

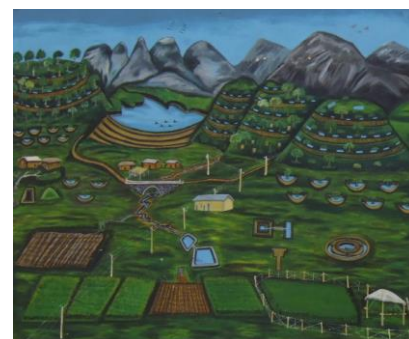
Documenting Extension Approaches of Selected Development Organizations

Report prepared by Sarah Sahlaney* and Katherine Hoerberling*, Mark Bell* and Andrea Bohn**
*University of California, Davis. ** University of Illinois at Urbana-Champaign

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A. Executive Summary

Seventy-five percent of the world's poor live in rural areas and the majority of these people depend on agriculture to survive.¹ Enhancing farmers' and agricultural workers' livelihoods is essential to addressing rural poverty. To address this need, input providers and other agricultural actors along the value chain need improved access to relevant, credible, and actionable information on best production practices, inputs, and marketing. Traditionally, governments have been responsible for providing extension services and disseminating information to farmers. Over time, however, a wide range of groups have begun to engage with farmers and other actors along value chains to provide a much broader pool of extension and advisory services (EAS). These groups include actors from governments, research centers, universities, civil society, private sector entities, and non-governmental development organizations. To improve our understanding of extension and development approaches, this study analyzes interviews with nineteen such Washington, D.C.-based development organizations with the goal of better understanding:

- 1) these organizations' EAS approaches and the factors in their approaches that are often associated with success,
- 2) specific components of approaches and programs that are unique to each organization,
- 3) common challenges they have overcome or are working to overcome, and
- 4) areas identified for improvement.

Several common trends across organizations emerged from these interviews. We believe that these findings and lessons learned can contribute to organizational understanding of best practices, as well as foster a larger dialogue on how the approaches used by non-governmental development organizations' contribute to improved service provision to farmers.

Major Findings

Development organizations rely on a number of different strategies to facilitate farmers' awareness of, access to and ultimately adoption of improved production and marketing practices; to promote inclusivity; and to ensure program sustainability. The study revealed definitive trends in their approaches and methodologies. Most of the interviewed organizations (1) establish farmer field schools and demonstration plots, (2) build capacity of lead farmers and rely on them to foster continued knowledge exchanges, and (3) provide farmers with credit mechanisms and increase their access to markets, particularly through the use of Information Communication Technologies (ICTs). Another strong trend suggests that development organizations strive to ensure program sustainability by engaging the private-for-profit sector and building local capacities. Finally, our findings suggest that organizations attempt to mainstream gender issues, include participatory planning in project design, and pursue participatory monitoring and evaluation strategies throughout the project cycle, though implementing participatory approaches can be a challenge. During the interviews the organizations shared some particularly successful approaches and strategies that have helped them in pursuing their objectives, but also discussed implementation challenges.

¹ Townsend, R.F., C. Iride, S. Cooke, M. Constantine, and G. Moses. 2013. *Implementing agriculture for development: World Bank Group agriculture action plan (2013-2015)*. Washington DC; World Bank. Retrieved from: <http://documents.worldbank.org/curated/en/2013/01/17747135/implementing-agriculture-development-world-bank-group-agriculture-action-plan-2013-2015>.

Approaches Associated with Success

Participation, building trust, and reducing risk. Underpinning elements in successful approaches were the need to (1) build trust between information providers and farmers and (2) reduce farmer risk. Trust is a critical element in maintaining effective and durable relationships with program participants and beneficiaries, as well as in finding and promoting successful ways of addressing farmers' needs. Focusing on farmers' needs and relevant solutions, promoting inclusivity, and having a longer term presence in the community were identified as key mechanisms for promoting the development of trust. Flexibility in project design to facilitate timely and appropriate responses to emerging farmer needs and opportunities is also a key factor in facilitating the development of trust and ultimately project success. Further, an element in reducing risk and building trust relates to ensuring that farmers have a profitable market for any additional produce or for produce of a higher quality.

Engaging the private sector. Organizations place a very strong emphasis on engaging the private sector, often by partnering with existing firms or promoting the development of new enterprises. Capacity development in existing firms often involves partnering with agro-input suppliers and providing support in the form of training and content for technical assistance tied to these inputs. These firms are usually identified through value chain or market analysis as being capable of providing training or having the capacity to reach a large customer base. Frequently they have developed a strong stake in the local community and have demonstrated a large potential to benefit multiple downstream value chain actors. Engagement of the private sector is critical in relation to ensuring that a stable supply of needed inputs are made available to farmers at an affordable price.

Employing farmer-to-farmer methodologies. Quite a few organizations work with farmers to develop their capacity to provide advice to others with specialized training focusing on leadership, business management, and agronomic practices. These individuals are often identified during training events as having demonstrated leadership capacity, entrepreneurial spirit, or exceptional understanding of training content.

Facilitating relationships. A fourth common approach was the broad focus among organizations on facilitating the development of relationships between farmers and other stakeholders in a value chain rather than (or sometimes in addition to) providing EAS directly. Organizations reported that in order to facilitate successful relationships, they attempt to make transactions more transparent, build trust, and communicate partners how relationships can be mutually beneficial. Organizations have different ways of building trust and facilitating relationships; these are detailed below.

Common Challenges

Many development organizations struggle with similar challenges when designing and implementing extension programming. The challenge of implementing activities in communities with weak local capacity was regularly identified as both an obstacle and an opportunity. Gaps in local capacities often run across all sectors, including those found within public, private and project staff. The shortness of the project cycle makes it difficult to develop the relationships and structures required to facilitate long-term program success within communities. Another challenge is related to the skills and approaches necessary for promoting behavior change – i.e., turning recommendations in to action. Common behavior challenges related to developing trust and ensuring that the message was not only the “right” message, but was also presented in a way that would lead to the desired behavior change. Finally, inadequate infrastructure was often also cited as a factor that made project implementation difficult.

Areas for Improvement

Not surprisingly, areas for improvement emerged from noted organizational successes and also in response to the common challenges.

An obvious area for improvement was related to the use of Information Communication Technology (ICT) in extension. While there are a number of examples of implementation, there is limited understanding of the factors required for successful adoption. Furthermore, ICTs have tremendous potential, not only as a tool to provide market information, but to improve management practices and increase yields as well. Development organizations should continue to consider ICTs for this purpose in addition to their ability to provide market information.

Organizations identified the need for more participatory approaches and methods for planning, evaluating, and monitoring programs. Ideas ranged from community monitoring tools and mobile applications to new methodologies for conducting participatory planning and evaluation. Establishing new participatory practices and improving longstanding ones will be a strong trend in the future.

