



## Farmer-to-Farmer Extension: Issues in Planning and Implementation

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### Introduction

Over the past decade a quiet transformation has been unfolding in Africa in the provisioning of extension and advisory services by state and non-state actors. The changes taking place, unlike the past, have not been led by a dominant paradigm supported through donor investments. Rather, the changes have been organic, arising from within the region in response to needs for greater cost-effectiveness, broader reach and aspirations for sustainability of their efforts beyond the investment cycle. The use of farmer field schools, and more recently expanded use of various information communication technologies, have been widely promoted and researched; farmer-to-farmer (F2F) extension approaches, have not. Yet in many countries F2F extension now constitutes the dominant approach.

F2F extension is defined here as “the provision of training by farmers to farmers, often through the creation of a structure of farmer promoters and farmer trainers” (Scarborough et al., 1997). We use the term “lead farmer” as a generic term for farmers serving extension functions within F2F programs, although we recognize that

different labels (e.g., model farmer, volunteer farmer, farmer trainers, community knowledge worker) are also used and often have implications for the exact roles and tasks performed by the farmers involved.

### Background

F2F extension programs date back at least to the 1950s (Selener et al., 1997). Currently such programs are widespread. In Malawi, for example, a survey of 37 major extension providers found that 78 percent used some form of F2F extension (Masangano and Mthinda, 2012), while across seven regions of Cameroon, 31 percent of 151 extension services were using the approach. The Malawi Ministry of Agriculture alone works with more than 12,000 lead farmers. Surprisingly, as pervasive as these programs are, little has been done to describe them, assess their effectiveness or distill lessons on successful implementation. A number of case studies have been written on F2F extension programs (e.g., Hellin and Dixon, 2008; Amudavi et al., 2009; Wellard et al., 2013), yet the only document available comparing approaches used by different organizations in different countries is by Selener et al. (1997), which draws on

examples from Latin America and was carried out nearly 20 years ago.

This technical note provides a synthesis of findings from national assessments of F2F extension programs in Cameroon, Kenya and Malawi (Franzel et al., 2014; Tsafack et al., 2014; Kundlande et al, 2014), a survey of lead farmers in Cameroon and Malawi (Khaila et al., 2015; Tsafack et al., 2015), supplemented by a prior survey of lead farmers in Kenya (Kiptot and Franzel 2014) as well as other studies. In total, representatives of 84 organizations using the approach (26-30 organizations per country) were interviewed using a semi-structured questionnaire. In all three countries, focus group discussions were held with lead farmers in order to determine key issues and to help in designing the questions for the structured survey that followed. In Malawi and Cameroon, 203 and 160 lead farmers, respectively, were randomly selected for the survey. These supplemented a survey of 99 randomly selected lead farmers from a dairy project in Kenya conducted previously.

The objectives of this three-country study were three fold: first, to assess how organizations select, train, monitor and reward lead farmers; second, understand the organizations' perceptions of the effectiveness of the F2F extension approach, challenges to implementation and benefits, as well as how they have modified their use of the approach over time; and third, explore what measures can be taken to enhance the sustainability of the F2F approach. The research explored two additional questions in greater detail, specifically: in the absence of salary, what motivates lead farmers to volunteer and continue to serve in this capacity? And, does use of the F2F approach help organizations achieve gender balance –

specifically the proportion of women serving in and reached by extension efforts? After providing a summary of the characteristics of organizations using the F2F approach the remainder of this note is organized around six critical issues related to the design and implementation of F2F extension efforts.

