

Access to and Governance of Rural Services: Agricultural Extension and Drinking Water Supply in Ethiopia

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This study investigated access to agricultural extension and rural water supply and assessed strategies to improve the provision of these services by strengthening accountability. The study paid special attention to the gender dimension of service delivery. The research was conducted in eight districts located in seven administrative regions of Ethiopia, combining quantitative surveys with a qualitative case study approach. Empirical findings show that access to safe drinking water is rather low: 32% of the surveyed households use safe drinking water sources, and the average time to fetch water from safe sources during the dry season ranged from 29 minutes to 82 minutes. Agricultural extension services were relatively accessible, but there were differences in access between men and women, and particularly stark differences across the survey sites in different regions. Farmers' satisfaction with extension services was very high, but only 8 percent of the sampled farmers had adopted any new practices in the past two years.

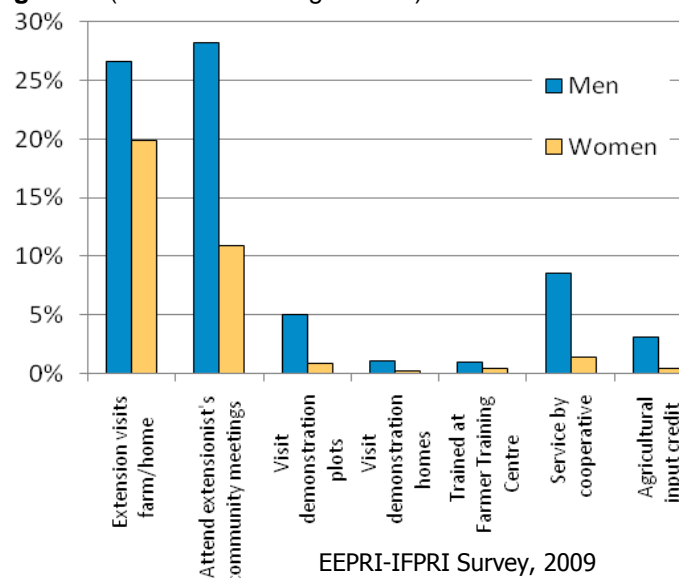
Assessing effectiveness of public service delivery

This study surveyed eight woredas or districts (four pairs of woredas) located in 7 of Ethiopia's 11 regions. Each district pair is geographically contiguous, but belong to different regions. Of the two regions associated with a district pair, one is a "leading" region—that is, one of Ethiopia's four more institutionally advanced regions—and is one in which local-level decentralization has taken place. The other district of a district pair belongs to a "lagging," or "emerging," region. From each of the eight districts, four kebeles were randomly sampled. From each of the resulting 32 selected kebeles, 35 households were randomly drawn. This resulted in a planned household sample size of 1,120. In each household, both the household head and the spouse were separately interviewed. Quantitative kebele level surveys were also conducted in the same weredas as the households survey, with separate questionnaires for focus groups, wereda council members, kebele council members, kebele council speakers, kebele chairpersons, agricultural extension agents, heads of water committees, and heads of agricultural cooperatives.

Access to drinking water and extension services

There are clear, albeit not stark, differences in **access to agricultural extension** between women and men. While 20% of the women covered in the sample received agricultural extension visits at home or on the farm, 27% of the men in the sample had access to agricultural extension visits. However, this does not reveal whether the woman actually came into contact with the extensionist during these visits, or whether the extension officer focused his or her advice on the man in the household. The latter is in fact strongly suggested by the qualitative fieldwork, which also found that extension agents targeted the men even when the advice concerned activities primarily undertaken by the women (such as poultry keeping).

Use of extension and other agricultural services, by gender (Percent receiving service)



Also, access of women to extension services remains curtailed relative to that of men, as proportionally much fewer women than men (11% versus 28%) appear in community meetings organized by extension agents, and significantly fewer women than men visit demonstration homes and plots. The national goal is that women should account for 50% of extension users, but the team found many barriers to women's participation in extension programs, including cultural norms.

Compared to the differential access to extension by gender, the share of households receiving extension visits varied more drastically by region, ranging from 2% in the Afar site to 54% in the Tigray site.