Finally, development organizations must continue to pursue knowledge sharing within organizations regarding approaches, programs, methodologies, and best practices. In some cases, organizational representatives were aware of the programs on which they work, but were unaware of larger organizational practices and methodologies. This was particularly true of organizational approaches to gender. Overwhelmingly, representatives referred us to an in-house gender expert or advisor and were otherwise unable to discuss the organization's specific gender methodologies, mainstreaming, or integration practices. Intra-organizational dialogues and learning on topics such as gender methodologies is critical and lacking.

Development organizations must also pursue more opportunities to share best practices and successful approaches among each other. Many organizations listed this as a priority, but did not have proactive strategies to pursue knowledge sharing. We hope that this report can serve as a catalyst for a stronger dialogue between organizations on creative and innovative approaches.

B. Introduction and Purpose

Extension and advisory services have historically been delivered by public providers, usually from units within a Ministry of Agriculture or similar public entities. In the past decades there has been a shift towards a pluralistic system of EAS provision, with many different types of actors providing such services. They differ in terms of their motivation for EAS provision, their business or funding models, as well as the type and scope of services provided. Furthermore, the traditional definition of *extension* has broadened to include not only the dissemination of new agricultural technologies and agronomic practices, but also all systems that facilitate the access of farmers, their organizations, and other market actors to knowledge, information, and technologies; facilitate their interaction with partners in research, education, agri-business, and other relevant institutions; and assist them in developing their own technical, organizational, and management skills and practices.²

Today's EAS providers include public sector institutions as well as private enterprises and consultants, civil society, intergovernmental organizations, and non-governmental organizations. Given the

² Bohn, A. (2013). *Diverse Approaches and Models of Providing Extension and Advisory Services*. Retrieved from www.meas-extension.org/meas-offers/case-studies

increasing range of extension players and the apparent diversity of extension approaches, there is an opportunity to understand and share principles and knowledge of the different ways in which they approach EAS in an effort to improve understanding of the development landscape.

This study focuses on Washington, D.C.-based development organizations, many of which are primary implementers of USAID (United States Agency for International Development) funded projects. The purpose was to seek to understand their approaches and the factors in those approaches that have led to success, the common challenges they have met, areas identified for improvement, and general lessons they have learned. As the environment in which development organizations operate becomes increasingly variable and oftentimes uncertain, such knowledge sharing and improved understanding will be important in strengthening these organizations' adaptive capacities and ability to provide effective EAS to those who need it.

C. Methodology

As a means to examine organizational successes, challenges, and unique methods, we conducted interviews with nineteen development organizations in July and August of 2014. In order to select interview participants, we contacted several organizations that had previously worked with the USAID funded Modernizing Extension and Advisory Services (MEAS) project, then identified additional groups through a literature review and purposive snowball sampling. As a result, the study features organizations that are diverse in type, size, and function. More than half of them are non-profit entities, a quarter are consulting agencies, one is a cooperative, and another a social enterprise organization. The sample included eight large, seven medium, and four small organizations. Three of the organizations are faith-based. The majority of organizations provide other services aside from agricultural extension, including health, governance, and education. Four organizations are solely active in agriculture or food security (Appendix 1 lists all the organizations taken into account for the study).

After organizations were identified, each was asked to discuss its methodologies and organizational approaches, rather than to describe project-level specifics. Several organizations circulated questions around their offices in order to determine which individuals might best be able to explain and represent the organizational perspective of each organization. Most organizations identified one to three staff members. We then conducted interviews with these staff by phone or in person.

With respect to content, these interviews were solely qualitative in order to allow for flexibility in discussing methodologies and programs. Questions focused mainly on organizational challenges, successes, and unique practices, though we did ask organizations what their "roles" in extension are, how they structure their projects, what their overarching methodologies are, how they conduct monitoring and evaluation, and how climate change and gender play into their approaches (Appendix 2 provides the full set of interview questions).

Once interviews were completed, the transcripts were analyzed and trends began to emerge. Those trends that were relevant to two or more organizations were tallied and compiled in order to determine the strength of the trend and which organizations identified with it. While there were strong trends regarding organizational practices, challenges that organizations confront, and practices that organizations would like to approach differently, there were few robust trends in organizational successes and, unsurprisingly, unique practices. This report highlights both areas where there are significant trends across organizations and areas where robust findings were not evident. The findings are not intended to serve as a comprehensive analysis on organizational practices, challenges, and

successes, but intend to spark a larger discussion of what is working, what is not, and how the EAS community can move forward.

D. Trends in Organizational Approaches and Frameworks

Overall, organizational practices fall into three broad categories, which not only describe the different approaches that many organizations take, but also illuminate many of the shared goals of these organizations' extension approaches. The three broad trends that organizations discussed were:

- (1) Facilitating farmer adoption, awareness, and access to practices;
- (2) Ensuring program sustainability; and
- (3) Promoting inclusivity.

(1) Facilitating Farmer Adoption, Awareness of, and Access to Practices, Technologies, and Markets

Most organizations discussed how their programming efforts focus on (1) facilitating knowledge transfer to and among farmers and (2) access to inputs and services that were previously less accessible, or (3) a combination of both. These programs are the keystones of most organizational extension approaches and focus on a variety of training techniques, links to credit provision, financial management programs, and efforts to connect producers to value chains and markets. Major approaches used included:

1. Farmer Field Schools, Demonstration Plots, and Individual Follow-Up
2. Lead Farmers and Specialized Training
3. Credit Schemes and Savings Initiatives
4. Value Chain and Market Integration and Development
5. Information Communication Technology (ICT)

Each of these is discussed below.

1. *Farmer Field Schools, Demonstration Plots, and Individual Follow-Up*

Thirteen of the nineteen organizations indicated that *Farmer Field Schools* (FFS) are a training technique. The FFS model is a participatory group training technique that organizations use to engage local farmers in trainings on agronomic practices, technologies, and inputs in conjunction with discussions of their individual assets, needs, constraints, and reasons for adopting or not. These trainings are moderated by a trained facilitator, usually a local lead farmer identified by the implementing organization as having leadership potential and who was given specialized training.

Organizations also use *demonstration plots*, either as part of a FFS or for other training purposes, with the goal of allowing farmers to see firsthand how various techniques, technologies, and inputs can be employed. Farmers often participate directly in the set up and management of these plots, which are meant to supplement trainings that may have a more classroom-based or theoretical approach to teaching. The Land O'Lakes International Development unit employs a modified approach to demonstration plots and organizes what they call *Answer Plots*. Answer Plots demonstrate the use and potential benefits of various input suppliers' products to farmers with the goal of offering them a menu of options from which to choose (see Box 1). A few organizations also mentioned arranging exchange visits between farmers, as well as between farmers and buyers, with the dual purpose of demonstrating

certain agronomic techniques, inputs, or technologies, and building relationships between farmers and buyers.

Many organizations also mentioned *following up* group trainings, part of FFS or otherwise, with individual trainings on participants' farms in an effort to adapt techniques to more specific contexts and agro-ecological conditions, as well as to deepen their understanding of farmers' needs.