### **General Tendencies**

Of the organizations identified across the three countries using the F2F approach all but two are non-state actors (non-profit, farmer organizations, and private sector). Only in Malawi, where the approach is formally part of the national extension strategy, and to a lesser extent Kenya, do government structures make use of F2F extension. Outside of government and a few large non-state extension programs, nearly all of the organizations using the F2F approach are small, less than 25 total staff, with the majority supporting eight or fewer field staff. As a consequence most programs have limited geographic coverage in their extension efforts. Only in Malawi did a majority of organizations report having national or near-national coverage; the remaining programs reported operating in a few (1-3) districts to a few (1-2) provinces. Most organizations reported being established in the 1990s to early 2000s, with the vast majority adopting the F2F approach since 2005. Where those interviewed could trace the origins of their organizations' adoption of the F2F approach, most cited partner organizations as being most influential, and in the case of Malawi, specifically the national government extension service, suggesting the lateral spread of the approach among organizations similar to the spread of new practices among farmers (see Simpson, 2015). In addition to using the F2F approach to structure their

extension activities, organizations also reported using other extension methods, with demonstrations, field days and exchange visits cited most frequently, followed by direct contact and the use of Farmer Field Schools and various multimedia. These other extension methods were often used in combination with the F2F approach. Organizations interviewed reported increased coverage as the most important motivation in adopting the F2F approach, followed by its ease of use/management efficiency and prospects for sustained impact beyond project end-dates.

### **Selection of Lead Farmers**

Organizations using the F2F approach emphasized the greater effectiveness of farmers' communicating directly with other farmers, than with extension field staff, thus making the selection of lead farmers particularly important. In Kenya and Malawi, the extension organization together with the community (i.e., farmer groups, cooperatives or local leaders) most frequently selected lead farmers (47 percent and 60 percent of cases, respectively), while in Cameroon communities themselves (60 percent of cases) most often lead selection. Some respondents stated that allowing the communities or organizations to choose lead farmers helped increase local ownership and accountability. Only in 8 to 12 percent of the cases across the three countries did the extension organizations select the lead farmers.

Organizations used different approaches in working with communities to select lead

farmers. In some cases, the organization provided selection criteria that the communities then used in choosing their lead farmers. In other cases, communities were asked to nominate candidates, whom the organization then interviewed in selecting one. In other cases organizations encouraged or required communities to select some or a certain percentage of women as lead farmers. In Kenya and Malawi where government has established a target percentage of women employees (e.g., 30 percent), non-state actors often adopted the same targets in their selection of female lead farmers.

Selection criteria varied considerably across organizations with the most important criteria being communication ability, viewed as a "model" farmer, literacy and having good behavior (Table 1). Being a resident in the community or member of the group, being "available" and "teachable" were also important criteria. Some organizations emphasized farming expertise alone, because it was readily observable. Research in Kenya, however, indicates that about 40 percent of those with farming expertise are not expert disseminators (Franzel et al., 2013). In Cameroon and Kenya 60 percent, and in Malawi 30 percent, of the organizations reported having had to replace lead farmers, citing under performance or behavior issues as the principle reasons. Over 80 percent of all the organizations interviewed reported receiving feedback from the communities or groups served by lead farmers in assessing lead farmer performance.

**Table 1: Criteria used for selection of lead farmers**

Selection criteria	Cameroon	Kenya	Malawi
Farming expertise/hard working/can be a role model	72	43	44
Literacy -- able to read and write	48	20	68
Residence in the community	24	17	48
Able to communicate	56	27	40
Good behavior, trustworthy, acceptable to community	56	27	36
Reachable/available	48	43	16
Trainable/teachable	28	27	12
Good track record (has not defaulted on loans in past, no criminal record)	12	0	28
Innovative	0	0	28

**N=25.** Percentages sum to greater than 100 because organizations gave multiple responses.

On average those selected as lead farmers were the same age or younger than the farmers they worked with. Lead farmers had higher or the same education level, and similar or higher wealth status. Most lead farmers are seen as leaders/opinion leaders in their communities, with 25 percent in Kenya holding formal leadership positions. Some organizations, however, said that they avoided individuals with formal leadership roles as these individuals might not have the necessary time available to devote to extension duties.

In many of the cases the lead farmers selected had previous experience serving as lead farmers for other organizations, sometimes concurrently serving more than one organization. Across the three countries, 20 to 50 percent of lead farmers had experience serving as lead farmers for other organizations.

