors used econometric methods for establishing the value of non-marketed services and goods to estimate farmers' willingness to pay for extension services. Their survey results find that 49% of the farmers expressed a willingness to pay for extension visits. The contingent valuation (CV) methods the authors used to establish how much farmers would be willing to pay yields a mean estimate of Kshs 262 per extension visit if the services are efficient. This compares favorably with the Kshs 200 consultation fee typically charged by veterinary service providers in Kakamega District.

These results imply that there exists significant demand by farmers for extension information services, making it potentially attractive for commercialization or privatization if high quality extension can be provided at costs on this order per visit. These results suggest that cost recovery mechanisms might be able to enhance the funding of extension delivery systems that farmers indicate they find useful and important.

Many of the same factors that affect household use of demand-induced and supply-driven extension also influence households' willingness to pay for extension services. In particular, ownership of or access to a radio, television or telephone positively and significantly increased households' willingness-to-pay for extension visits.

### **Summary and Policy Implications**

This paper seeks to investigate the extent of farmers' access to various sources of extension service and to determine the factors that influence both a farmer's tendency to proactively demand extension advice and an extension agent's choice of farmer to visit. Evidence from Kakamega District in Western Kenya suggests that government agents are the preferred provider of agricultural information as they are both considered to be the most affordable and the most accurate source of information. Nonetheless, with the limited government funding available for extension provision, other modes of extension delivery are necessary to complement the government's efforts and fill the vacuum in access that may arise.

The findings of this study point to the importance of creating a coordinating mechanism that allows the key stakeholders in the industry to maximize their efforts in collaboration. As the study shows, the government seems to main a comparative advantage in the provision of extension, at least as perceived by the farmers themselves. As the government cannot alone finance all extension efforts, they should provide an enabling environment for the enhanced effectiveness of other players. One possible, untapped resource with documented potential is the use of national radio to broadcast targeted programs with extension content. Development practitioners are beginning to recognize the value of such an information delivery system and various initiatives in several nations are already making use of this mechanism (see Eltzroth et al., 2003).

Community Based Organizations and other similar agencies need to put forth a concerted effort to sensitize skeptical farmers to the benefits of the services they offer and also to ensure that the services that are offered are relevant to their clientele and of high quality. Encouraging partnerships with local farmer organizations would increase awareness and is also likely to improve the perception farmers have of these agencies by actively including them in their activities.

A further key finding of the study was the fact that males were significantly more likely to seek extension advice or to be visited by agents. This reveals the critical need to gender-sensitize extension providers and to create programs that specifically empowers female farmers to proactively seek all available resources of information pertinent to improving their farm productivity.

## About the Authors

Elizabeth Nambiro is an Agricultural Economist with Kenya Agricultural Research Institute while Dr. John Omiti is a Senior Research Fellow and Coordinator of the Real Sector at the Institute of Policy Analysis and Research (IPAR) in Nairobi Kenya. This brief is based on their paper “Enhancing Access, Accountability and Empowerment for the Poor Through Decentralization and Participation: A Case for Agricultural Extension Service in Western Kenya.”

## Further Readings

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