Box 1: Land O'Lakes Answer Plots

The Land O'Lakes International Development unit's Answer Plots are set up and managed by local input supply firms for the benefit of interested farmers. These firms include, among others, "seed companies, soil testing firms, fertilizer companies, water management equipment suppliers, mobile-phone based service suppliers, storage companies, transport and logistic firms, banks and financial service providers" (T. Herlehy, personal communication, July 16, 2014). They are similar to demonstration plots in that they are used to demonstrate the benefits of improved farm inputs, practices, or technologies. They are unique, however, in that multiple firms set up plots and employ different production practices in various agro-ecological conditions so that farmers may compare them and make more informed decisions regarding which inputs to purchase or not. The plots allow these firms to communicate with farmers – potential customers who can choose to purchase inputs that are most appropriate for their own needs, assets, and interests. Land O'Lakes facilitates this communication by inviting farmers to demonstrations and providing impartial advice to both the farmers and input supply firms.

2. Lead Farmers and Specialized Training

Ten of the nineteen organizations identified training *Lead Farmers* or *Champion Farmers* as a way of scaling up, demonstrating successful adoption to other farmers, or providing technical training and access to markets once programs end. These individuals are typically identified as having demonstrated a willingness and strong interest in taking on a more active role in a project, i.e. they require little to no extra incentive to invest time and effort in becoming a lead farmer. This approach took on various forms depending on the organization's goal. Most organizations that engage in this practice do so in order to increase local participation by developing local leadership capacity as well as widening their beneficiary base. Lead Farmers are given specialized training in agronomic practices and facilitation so that they can train other farmers whom organizations may not have the resources to reach. These Lead Farmers also often manage demonstration plots when they are part of training approaches.

A few organizations discussed a broader approach to developing Lead Farmers. This add-on method involves training Lead Farmers in enterprise management as well as agronomic practices, most notably when improved inputs are coupled with trainings. These *Village-Based Agents* (VBAs), *Community Promoters* (CPs), and *Champion Farmers* are expected to eventually sell these inputs to other local farmers and provide technical assistance to customers (see Box 2). This approach seems to be used most often when an organization has identified an input supply gap in local markets or local input suppliers have weak relationships, if any, with farmers. These Champion Farmers serve as conduits between farmers and input suppliers.

Box 2: Connecting Farmers with Inputs and Markets

Multiple organizations provide specialized training to particularly capable farmers who partner with

input supply firms to market and sell inputs to local communities. These farmer agents also often provide technical information and services to customers. The training of these identified farmers often focuses on skills such as enterprise management, communication, leadership, and negotiation, as well as technical skills. These approaches create employment, provide opportunities for cost-effective scaling up of programs, develop individual capacity as well as private sector capacity, and can facilitate communication between organizations and the communities with whom they work. Some examples include the following:

1. BRAC trains *Community Agricultural Promoters (CAPs)*, *Community Livestock Promoters (CLPs)*, and *Artificial Insemination Workers (AIs)* who sell and deliver high quality inputs, along with technical assistance, door to door. BRAC itself sources the inputs until there is sufficient capacity in the local private sector, which is expected to respond to increasing demand from farmers. CAPs and AIs also serve as conduits between BRAC staff and local communities.
2. Aga Khan Foundation identifies capable farmers, often participants in their FFS, and provides them training to become certified *Village Based Agents (VBAs)*. Trainings focus on business fundamentals and input-use advising. VBAs are often contracted by input suppliers to sell their products and provide technical assistance to farmers or may be paid by farmers whom they advise. They purchase inputs, make orders, and often prepay a percentage of costs of the inputs before they are delivered, building trust with input supply firms and promoting a stable supply to farmers.
3. Heifer International's *Community and Animal Health Model* in Latin America involves training local community members so that they can start business and deliver and administer basic services, such as medication, often by bicycle. They are able to reach more beneficiaries than Heifer International can alone and build trust within local communities.

3. Credit Schemes and Savings Initiatives

As the definition of extension has evolved over time, it has come to encompass supportive activities in addition to traditional technology and knowledge transfer. For many organizations, this includes credit schemes and programs to develop financial management skills for beneficiaries who are participating in EAS programs. These are often implemented to increase access to inputs and services, as well as to forward goals of improving livelihoods by increasing incomes. A few organizations mentioned microfinance as one mechanism for doing this. One Acre Fund, on the other hand, employs an input-based credit scheme through which they provide inputs on credit and require repayment once farmers have harvested and sold their product and thus have the financial resources to make payments. Even more organizations integrate savings programs into their initiatives in an effort to develop local financial management capacity. Catholic Relief Services (CRS), for example, establishes *Saving and Internal Lending Communities (SILCs)* by connecting people or mobilizing existing groups, such as farmer associations, to save, pool, and loan money to local member enterprises. These tend to be more effective when interest already exists in a community since members must be willing to pool their money with that of other households.

4. Value Chain and Market Integration and Development

One of the most common trends among organizations is a deliberate effort to integrate farmers into existing markets and value chains, as well as strengthening those markets and value chains. This is done with the goal of facilitating input and market access, promoting behavior change, as well as ensuring program sustainability as is discussed below in Section D.2 (Ensuring Program Sustainability). A variety of approaches are taken to reach these goals including the use of Information and Communication

Technologies (ICTs) and organizing farmers into cooperatives or other Farmer-Based Organizations, as well as working with and strengthening existing groups.

Quite a few organizations have focused efforts on mobilizing farmers and working with or strengthening existing farmer groups to increase smallholder access to markets. Farmer-based organizations (FBOs) benefit from economies of scale and can often negotiate larger and more stable contracts with buyers. In turn, buyers report that the risk of farmers breaking contracts due to unforeseen environmental or economic stresses is lower in farmer groups. Like many other interventions that focus on strengthening value chains and increasing smallholder access to markets, the goal of working with FBOs is to create and demonstrate mutual benefits to buyers and sellers by building trust and reducing risk.

5. Information Communication Technology (ICT)

While a few organizations mentioned using ICTs in trainings, several use them to increase market access using a variety of mobile platforms. The most commonly mentioned ICTs were those that provide market information to users, frequently including market prices for the products they sell. Such access to information can potentially allow farmers to sell their product at a higher price and may increase their income. Time-sensitive agronomic information, such as weather, pest alerts, and notices to perform certain tasks at certain times were also frequently mentioned. There seems to be growing interest in mobile money platforms as well, but many of these are still in piloting stages. ICTs are also being used to strengthen relationships between farmers, input suppliers, and buyers. A few organizations mentioned using mobile applications to negotiate contracts and communicate needs among these actors in an effort to reduce risk all along the value chain.