### Gender Balance

Gender imbalance among agricultural extension field staff, that is fewer women than men, is a problem noted by many observers (World Bank, FAO & IFAD, 2009; World Bank, 2012). The examination of enrollment in agricultural extension training programs, however, show that fewer women than men have selected extension as a career path, suggesting the potential that a smaller selection pool rather than overt gender bias in hiring is responsible for the gender imbalance (e.g., Simpson et al., 2012). Some women trained report the desire to be relocated, moving out of remote rural areas to more central locations to be closer to services and educational opportunities for themselves and their children. Is the F2F approach, with no formal extension training required for lead farmers, and the selection of lead farmers from within their communities, capable of overcoming these organizational and individual constraints?

The findings on gender balance are mixed. In Cameroon and Malawi, the proportion of female lead farmers and female field staff were almost identical. Only in Kenya did the proportion of female lead farmers significantly outweigh the percentage of women field staff supporting the F2F approach; women accounted for 33 percent of field staff but 44 percent of lead farmers. In two of the largest F2F programmes in Eastern and Southern Africa, however, the proportion of women serving as lead farmers significantly exceeds the number of female field staff (Figure 1). In the East African Dairy Development (EADD) Project, Uganda, only 5 percent of the professional trainers were women whereas 33 percent of the 1,141 lead farmers were women (Franzel et al. in press). Similarly, 40 percent of the 12,000 lead farmers in Malawi working with the national extension service are women, compared to 21 percent of the government field staff that are women. Where achieving gender balance is an objective of the organization, the F2F approach offers greater flexibility in engaging more women in the delivery of extension field programs.

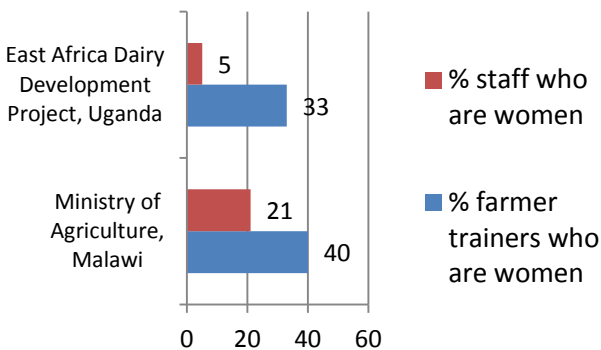


Figure 1. Proportion of staff and lead farmers that are women in two large extension programs.

Men and women lead farmers trained about the same numbers of farmers. Women lead farmers did, however, train more women than men lead farmers did. In Cameroon, women comprised 74 percent of farmers trained by female lead farmers, compared to 41 percent of those trained by men. This difference was statistically significant at the one percent confidence level (i.e., there is only a one percent chance that the difference was caused by random variation). In Malawi, women made up 62 percent of those trained by women lead farmers and 55 percent of those trained by men (this difference was significant at the five percent confidence level). Technology choice, programme objectives and targeting efforts likely influence these outcomes more than natural affinities between the gender of the lead farmer and farmers trained.

### Roles and Responsibilities

The specific roles and responsibilities of lead farmers across organizations in the three countries varied, reflecting the different technical objectives within the F2F programs in which they served. As reported by organizations, training, advising, monitoring/follow-up contacts, organizing meetings and demonstrations in support of technology dissemination objectives were the most common roles carried out by lead farmers. Ninety-six and 98 percent of the lead farmers in Cameroon and Malawi reported that training other farmers was their principle responsibility, followed by advising and monitoring. Between 48 and 88 percent of the organizations interviewed reported that lead farmers had weekly or bi-weekly contact with their groups. The frequency of meetings often varied by season with a majority of lead farmers in Cameroon reporting that they meet with

groups upon demand, which occurred more frequently during the growing season. The majority (>60 percent) of lead farmers served less than three groups, most frequently working with a single group, typically the group to which they belonged. Group sizes averaged 25 members or less. Lead farmers in Cameroon reported to also train an additional 37 persons outside of their principle contact groups. Over the past 12 months, 75 and 65 percent of lead farmers in Cameroon and Malawi reported working with a total of 1-50 farmers respectively.