Access to safe drinking water in Ethiopia was rather low: 32% of the surveyed households use safe drinking water sources, and 3% use wells without pumps (which would be classified as safe if protected). The average time to get to safe water sources during dry season ranged from 29 minutes (for public standpipes) to 82 minutes (for wells with pump).

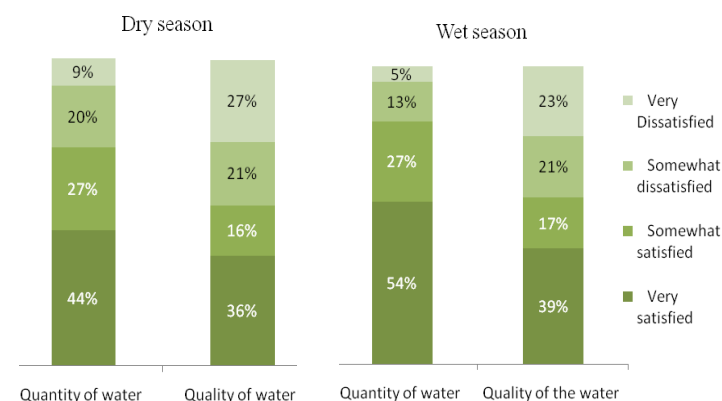
Rural development policy may consider the level of priority it gives to this sector in light of the potentially important productivity effects of reducing women's daily time spent fetching water (as this is time not spent engaging in agricultural activities) and of having better access to safe water sources (as health problems are a major cause of rural residents' inability to work).

Expressions of satisfaction with extension and water services

Using the methodology that is widely applied in the "Citizen Report Card" approach, the survey tried to establish how satisfied the farmers were with the extension and water services they receive. Practically all extension recipients in Ethiopia expressed satisfaction with the extension service. Similarly, 71% of the households were very or somewhat satisfied with the quantity and 52% with the quality of drinking water (dry season), even though access was very low. Inconsistent with these findings is the fact that a considerable share of the households identified water as their main concern; 34% of the female-headed households considered drinking water to be their main problem, a larger percentage than for any other identified service or infrastructure type. However, respondents expressed discontent with the governance of water systems in the qualitative case study research. Yet, the share of households who took any action, such as contacting political representatives or public officials to complain, was low.

The inconsistency between the problem ratings on the one hand and the satisfaction ratings and the low inclination to complain on the other hand may have several reasons. First, awareness about the health advantages of using safe drinking water sources seems to be limited, which is indicated by the high satisfaction rates with the quality of unsafe drinking water sources. Second, respondents may feel uncomfortable giving answers that might be seen as critical to the government's service provision. Third, residents perceive any basic public service as a privilege and gift from government rather than the state's obligation to its citizens. More research needs to be conducted into the satisfaction question methodology to make it attuned to specific social and political contexts.

Satisfaction with quantity and quality of drinking water supply



EEPRI-IFPRI Survey, 2009

Modality of service provision in agricultural extension and water supply

Individual visits by **public sector extension** agents, which can be referred to as the "traditional model," has remained the predominant mode of providing extension. NGOs were not active in providing extension. The extension role of NGOs was limited to the training of extension agents and other district-level staff, but in the study sites did not involve the direct advisory services to farmers. Private sector enterprises also did not feature as providers of extension services.

Ethiopia pursues the strategy to mainstream gender through the "gender machinery" in the public administration. There are wereda (district) Offices of Women's Affairs as well as gender desks or gender focal points within each line department at the wereda level, including in WoARD, the office in charge of agricultural and rural development. There is also a women's affairs position in the kebele cabinet. The rapid expansion of the extension service has created many more opportunities for women to work as crop, livestock, and natural resources management specialists, rather than as just home economics extensionists.

Nevertheless, gender-differentiated treatment in extension provision persists. It may originate from many sources, but one reoccurring theme in the study was the cultural perception that "women don't farm," even where the range of agricultural activities in which women engage is well known. The perception of men as "farmers" and women as "farm wives" also proposes that professional advice given to the man will be faithfully passed on by him to his wife, without due consideration of the somewhat different realms in agriculture in which women and men engage.