(2) Ensuring Program Sustainability

Program sustainability was another goal mentioned explicitly or indirectly by nearly every interviewed organization. The approaches through which organizations build sustainability into their programming vary greatly, though most center on capacity building and strengthening relationships in the private sector. Many organizations also mentioned integrating multiple initiatives into a program to address a variety of needs in communities, as well as using Behavior Change theory as a backbone in their approach to ensuring sustainability.

The major elements identified in building sustainability were:

1. Private sector engagement – Facilitating relationships and developing local capacity
2. Local ownership – Engaging a variety of stakeholders
3. Behavior Change Theory

These are each described below.

1. Building Sustainability through Private Sector Engagement – Facilitating Relationships and Developing Local Capacity

The ways in which the interviewed organizations engage the private sector take on many forms. The most common forms that emerged are:

- a. **Working directly with local businesses** like input suppliers and processors to strengthen local markets and create both supply of inputs and demand for products for smallholder farmers.
- b. **Working with large or international corporations** to provide smallholders access to export markets.

- c. Others, such as One Acre Fund, **integrate themselves as a private sector provider**, supplying inputs to farmers, especially when they have identified gaps in local value chains, including a significant lack of providers or limited quality in existing input supplies.
- d. **Stabilizing and creating demand** by organizing farmers into groups or mobilizing existing groups to create adequate demand.
- e. **Establishing extension advisory capacity.**

a. Working directly with local business.

Those organizations that develop local private sector capacity often begin by assessing the strengths and weaknesses in local value chains. They then attempt to find a balance between focusing on capacity development in the weakest and most vulnerable areas and on actors that have the highest potential to benefit local markets. CNFA's approach, for example, involves working with entrepreneurs with high potential to become agro-dealers and operate in close proximity to population centers. They also work with actors who are already supplying inputs to farmer organizations and work to strengthen their capacity to continue to do so. Their Farm Service Center model supports the development of private input supply enterprises that provide improved inputs as well as technical assistance to their customers (see Box 3). ACDI/VOCA has a similar model and works with private and public sector entities to develop Business Service Centers that provide inputs, trainings, and financing mechanisms to farmers. This approach exemplifies a general trend among the organizations of using local businesses as a way to work with different actors along the value chain.

Box 3: CNFA Farm Service Centers

CNFA's Farm Service Centers (FSCs) provide embedded services to farmers, private sector input dealers, and downstream actors, such as processors, along the value chain. FSCs target these actors through existing farm stores with which they work to provide inputs, credit services, and trainings that relate to inputs. Local entrepreneurs and input dealers also receive trainings so that they can serve as resources to farmers. Those providing extension – usually store owners and service providers – have a stake in the knowledge transfer process; as a result, everyone involved in the FSC has a strong incentive to work towards its success. CNFA notes that FSCs are successful because they are driven by a desire for profitability and productivity (Scott Clark and Paul Sippola, personal communication. July 24, 2014).

b. Working with large or international corporations.

Many organizations discussed how their approach to private sector engagement often takes the form of facilitating relationships between different value chain actors. CARANA Corporation, a consulting firm, often partners with large international firms that buy farm products such as Sysco and Cargill to establish buyer-seller relationships between them and local farmers who can supply them. This often involves communicating and articulating their needs in terms of quantity and quality standards to farmers, centering trainings around practices and technologies that can help them meet those standards, and building trust and transparency into these relationships. In CARANA Corporation's case, these commercial importing firms will fund these trainings and receive the benefits of their relationships with farmers as suppliers. Many of these organizations see themselves more as "facilitators" rather than direct EAS providers.

Such a facilitating approach illuminates the trade-off mentioned by many organizations between trying to ensure sustainability (especially because most projects have limited time and resources) and reaching the most vulnerable and marginalized farmers. These populations may not be well integrated into

existing value chains due to a variety of factors including limited access or capacity to produce at a volume or quality standard held by those value chains. Organizations have attempted to address this trade-off in a few ways.

c. Integrating as a private sector provider.

One approach to reach marginal farmers while building sustainability is to focus on the supply side; organizations insert themselves into local value chains by acting as input suppliers where few or none exist to meet local demand. One Acre Fund operates as a local business in African countries by providing improved agro-inputs on credit along with technical assistance regarding best practices to smallholder farmers. Because they act as a local enterprise rather than an NGO, they can remain in communities as long as there is a demand for their product. BRAC has similar activities in Bangladesh, where they provide inputs to farmers but also work to develop local input supplier capacity. They are also able to remain in communities until the local private sector is able to stand on its own.

d. Stabilizing and creating demand.

Another way of addressing the marginal farmers and sustainability challenge is to focus on the demand side by organizing farmers into groups or mobilizing existing groups, not only to create demand for improved inputs, but also to provide more stable supplies to buyers, as mentioned above in Section D.1.4 (Value Chain Market Integration and Development). Land O'Lakes' programs often involve facilitating the democratization of existing farmer cooperatives or encouraging farmers to form cooperatives around specific crops. ACDI/VOCA has also found success with building capacity in cooperatives as discussed below in Section G (Successes).

e. Establishing extension advisory capacity.

Finally, a few organizations work to develop the local private sector's capacity to provide EAS. As mentioned earlier in Section D.1, organizations such as Aga Khan Foundation and BRAC work to develop individual leadership capacity in some of their participants. World Vision has also been piloting a similar model they have called Private Service Providers (PSPs). PSPs begin as lead farmers and World Vision works with them to build skills to provide EAS as a business once the organization leaves.

2. Building Sustainability through Local Ownership – Engaging a Variety of Stakeholders

Just as the increasingly pluralistic network of EAS providers includes a variety of types of organizations, many providers engage a variety of stakeholders to finance, plan, implement, and monitor programs, as well as to take on program activities after an organization leaves. These stakeholders include entities from local governments, public extension systems, universities, NGOs, local value chain actors, exporting firms, and community organizations. Engaging a variety of stakeholders in addition to program beneficiaries not only ensures program sustainability by developing local capacity to assume various responsibilities and continue relationships after programs end, but also helps to promote a sense of ownership of initiatives within communities. This sense of ownership was mentioned as a goal by many of the interviewed organizations that employ participatory approaches in implementation. Creating a dialogue between different stakeholders also brings in expertise from different areas important to sustainable community development and fosters understanding among them.

3. Building Sustainability through Behavior Change Approaches

Finally, Behavior Change Theories act as a backbone for many organizations' programming. Rather than a specific project model, most organizations that mentioned it discussed it as broad frame of mind that they use to structure any project that aims to introduce alternative practices or inputs into a community. Abt Associates, for example, employs what they call Agricultural Behavior Change (or AgBC)

Model (see Box 4). Similarly, ACDI/VOCA has a Social and Behavior Change Specialist who implements behavior change approaches in agricultural and nutrition programs. World Vision, employs barrier analyses and attempts to communicate both short- and long-term benefits of alternative practices to unmanaged tree harvesting, especially in the context of their Farmer Managed Natural Regeneration (FMNR).