In support of their lead farmers, the majority (63 – 92 percent) of organizations said that the principal responsibility of their field staff was lead farmer capacity building, and lead farmer follow-up (20-80 percent). Field staff monitored lead farmers performance in terms of numbers of farmers contacted, and the numbers of trainings, meetings held or demonstrations carried out. Only in Kenya did organizations (20 percent) report that field staff monitored the adoption of technologies or practices promoted by their lead farmers. In Cameroon individual field staff worked on average with 17 lead farmers, while in Malawi 42 percent worked with fewer than ten lead farmers.

Across the programs a majority (64 - 72 percent) of lead farmers kept records of their activities. Attendance and the numbers of farmers trained, numbers of activities and demonstrations carried out, are the most common types of information recorded. Only in Cameroon did a majority of organizations report that their lead farmers recorded challenges that they encountered. Similarly, only in Malawi did organization representatives report (36 percent) that their lead farmers kept records of the

number of farmer adopting the technologies promoted.

In determining what technical themes would be covered in their trainings, nearly half (48 percent) of the lead farmers in Malawi reported that they determined the technical content through their own assessments of needs or in response to requests from the farmer groups that they served. In Cameroon lead farmers reported carrying out trainings on 40 percent more topics than they reported receiving during their own training. Given the limited training that lead farmers receive, and the intent of the sponsoring organizations to focus on specific themes, the question arises as to both the source and quality of the technical information that lead farmers are passing on in these non-supported areas.

### **Training and Operational Support**

Over 80 percent of the organizations reported providing some form of initial training for their lead farmers. A surprising 12 to 16 percent of organizations, however, provided no training whatsoever. In Cameroon and Malawi 52 and 88 percent of organizations, respectively (23 percent in Kenya) used a residential model in their training program. Across the three countries 56 to 80 percent of the initial trainings offered were five days or less. Fifty percent of the lead farmers interviewed in Cameroon reported that their initial training lasted two to three days, while 45 percent of those in Malawi reported that they received only one day of training. In addition to technical content, 32 to 69 percent of the training programs included specific training on extension and/or communication skills.

Follow-up training was much less frequent than initial training. Less than half (44 and 46

percent) of the organizations in Cameroon and Kenya reported providing follow-up training to lead farmers. Fifty-two percent of the lead farmers in Cameroon felt that they had mastered the technical themes that they were trained in, while 65 percent of those in Malawi felt technically competent. That said, over 80 percent of lead farmers in Cameroon indicated that the F2F approach could be improved, including the addition of increased trainings, while 41 percent of lead farmers in Malawi specifically cited increased training as one area where the F2F approach could be improved.

In addition to training, organizations also reported supplying lead farmers with a range of materials in support of their extension efforts. Technical leaflets, manuals and posters were the most prevalent, along with supplies such as pens and notebooks. The supply of notebooks served a dual purpose of enabling to lead farmers to record field information for reports, and also notes taken during training sessions, which they later used as reference material in their interactions with farmers.

In carrying out their responsibilities the majority of organizations (60 – 88 percent) reported that their field staff used motorcycles, generally supplied by the organization. The majority of lead farmers on the other hand reported walking (74 – 86 percent), or used bicycles or public transport. In Cameroon 27 percent of lead farmers used their own motorcycles (all men). Twenty-eight percent of organizations in Cameroon reported paying lead farmers for at least some of their transportation costs; 50 percent in Kenya reimbursed lead farmers using public transportation for the expense. None of the organizations interviewed in Malawi reported reimbursing farmers for

transportation costs. Similarly, a minority of organizations reported providing lead farmers with airtime for their personal cell phones in support of their extension functions (37 percent in Cameroon and none in Malawi). No organizations provided lead farmers with phones.

### **Motivations of Lead Farmers**

Questions over what motivates individuals to take on the duties of lead farmers lays at the heart of the F2F approach. Lead farmers are essentially volunteers. Thirty-one percent of the organizations reported that lead farmers received no compensation, 54 percent were compensated for some expenses, such as communication and travel, and 15 percent received salaries or periodic allowances. There was little variation among countries.