The construction and major rehabilitation of **drinking water facilities** is managed by district water desks or technical departments, which are backstopped by the Regional Water Bureaus. Currently, water desks are under the wereda Office of Agriculture and Rural Development (WoARD). Water committees have been established, each of which is supposed to manage one water facility. Committees register users, mobilize labor contributions, collect fees, and ensure maintenance. Although bringing water to the household is predominantly a task undertaken by women (and their children), the study found that in all sites except for one, the water committee leaders were men (although water committee members did include women). In the remaining study site, all water committee leaders were women.

The study found that in some cases the functioning of water facilities was compromised if the organization that constructed the facility did not take into account the community's knowledge of water sources in determining where to locate the facility. Such phenomena prevailed whether the government, NGOs, or the private sector were responsible for the construction of drinking water facilities. Both geological expertise by service providers as well as local knowledge of the community can be drawn on to minimize mistakes in site selection. The study found that service providers at times only think through the process until the completion of facility construction and do not take into account a more long-term maintenance strategy. This is a waste of resources if facilities fall into disrepair because of a lack of, or an inadequate, maintenance system.

Linking extension to women's groups

Women are organized in various forums that are associated with the political party system. The women's associations and the women's league of the party have shown themselves to be possible entry points for strengthening service delivery to women. The study found that in some areas extension agents are trying to find ways around cultural taboos to work with more women by collaborating with local women's associations. In addition, party ideology and government policy support gender equality while recognizing the barriers posed by centuries of patriarchal culture. The women's associations and party women's groups not created by external agencies such as donors—and such groups are widely present through the country at the lowest administrative unit—have been found to be quite active in some of the study areas.

Assistance and policy to further expand this and other approaches to facilitate women's access to extension advice somewhat more in line with that of men can include, to start with, better and more-detailed documentation on how and through which mechanisms women's associations are successful in bringing extension advice to their members. These lessons can then be taken into account in a process of expanding this approach, possibly through a project within a limited number of rural districts in Ethiopia that focuses on drawing on women's associations and other women-focused local institutions in extending agricultural advice to women. Such a project can then lead to a more widely applicable policy, after further lessons are learned on what works and what doesn't in this approach.

Overreliance on a package approach

Unlike in several other developing countries, in Ethiopia the **challenge to make agricultural extension demand driven** is generally not predominantly due to neglect to provide public investment in extension and employ extension staff. The study indicates, instead, that it was the pronounced “top-down” nature of public service delivery in Ethiopia that made it difficult to tailor agricultural extension to farmers' demands. While in comparison to many other African countries, farmers in the Ethiopian study areas have more access to extension services, practically none of the extension visits resulted from farmers demanding or requesting some specific advice or information. The incentives of the extension agents were set in such a way that they tried to maximize farmers' willingness to adopt the “technology packages.” Since these packages are mostly not subsidized, convincing farmers to adopt them is the major task of the extension agents. The study found evidence that extension agents were discouraged from adapting the packages to local needs. Even where extension agents wished to be able to tailor their advice to diverse local needs, the fact that their promotion depended on meeting quotas of adopted packages discouraged them from pursuing a more demand-oriented focus.

The packages have become less rigid in recent years, with a menu of options now available to farmers. However, the quota system for the evaluation of extension agents remained in effect at the time of the study. The top-down orientation of delivery was even reflected in the way that the different roles of agricultural workers reporting to the district government coagulate. Supervisors should coach and ensure extension agents' strong performance, and subject matter specialists should provide technical backup. In practice however, these actors formed a chain of command, the main purpose of which was to make farmers adopt the standardized agricultural packages. Nevertheless, the study

found that the posting of agents to the kebeles does make them more attuned to local needs and desires. In fact, the agents are now well-positioned to play an important role in facilitating bottom-up information flow if their incentives were appropriately altered to encourage this.

With a view to ensure increased technology adoption by more farmers, policy advice could promote expanding the discretion of agricultural extension agents, and giving them more space to experiment together with their farmers with potentially more appropriate technology and input packages than those they are obliged to promote. That said, it is important to acknowledge the progress made in government policy to diversify the farmers' packages, expanding to new menus for women (spouses of household heads) and for pastoralists. However, even the more diversified menu cannot substitute for the microlevel adaptation, the process that would make new inputs and practices more credible to farmers, and which only extension workers and their farmers can feasibly manage. This is particularly important with regard to extensionists' work with women (both household heads and spouses of heads, whose needs may differ), as extension advice to women is still less frequent, and thus both female farmers and extension agents need to have the opportunity to experiment with input combinations and other advice on agricultural practices. The recent policy to develop packages based on model farmers' practices offers an interesting potential in this respect.