Box 4: Abt Agricultural Behavior Change (AgBC) Model

Abt's AgBC Model examines barriers to change along the entire value chain in order to understand why and how farmers adopt certain practices and reject others. The AgBC Model also examines the risk and rewards that farmers must consider. Abt uses AgBC to understand potential barriers to adoption. It also uses this information to plan projects that anticipate and overcome these barriers. Abt notes that AgBC has been successful because it takes farmers' incentives into account and subsequently creates long-lasting behavioral change in the course of a project. As one respondent from Abt said, "instead of going out and telling farmers to do something, we have begun to understand what will make them interested in changing their behaviors" (Carol Adoum, personal communication, July 15, 2014).

(3) Promoting Inclusivity

Organizations attempt to make their approaches and activities inclusive, since reaching a variety of appropriate stakeholders is important for both facilitating access and ensuring project sustainability. We found that organizations also institute specific sets of practices that further help to foster inclusivity in programs. The common trends in these practices include gender programming, participatory planning, and participatory Monitoring and Evaluation. As such, focusing on nutrition, enterprise development, and education, in addition to agricultural productivity or market development projects, can help address more needs and foster inclusiveness and sustainability in programming.

Gender Programming and Mainstreaming

Ensuring that interventions reach both women and men equally was a goal for nearly every organization we interviewed, especially those that work with USAID and other donors who have specific gender requirements. How organizations go about integrating gender considerations into programming and how they prioritize gender issues, however, varies by organization. Some organizations set specific targets for themselves, such as requirements to award grants to a minimum percentage of women. Most stipulate that a minimum percentage of training participants are women (although focusing on women is not a gender-integrative strategy per se). Other organizations implement specific initiatives or projects meant to address gender roles between women, men, boys, and girls. OIC International's Health, Agriculture, and Nutrition for Development Sustainability (HANDS) program in Liberia, for example, includes activities geared towards addressing men and women's gender roles. OIC also conducts programming on development of women's soy processing skills and a Girl's Empowerment project meant to enhance girls' access to education.

A few organizations cited sex-disaggregated data analysis as a means to enhancing their understanding of how local conditions and project activities impact women and men differently. Sex-disaggregated data collection is not the only component of gender-integrated programs, but it is a critical part of an organization's overall gender policy. ACDI/VOCA is one such organization that has a formal Gender Policy that influences its extension approaches. ACDI/VOCA's gender mainstreaming gives projects the tools to examine existing gender roles and address gender-based constraints and inequalities.

Other organizations have less formalized approaches for gender mainstreaming, but attempt to be inclusive in other ways. Sustainable Harvest International, for example, works with households and family units rather than individuals. Their projects attempt to indirectly address gender-related issues such as family member roles and dynamics through participation of the entire household. Other organizations mentioned using an informal framework to plan their activities to address gender issues. CARANA Corporation, for example, discussed the importance of being flexible and able to adapt when gender-related issues arise. They cited project examples in which there was a need to schedule trainings around women's free time, which often differs from that of men in both duration and timing. They gave special focus to communicating those schedules to women who didn't have the same access to communication outlets by connecting with a few women who could then communicate with others. They also discussed trying to anticipate whether introducing a crop or increasing productivity would give male farmers an advantage over female farmers in the market and planning programming to reduce this risk.

Still, ensuring gender inclusiveness continues to be a challenge for many development organizations. This is discussed further below in Section E (Challenges).

Participatory Planning and Implementation

Ensuring that EAS approaches are inclusive often means involving local stakeholders and community members in program planning at a program's offset, as well as throughout its duration. Aga Khan Foundation discussed their use of Participatory Learning and Action Research (PLAR) during their programs' formative stages. PLAR, a widely used approach to project planning, not only encourages local communities to be active participants in projects, but also allows EAS providers to develop a deeper understanding of local contexts, needs, and assets. This approach is the result of efforts to make projects more adaptive and flexible, an interest expressed by many of the interviewed organizations. Similarly, the World Vegetable Center (AVRDC) involves local farmers in participatory breeding initiatives and farmer-managed variety trials as part of their approach to ensure that improved varieties, technologies, and transferred knowledge are all appropriate to local contexts. Sustainable Harvest International works with families and households, heavily involving them in the creation of a work plan tailored to their specific needs, assets, and interests while also integrating the organization's values and goals.

Many organizations also employ local individuals either as volunteers in their programs or permanent field staff. The Hunger Project views community level mobilization and participation in planning and implementation as a means to fostering feelings of ownership and empowerment, one of their main objectives, as well as a means to improve understanding of local conditions. The Hunger Project program staff is comprised entirely of local individuals. Animators, or community leaders, work with public extension specialists and farmers in their communities so that farmers have more frequent access to EAS that can be tailored to their specific experiences. Communities are also encouraged to take on the entirety of construction and management activities surrounding the Epicenters, or community centers that house a variety of programs including EAS provision, microcredit unions, food banks, and other services. Village Based Agents, Private Service Providers, and Community Promoters are further examples of efforts to involve local community members in program planning and implementation.

Participatory Monitoring and Evaluation

A few organizations use participatory approaches in their monitoring and evaluation procedures, though they generally seem to be, with a few exceptions, informal or a small part of organizations' overall M&E approaches. OIC International employs local Monitoring and Evaluation Officers who are responsible for verifying that field agents are following their agreed upon work plans and visiting individual farmers' fields as frequently as they have agreed to. Other organizations include informal assessments such as

post-training surveys and discussions with participants in their M&E approaches. However, more participatory monitoring and evaluation was cited as a challenge by a few organizations, sometimes created by a focus of M&E resources on formal or external assessments, especially in cases where projects are grant-funded. Catholic Relief Services is working to formalize some of their more informal M&E mechanisms, which currently function to provide feedback to local field staff so that more removed staff can gain a more concrete understanding of project progress.

E. Challenges

Throughout the interviews organizations discussed a number of challenges they face when pursuing the goals and practices discussed above. As organizations discussed these obstacles, the four broad trends that emerged in terms of challenges are related to:

- 1) Local capacities,
- 2) Organizational capacities and project timelines,
- 3) Facilitating access and adoption, and
- 4) Ensuring sustainability.

The next section discusses each of these trends in more detail.

(1) Local Capacities

Limited local capacities³ were a common point of discussion throughout many of the interviews. Organizations noted that limited local capacities throughout the private and public sectors pose a large challenge to working with farmers in extension contexts. In general, discussions surrounding capacities dealt with three types of local capacities:

1. Public sector capacity,
2. Field staff capacity, and
3. Private sector capacity.

Public Sector Capacity

Overall, the strongest trend in the discussion on capacities highlighted the challenges of working with local public extension. Organizations that work directly with public extension noted a number of challenges involved in such partnerships.