Lead farmers were asked what had motivated them to become lead farmers and what motivates them to remain serving in this role. Representatives of extension organizations were also asked their impressions of what motivated lead farmers.

Gaining knowledge for increasing one's own income was the main reason for becoming a lead farmer across the three countries, cited by 58 to 64 percent of lead farmers (Table 2). Altruism was a close second, cited by 42 to 69 percent of farmers. Improving one's own social status and social networking were ranked third in Kenya and Cameroon, with 28 to 30 percent of lead farmers. The proportions of lead farmers citing social status and networking as important were much lower in Malawi, although representatives of extension organizations believed that social status was in fact an important motivation but that farmers were hesitant to say so openly. The receipt of

project related materials were cited as an important benefit by 8 to 30 percent of lead farmers. Income earning opportunities, such as selling seed from one's demonstration plot or receiving a training fee from groups served, were cited by 5 to 23 percent of lead farmers.

**Table 2. Farmers' motivations for becoming a lead farmer**

	Cameroon	Kenya	Malawi
	percent of farmers citing		
Gain knowledge	64	62	58
Help others	69	42	56
Social status	26	28*	4
Social networking	34		4
Project financial/material benefits	30	27	8
Income from associated activities	NA	23	5

\*In the Kenya questionnaire, social status and social networking were combined into a single variable called social benefits

NA indicates not available, because farmers in Cameroon were not asked to rank the motive on income from associated activities.

The motivations expressed by lead farmers for continuing to serve in their role were similar to those of the initial decision to volunteer, with three important differences. First, the importance of gaining new knowledge declined in every country. Second, the importance of helping (altruism) others increased in all three countries. Third, the motivation to earn income from associated activities increased significantly

in both of the countries where it was cited. In Kenya it rose from the fifth most important motivation to the first, and in Malawi, the proportion citing income earning potential as important tripled. In Kenya, 50 percent of the lead farmers were earning income from associated activities, whereas 24 percent in Cameroon and 18 percent in Malawi were doing so.

*"Seeing other farmers in the community improve their productivity as a result of my training gives me satisfaction. It makes me feel good," Mrs. Agatha Buuri from Mweiga, Kieni West District in Kenya, told Dr. Evelyne Kiptot, a social scientist with ICRAF involved in the EADD project.*

*"Service to the community has made me become so famous...wherever I go, farmers refer to me as Mwalimu (Kiswahili for teacher). This recognition has raised my social status," Mr. Laban Tallam, a volunteer farmer trainer from Kabiyet, Nandi North District in Kenya, told Kiptot.*

*"The knowledge I have gained has increased productivity and my income. Before I became a VFT, I used to get less than 5 liters of milk in a day, but I now get about 40 liters!" - Mrs. Agatha Buuri, Mweiga, Kieni West District.*

(Kiptot and Franzel, 2014)

## Benefits and Challenges

The main benefits of the F2F approach, as perceived by the organizations using it, were the ability to cover increasingly large areas and numbers of farmers, and enhanced sustainability of extension efforts, as many felt that volunteer activities would continue after their projects ended (Fig. 2). Many also felt that the approach helped increase



adoption because farmers were able to learn more effectively from other farmers who

were using new technologies, than from extension staff.