Training of frontline service providers

The training of extension personnel reflects the supply orientation of the extension service. Much of the pre-service training focused heavily on technical issues, nearly to the exclusion of aspects such as community organization and interaction and gender concerns of services, topics that would contribute to the ability of front-line service providers to manage community members' concerns and feedback and to use this feedback to better tailor services to farmers' needs. However, the study suggests that extension workers received in-service training on these topics, among others from NGOs. Similarly, as found in this study, water committees are often only trained in handling technical issues related to the water facilities. Training for managing community relations, raising awareness for the need of users to ensure the facilities get maintained after initial construction, and similar “soft” skills is very limited. One important reason for the nonfunctioning and nonuse of drinking water facilities in rural areas is the poor governance of facilities by water committees, and specifically the challenges water committees face in mobilizing community resources to maintain facilities. Water policy could help in expanding this form of capacity building. As training of water communities is commonly undertaken (or commissioned) by district water desks, or regional water bureaus, first an assessment could be made how well these trainers are themselves versed with community relations topics relating to water user groups. Targeting the public sector agencies tasked with training water committees may also be an efficient way to support this issue.

The short and the long route of accountability of service providers to rural residents

The reach of the state is extraordinarily deep. This is manifested in at least two ways, and these two ways interact with and influence each other. First, decentralization has facilitated and enabled a deep reach of the state down to the level of groupings of 30 to 50 households. Decentralization has made the kebele, with an average population size of approximately 5,000, the lowest formal administrative unit at which deliberative, executive, and judicial bodies manage local affairs. But the existence of a formalized state structure at this level has made possible the further organization of households into *mengistawi budin* (government teams), which, through the *mengistawi budin* leaders, coordinate the implementation of government development programs, ensure labor and other contributions from households for government initiatives, and in some cases work closely with and even evaluate the performance of front-line extension workers. Second, the deep reach of the state has manifested itself also in the ability of the government to see through a dramatic expansion of those public services that constitute a priority area in its policy framework. Agricultural extension delivery is one such priority area.

Hence, the short route of accountability—rural residents' ability to hold service providers accountable—is accessible for rural households, at least in terms of physical proximity. Yet, in view of the predominant top-down approach to agricultural extension, the challenge remains how to make agricultural extension more responsive to the needs of farmers, including female farmers.

Standardization versus demand-oriented public service delivery

One has to acknowledge that upward accountability also has some advantages. The fact that the extension providers in Ethiopia reach a larger share of farmers, both male and female, may be due not only to the favorable agent-to-farmer ratio, but also to the strong discipline among the extension agents that induces them to meet their package targets. Also contributing to the success of agricultural extension is the high priority placed on this service by the political leadership of the country and party. The standardized system reduces the challenge of supervising and monitoring extension agents, which is one of the inherent challenges of providing this service.

However, African agriculture is characterized by agroecological diversity—this is especially true in Ethiopia, where one can find different agroecologies within a single district (*woreda*) and technologies do not “travel far” in this part of the world. In fact, only Australia is similar to Africa in the need to tailor technologies to very specific situations.

Therefore, a more demand-driven approach is essential to develop agriculture in Ethiopia, beyond other instrumental or intrinsic reasons to favor participatory approaches to agricultural and rural development. With regard to drinking water, a standardized approach might work better as far as the provision of infrastructure is concerned. However, a major challenge of providing drinking water is creating awareness about the advantages of safe drinking water, and encouraging communities to work collectively and invest time and resources in the maintenance of drinking water facilities.

This research note is intended to promote discussion; it has not been formally peer reviewed but has been reviewed by at least one internal and/or external reviewer.

The Ethiopia Strategy Support Program of the International Food Policy Research Institute (IFPRI) works closely with the government of Ethiopia, and other development partners to provide information relevant for the design and implementation of Ethiopia's agricultural and rural development strategies. For more information, see <http://www.ifpri.org/book-757/ourwork/program/ethiopia-strategy-support-program> or <http://www.edri.org.et/>.

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