Many development organizations noted that in some cases, the organizational capacities and funding of public extension are often limited. For example, representatives from World Vision, DAI, CNFA, Heifer International, Mercy Corps, and OIC International noted that public extension programs are often underfunded. When public extension programs do not receive enough funding, extension agents are strapped for time and resources. Thus, extension programs that rely heavily on public extension may face obstacles in effectively engaging with farmers and planning projects at the appropriate scale. An additional observation here relates to mandate. One might reasonably suggest that given that these

³ We take “capacities” to mean “the ability of people, organizations, and society as a whole to manage their affairs successfully and “capacity development” as the process whereby people, organizations, and society as a whole unleash, strengthen, create, adapt, and maintain capacity over time.” (GFRAS 2012, page 2. “The New Extensionist Summary: Roles, Strategies and Capacities to Strengthen Extension and Advisory Services, Position Paper.”)

public systems are already challenged in so many ways, their job is not necessarily to partner with development organizations which may add to their already overburdened schedules.

Other organizations noted that in some extension branches, the individual capacities of some public extension agents can be limited. These organizations (who in this case will stay anonymous) reported that agents sometimes need more technical training and often more training centered on adult education. Often, limited individual capacity goes hand-in-hand with decreased organizational capacity; in some cases, where public extension does not have funds, they are not only unable to reach farmers, but they also cannot provide adequate training to extension agents. Several organizations also noted that these issues are particularly problematic in African contexts where governments may not funnel as much money into extension and where extension agents sometimes need extra trainings and resources. In these scenarios, many organizations attempt to incorporate public extension agents into trainings and other programming in order to increase their competence. Nevertheless, the limited organizational and individual capacities of public extension systems are a large obstacle for organizations attempting to work with smallholder farmers.

Field Staff Capacity

With respect to local capacities, a few organizations also discussed issues of limited local capabilities among field staff, both with respect to their own agency's field staff and field staff from partnering organizations. These comments suggested that while field staff may have exemplary technical knowledge, in some cases they may also have trouble conveying information to farmers for two main reasons. First, local field staff often have not received adequate training on how to train adult farmers and facilitate adult learning. CRS, in particular, noted that local field staff are often well educated, but do not necessarily have experience teaching adults.

Second, it may be difficult to communicate information due to language barriers. A small number of organizations noted that in many cases, and particularly in Africa, field staff's capacity for translation is a major obstacle. Organizations testified to the need to find translators and facilitators who have a strong command of the technical terms that are prevalent and important in agricultural trainings. Furthermore, some organizations, including Fintrac, Land O'Lakes, and CARANA Corporation, noted that even when local translators are very competent, translation can be an issue simply because technical terms do not exist in local languages. In many cases field staff must possess the capacity not only to translate terms, but also to actively explain them and incorporate them into farmers' vocabularies. Given the dual challenges of translating and explaining technical terms and adequately conveying them to adult learners, many organizations suggested that field staff have difficulty overcoming these obstacles.

Private Sector Capacity

Finally, organizations noted that limited capabilities in local private sector players carry high opportunity costs and can impede effective EAS. Three organizations (TetraTech, OIC International, and CNFA) that work with input suppliers noted that these suppliers may have low levels of knowledge regarding the products they sell. In some cases, organizations noted that while this is a challenge, it can also present an opportunity; organizations like CNFA and One Acre Fund provide trainings and other services to input suppliers as a way of extending their reach to input suppliers as well as farmers (See Box 3).

(2) Organizational Capacities and Project Timelines

In addition to challenges relating to local capacities, respondents also discussed challenges that come from within their own organizations. These challenges include staff acculturation, project timing, and issues related to funding. For example, a small number of organizations were vocal about the need to

ensure that staff is acculturated; both DAI and CRS suggested that they make great efforts to guarantee that field and home staff have respectful attitudes toward the cultures and practices of smallholders. However, DAI and CRS respondents noted that this is a challenge at an organizational level, particularly with local field staff who may have more education than an average farmer and pre-existing attitudes towards smallholders.

Furthermore, organizations noted that in some cases, short project periods are a significant challenge to providing effective extension. ACDI/VOCA, CNFA, DAI, Heifer International, Sustainable Harvest, CARANA, and others suggested that donor specifications, project metrics, and funding timelines often impose challenges on projects. Respondents noted that oftentimes organizations simply need more time to change what one respondent called “entrenched agricultural practices.”

(3) Facilitating Access and Adoption

Organizations frequently discussed the challenges that directly affect access and adoption. All challenges impede farmer access and adoption to some extent; however, there were certain challenges directly related to farmer's abilities to implement practices and use technologies. These challenges revolved around four themes:

- 1) Ensuring the message is right,
- 2) Building farmers' trust,
- 3) Catalyzing behavior change, and
- 4) Dealing with poor infrastructure.

Ensuring the message is right

Respondents often noted that the most important part of facilitating access and adoption is “getting the message right.” Here we use that phrase to mean that the organization has identified the problem and decided upon what is, by all accounts, an appropriate solution. However, while getting the message right is critical to access and adoption, many respondents noted that this is also a significant challenge for three main reasons.

First, the message itself must be driven by farmer needs. DAI noted that farmers must identify the problem and select possible solutions. However, this often takes a significant amount of planning, stakeholder analysis, and participant feedback in planning stages, as well as throughout the course of a project.

Second, respondents noted that even when farmers' needs are appropriately incorporated into project planning, it is sometimes difficult to steer an ongoing project in the direction of those needs over the entire course of the project period. For instance, ACDI/VOCA has found success when projects have relied on ongoing monitoring and evaluation to continually inform the project's upcoming activities, allowing staff to ensure that the project is continuing to meet farmers' needs. Continually changing projects and ensuring that they are targeting farmers is critical to success, but it also requires significant amounts of time and money.

Finally, “ensuring the message is right” is difficult because, according to Abt Associates, disseminating information to farmers is complicated. Abt noted that it is especially “difficult to disseminate information accurately” to remote groups of farmers (Carol Adoum, personal communication, July 15, 2014). Even with the availability of radio and ICT platforms, many organizations discussed the challenge of not only ensuring the message is right, but also determining how to disseminate correct information

in a way that farmers can use effectively. The challenge appears to lie primarily in broadly disseminating a message in a form that farmers can easily and correctly implement.

Building Farmers' Trust

Several organizations also mentioned a lack of trust as a major challenge for their extension workers. Organizations noted that a lack of trust generally fits into the following categories:

1. Trust between the organization and the farmers,
2. Trust between actors along the value chain, and specifically, trust between farmers and buyers.

First, farmers may have a distrust for organizational staff themselves and will therefore resist adopting the organization's suggestions. The issue of trust, or lack thereof, relates strongly to organizations' comments regarding project time periods; many organizations, including DAI, CARANA Corporation, and Mercy Corps noted that, given longer project time periods, it might be easier to build trust. Interestingly, those organizations with relatively long project time frame, such as The Hunger Project, generally were not as likely to highlight lack of trust as a challenge.