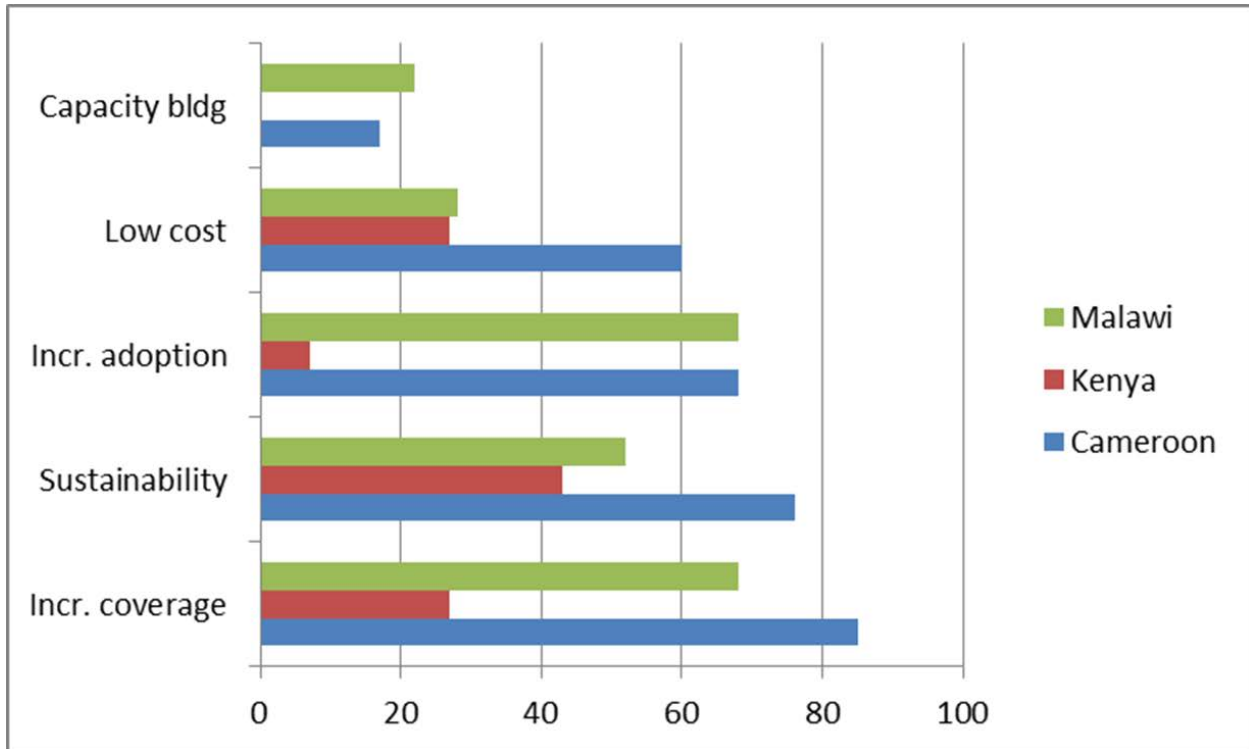


Figure 2. Organizations views of the main benefits of farmer-to-farmer programs (percent of organizations reporting)

Organizations using the F2F approach reported three main problems in implementing F2F extension programs (Fig. 3). First, as reported by over 40 percent of organizations in Cameroon and over 20 percent in Kenya and Malawi, farmers have high expectations in terms of financial and non-financial rewards, despite organizations' attempts to reduce such

expectations. Related to this, high dropout rates were cited as a problem by a similar proportion of organizations. Even with reduced expenditures for extension implementation through using the F2F approach, organization reported limited budgets for supporting lead farmers as a significant problem.

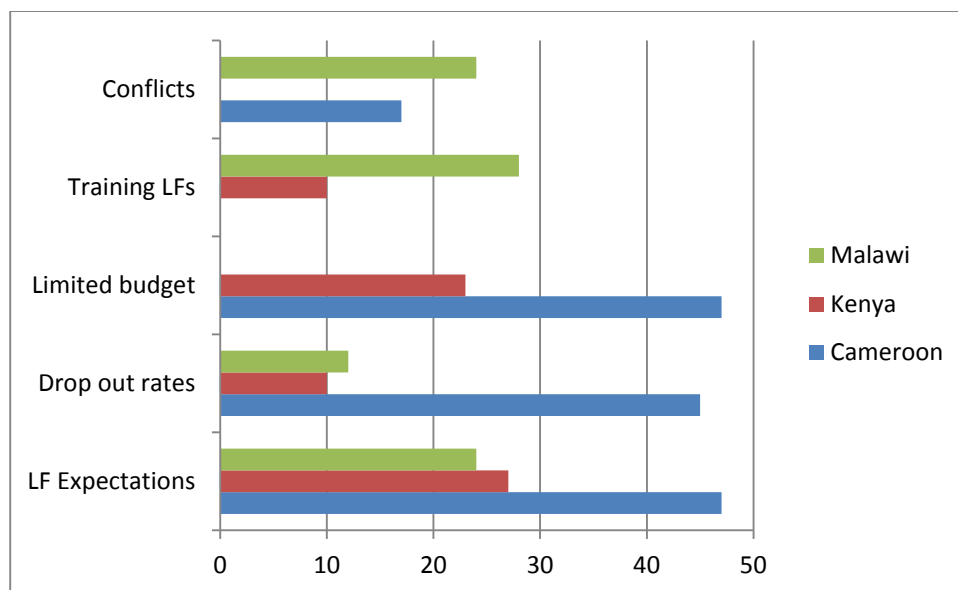


Figure 3. Organizations views of the main problems of farmer-to-farmer programs (percent of organizations reporting)

The principal challenge facing the F2F approach is that of sustainability. Although organizations reported a sense of achieving increased sustainability in their efforts through the F2F approach, the data and a larger perspective confounds this perception. Many Lead Farmers (LFs) were said to be, or self-reported serving as lead farmers in previous F2F efforts, suggesting that they were no longer serving this function. This observation aside, at some point the uptake of any innovation, or new management practice will become locally saturated among potential adopters (see Simpson, 2015). Without the injection of new technical content or information, lead farmers simply exhaust opportunities for offering additional benefits to their communities or groups, effectively work themselves out of a job. Most programs using the F2F approach, and consequently LFs, are not connected to enduring programs capable of introducing new information, technologies and practices. Even in the case

of Malawi, where use of the F2F approach is a core element in the national extension strategy, separate lead farmers are selected in introducing each new technology. On an individual basis, lead farmers do not have access to new information or technologies.

### Conclusions

Our interpretation of the data leads to the following observations and recommendations on the use of the F2F approach:

The voluntary adoption, continued and expanding use of the F2F approach by organizations in the absence of any direct external promotion, confirms that it is an effective tool in responding to extension delivery needs. The ratios of program field staff to lead farmers, and of lead farmers to farmers trained, substantiate the ability of the approach to both expand organizations' geographic coverage and numbers of farmers reached. One cautionary note is warranted, however. We question whether

use of non-expert technical advice is appropriate in contexts where high-risk interventions (e.g., treatment of livestock diseases) or essentially permanent decisions are a concern (e.g., siting of water control structures). Given their limited technical training and backstopping, it is inappropriate to place volunteer farmers in a position where they are responsible for advising other farmers on high-risk investment decisions. The approach may also be less effective in areas with dispersed and/or low population densities, as it increases the transportation costs faced by lead farmers and loses much of its power in reaching large numbers of farmers.

The findings show that salaries and allowances are not needed to motivate individuals to volunteer in serving as lead farmers. As a matter of principle, however, we believe that individuals volunteering their time to serve as lead farmers should not also be expected to financially subsidize (e.g., payment of transportation and communication costs) the field activities for which others are being paid to execute. Lead farmers were assessed to have similar or slightly higher wealth levels compared to the farmers they served. In other words, they are equally poor. One danger of course in making compensatory payments for real expenses (e.g., transportation and communication) is that LFs begin to view this as “salary,” and inadequate. Already programs using the F2F approach note that managing lead farmer desires for additional support and compensation is one of the primary challenges in using the approach. Context specific solutions will need to be sought, but the issue should not simply be ignored.

The country studies identified a broad range in the levels of support given by

organizations to their lead farmers. At the extreme, where lead farmer are provided a regular salary to perform specific functions, or where they have essentially established themselves as fee-based independent service providers, we believe a threshold has been reached where use of the F2F designation is no longer applicable. The essential feature of F2F extension is the voluntary nature of the role. While lead farmers may be motivated by opportunities for financial gain, when the nature of their relationship between their sponsoring organization or those that they serve become contractual, use of more appropriate descriptors is warranted.