Organizations also discussed a lack of trust between various actors along the value chain. For example, CARANA Corporation discussed the lack of trust between farmers and warehouse managers they experienced during a project in Malawi, which posed a significant threat to project success. They overcame this distrust by continuously facilitating meetings between farmers and warehouse managers and ensuring that both parties lived up to each other's expectations. Nevertheless, CARANA Corporation's representative noted that developing trust is a major issue for CARANA Corporation's projects with farmers.

In another example, ACDI/VOCA mentioned lack of trust between "buyers", or those buying produce from farmers, and the farmers themselves. With respect to cases like these, organizations noted that both parties lacked trust due to a high level of perceived risk involved for each actor. Furthermore, distrust was mainly discussed as a function of particular value chains in specific locations and was generally something that organizations were able to address in their programming.

Changing Behaviors

Four organizations including Abt Associates, Heifer International, CARANA Corporation, and The Hunger Project, also discussed how challenging it can be to catalyze behavior change, particularly with respect to deep-seated practices and cultural roles. Several organizations have conducted extensive behavior analyses in various projects and plan their actions on the basis of behavior change models. Not coincidentally, these organizations remarked that shifting behaviors takes time, persistence, and funding, and that when combined with limited time and resources, achieving behavior change can be challenging.

Confronting Poor Infrastructure

Difficulties related to poor infrastructure represent another challenge that prevents farmers from adopting new practices and accessing information, technologies, or inputs. DAI and World Vision suggested that poor roads, distant markets and banking services, little to no internet connectivity, and a lack of adequate transportation in many cases prevented public and private extension from reaching farmers. These factors also make connecting farmers to value chains and markets difficult. In some limited cases, organizations have used ICTs to overcome these barriers, but in general, organizations noted that, regardless of ICT options, poor infrastructure is an ongoing challenge for extension work.

(4) Ensuring Sustainability

All of the organizations interviewed strive to ensure program sustainability, as discussed above. However, organizations discussed specific challenges that they encounter in attempting to achieve sustainability. Two major challenges emerged:

1. The use of subsidies, and
2. Keeping the private sector engaged.

Subsidies as an Opportunity and a Challenge

Organizations reported that subsidies, which are provided to farmers for inputs, are a major challenge to ensuring project sustainability. This was a very strong trend in many of our interviews; Abt Associates, CRS, DAI, World Vision, AVRDC, and OIC International all discussed how difficult it is to operate effectively and move towards sustainable practices under conditions where farmers are used to receiving subsidies. Organizations classified problematic subsidies in two major categories. Initially, and most frequently, organizations discussed how removing their own subsidies mid-way through a project can be very challenging; many organizations struggled with how to gradually and effectively remove subsidies for inputs while still keeping farmers and the private sector engaged.

The second category of subsidy challenges dealt with the aftermath of inappropriate subsidies left by previous projects and other organizations. While fewer organizations discussed this point, two noted that they struggle with program participation and incentivization when previous projects in the same region have provided subsidies and “handouts.” Abt Associates, in particular, noted that it is difficult to deal with these subsidies because it encourages dependency and makes it very difficult for the private sector to compete.

Maintaining Private Sector Engagement

Finally, some organizations, including Aga Khan and Mercy Corps, noted that keeping the private sector engaged can be a major obstacle. They noted that private sector involvement helps to ensure sustainability in terms of funding, project participation, and continued relationships between the organization and local industry. If organizations struggle to keep the local private sector engaged while the project is still active, it is much less likely that the private sector engagement can be sustained after a project ends.

F. Doing Things Differently: Some Emerging Examples

Though organizations talked a great deal about the challenges that they face in providing extension services (in the broad definition of the term), the overall tone of the interviews was hopeful. Most organizations reported successes, unique practices that they felt contributed to their success, and a specific plan to continue improving upon the extension services that they provide. All of the organizations discussed at least one specific element they would like to approach differently and that they felt would benefit programming. Several specific trends emerged throughout interviews. These relate to:

1. Better engagement of the private sector,
2. Improved formative research (i.e., how to better influence behavior change),
3. More collaboration with governments, and
4. Maintaining an innovative attitude.

Better Engagement of the Private Sector

First, there is increasing interest among EAS organizations in better engaging the private sector in their programming, either through partnerships with large firms or local enterprises. Private sector firms may provide some funding for activities, but more importantly, they are an integral part of buyer-seller relationships with farmers and potential providers of EAS and inputs.

As mentioned earlier, engaging the local private sector can be challenging, especially when it is not well developed. Aga Khan Foundation discussed their interest in addressing this challenge through creating an enabling environment in which financial incentives exist for businesses to participate in extension projects. Other organizations discussed how such engagement can be more effective when coupled with capacity development activities. ACDI/VOCA expressed an interest in engaging in more and closer partnerships with the private sector, especially with local small and medium enterprises, with whom capacity to provide inputs and trainings can be built. Their hope is that such engagement would be complemented by their work with better organized farmers, who eventually may be willing and able to pay for advisory services, especially in transitioning economies where there is often more capacity to do so. Similarly, World Vision is interested in reviewing its Private Service Provider (PSP) approach, which aims to develop the capacity of lead farmers to provide EAS to farmers for a fee. They are especially interested in how existing private sector firms can become engaged in providing such services.

Improved Formative Research

Behavior change and facilitating adoption and knowledge transfer in general were both commonly cited as challenges by the interviewed organizations. This is likely a reason for the widespread interest in devoting more resources to and improving formative research among organizations. Organizations cited how approaches such as barrier analyses, behavior change frameworks and messaging, market research, socio-economic research, and community information systems could allow them to better anticipate barriers and challenges and address them appropriately.

Many organizations noted that perceived barriers to adoption have cultural roots. Traditional knowledge and agronomic systems, gender or family member roles, language differences, and economic or political barriers, among others, can present unforeseen challenges for both organizations and beneficiaries in the process of knowledge transfer and behavior change. Conducting barrier analysis can help organizations plan programming to accommodate such differences and make field agents aware of aspects of knowledge transfer that may require more innovation or flexibility than projects usually involve. BRAC cited an interest in increasing and improving market research especially to enhance their understanding of informal mechanisms of behavior change and driving factors relevant to smallholder farming.

Community information systems can also give organizations a better sense of how to encourage behavior change. The development of community information systems, cited by The Hunger Project, involves communities in the management of their own data. This approach can increase communities' own awareness of their assets, needs, and contexts as well as empower them in understanding and cultivating their own identities. Community information systems can also address the widespread challenge presented by gaps in available data, which often exists on a much broader and regional, rather than local, scale and may not capture or represent the most impoverished and vulnerable populations. Such an approach, coupled with local monitoring and evaluation procedures, can improve both organizations' and beneficiaries' understanding of how people make decisions and identify opportunities for appropriate interventions.