The evidence also indicates ways in which organizations using the F2F approach can make their programs more effective. Understanding the sources of lead farmers’ motivation and strengthening the internal reward structures within programs that respond to these forces are key. Gaining knowledge and helping others were clearly the most important factors in the initial motivation of lead farmers to volunteer. The offer of increased training opportunities, particularly in the use of new technologies, and the supply of additional technical materials, exchange visits and interaction with researchers responds to both. For farmers motivated by altruism and social status, contests, certificates, badges, and community recognition are important. The rise in importance of having some income earning opportunities as a motivation to lead farmers in continuing in their roles calls for consideration on how to build such opportunities into the design of F2F extension efforts. Many options exist, related to the technical themes of the programs using the F2F approach, and should be promoted where appropriate.

One of the underlying tenets of F2F extension, cited by organizations using the approach in the countries surveyed, is that lead farmers are often more effective than extension staff in communicating with other farmers. A potential concern is that by providing lead farmers with more training in formal extension communication methods, they may begin to talk and behave like traditional extension officers. The extent to which lead farmers see themselves, and are viewed by others, as separate from the farmers they serve may be the point at which they lose some of their effectiveness in serving within F2F programs. We have no data on this, but as use of the F2F approach expands this is one area where further attention maybe warranted.

We also have only limited data on the quality of extension services provided to farmers under the F2F approach. Evidence from Malawi and Cameroon of lead farmers independently determining training topics and delivering trainings to other farmers on more subjects than those in which they themselves were trained, raises questions over the sources and veracity of the information being extended, as well as how well they are conveying information in which they were trained. The exchange of information between farmers lies at the core of the F2F approach, yet for sponsored programs issues of quality assurance and credibility are also a concern and warrant greater attention than is evident in most cases.

A related issue concerns the extent to which use of the F2F approach can support a demand-driven orientation to extension programming, and what may be required in doing so. The central issues are the extent to which sponsoring organizations themselves have flexibility in responding to locally

determined needs, as well as their ability to provide adequate support to the lead farmers with whom they work. Determining local demands may also require greater assistance from field staff in determining root causes of locally expressed needs, as opposed to symptoms, to ensure that responsive measures are appropriately targeted. Once determined, sponsoring programs must be capable of providing the needed technical training to lead farmers and supplying the necessary backstopping and materials. Unrelated to the F2F approach, a demand-driven orientation may not be appropriate for all extension programs, e.g., those delivered by non-state actors under contract, in which the technical themes of their work are often specified, or those where extension efforts target narrow market interests.

The ability of the F2F extension approach to include more women in extension roles, and to reach more female farmers is clearly evident. This potential, however, will not be realized if organizations using the approach do not undertake specific efforts to include more women as lead farmers. Freed from the constraint of having to select from a limited pool of formally trained extension graduates, and their associated personal preferences, the F2F approach allows for the selection of women lead farmers from within their communities, constrained only by local social norms.

The perception of the F2F approach by many organizations in increasing the sustainability of their programmes requires a temporal interpretation of what is meant by sustainability. Within a given locality, at some point the adoption potential of any new technology will become saturated. Lead farmers that are not connected with some enduring source of new information

and training have only limited opportunity to acquire new skills and information within the timeframe of project-based initiatives, and cannot be viewed as a long-term solution to progressive and evolving extension needs, such as those associated with adapting to climate change (Simpson and Burpee, 2014) and changing market opportunities. Countries such as Malawi and Zambia, where use of the F2F approach has become incorporated into the national extension strategy, offer one solution. In other cases, farmer organizations that have successfully entered into profitable commercial activities have shown themselves willing and capable to engage their own farmer-extensionists to serve member needs (e.g., Simpson, 2012). These individuals sometime started out as volunteer lead farmers within the organizations. Linking lead farmers to more permanent structures, such as government extension services, farmer organizations or private companies can help ensure that they have continued support and access to new information, thus making extension systems more effective and F2F extension systems more sustainable.

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