More Collaboration with Governments

Several organizations noted that they would like to improve their relationships with governments, particularly with respect to government extension services and ministries of agriculture. Many organizations noted that they no longer work directly with governments due to a number of challenges such as a consistent lack of capacity on the part of the public sector staff (see Section G.1 Local Capacities). However, many organizations were very aware of the potential for partnerships with public extension and ministries of agriculture. As one organization stated, “we could achieve a great deal by working more closely with national governments.” Organizations such as DAI, Heifer International, Land O’Lakes, World Vision, and One Acre Fund cited the potential for increasing capacity of extension agents, planning projects that government entities might be more closely involved in, and building the capacity of ministries of agriculture so that they might be more capable of meeting needs in their own countries.

Several of the organizations interviewed discussed a knowledge exchange with government extension. Heifer International, for instance, noted that it would like to more closely involve government extension in mentoring and providing resources to Heifer International extension agents. In other cases, organizations noted that they would like to facilitate closer collaboration between public extension and the private sector; Land O’ Lakes noted that it would like to continue to strengthen ties between governments and local private sectors. Establishing or strengthening partnerships with governments, coupled with a value chain approach, can begin to strengthen value chains, provide farmers with more access to diverse resources, and create a vibrant exchange of knowledge between the public and private sectors.

Maintaining an Innovative Attitude

Perhaps as an effect of USAID’s increasing emphasis on innovation, many organizations noted that they would like to be more innovative in their approaches to planning and executing projects. Organizations mentioned that they would like to consider more innovative methodologies, foster more creative thinking around project planning, and enact more inspired solutions to many of the challenges mentioned above. While this was a strong trend, it was not a specific one; none of the organizations gave concrete examples about what more innovative approaches might look like. Nevertheless, organizations noted that they were trying to create an environment in which staff and participants might be able to consider new methods and, furthermore, that doing so was a high priority.

G. Successes

Organizations discussed challenges at length and what they would like to do differently. However, they also discussed a number of successes. With most organizations, particular project successes were discussed; in general, organizations found it difficult to discuss successful overall methodologies and instead found it much easier to site specific instances of success in various projects or programs. We have highlighted many of these more specific examples in boxes. Despite the focus on individual projects, in some cases organizational successes did present some trends. Successes included:

1. Collaboration and capacity building with the private sector,
2. Building flexible projects, and
3. Using barrier analysis and behavior change models.

These more general achievements, which relate more to methodologies than to specific project circumstances, are detailed below.

Collaboration and Capacity Building with the Private Sector

There has been growing interest in how working with both local and international private sector actors can promote sustainability and facilitate transfer and access in EAS programs. This interest has come from both donor organizations and within EAS provider organizations that see the benefit of such engagement and market driven approaches.

One of the most commonly cited approaches to collaborating with the private sector was working with local input suppliers to address farmer demand for improved inputs. Land O'Lakes' Answer Plots allow a variety of local input suppliers to market their products and demonstrate their benefits to farmers. Their close relationships with both input suppliers and farmers allow them to facilitate informed decisions on the part of farmers. CARANA Corporation has also been able to incentivize local input suppliers to pay a portion of the costs associated with EAS coupled with supplied inputs by demonstrating to them that doing so can increase their profitability.

Demonstrating profitability to local private sector actors is another commonly cited approach to effectively engaging the private sector. Though it can take time, acting as a consistent source of good information regarding enhancing productivity and quality can demonstrate transparency and build trust between input suppliers and farmers. Doing so can benefit input supply businesses by providing them a more reliable customer base and thus also higher and more stable incomes. Such an approach was discussed by CARANA Corporation, CNFA, and Aga Khan Foundation, all of which also discussed how they have been able to effectively balance and sequence this demand-side approach with capacity building with farmers on the supply-side. CNFA has also found success in aggregating farmers to drive down their production costs and provide a more stable supply to buyers.

In general, it seems that engaging the local private sector has been most successful when relationships between buyers and sellers all along value chains are strengthened. Effectiveness can be further enhanced when strong, transparent relationships are coupled with capacity building. Interviewed organizations have found success in building capacity with input suppliers, cooperatives and farmer based organizations, and local EAS providers.

In addition to providing direct EAS, AVRDC holds international trainings with seed companies and other input suppliers, providing information and technical skills they can bring back to their respective communities. BRAC engages in many capacity development activities with local input suppliers who they hope can fill the niche after BRAC leaves a community. ACDI/VOCA has focused much of their capacity development efforts on strengthening cooperatives' abilities to "professionalize management, provide training or information services, scale up production and apply quality-control standards... [as well as] accessing essential technical services, linking to higher-value markets, forming business alliances and advocating for a favorable regulatory environment."⁴

A few organizations have also found success in incentivizing communities to provide their own EAS by providing trainings to farmers that center on entrepreneurship and training others. BRAC's Community Providers and Heifer International's mobile Community Animal Health EAS providers, for example, allow

⁴ ACDI/VOCA. (2014). Cooperative and Association Development. Washington, D.C.: ACDI/VOCA. www.acdivoca.org/co-ops-and-associations.

EAS to reach far more farmers than organizations have the capacity to. Local providers may also command trust and respect more readily than non-local organization staff.

Project Flexibility

Organizations also noted that building flexibility into a project is critical. AVRDC, Aga Khan Foundation, OIC International, World Vision, DAI, and ACDI/VOCA all discussed the importance of flexibility. Organizations discussed flexibility in two ways. First, they noted that it is important to be able to adapt an approach from the beginning of the project depending on local contexts. ACDI/VOCA, for instance, discussed the importance of conducting rigorous stakeholder analyses and building projects around them, thus being flexible from the offset of a project. Furthermore, organizations noted that, once the project has started, it is crucial that they are flexible enough to adapt over the course of a project period. For example, OIC International discussed instances in which farmers wanted to include a different or new technology or package of services in the middle of a project. They noted that it is important for a project to be flexible enough to continue to meet farmer needs throughout the project cycle. World Vision and DAI echoed these points, saying that many of their more successful projects have been flexible enough to change and meet farmers' needs throughout the project.

Barrier Analysis and Behavior Change

Additionally, a few projects have experienced success with barrier analysis and behavior change methodologies. Several organizations, including Abt Associates, World Vision, and The Hunger Project, have specific behavior change methodologies in place; organizations report that behavior change analysis and barrier analysis have brought greater insight to project planning and have resulted in more successful implementation. As one organization said, these practices have made a huge difference in the project's ability to successfully implement a change for farmers.

H. Unique Practices

If an organization has a particular method for success that other development organizations might be able to replicate for their own success, such information might be incredibly helpful for the entire EAS and development community. Distinctive practices that lead to success in various projects were therefore of particular interest to the research team. To that end, we asked all participating organizations whether they employ unique practices that might lead to their project success. While some stated that most of their methods were tried-and-true, rather than novel, some organizations did mention practices that they felt were unique. Two trends, in particular, arose with respect to unique practices. Those organizations that operate on long term project periods felt that this leads to success. Additionally, some organizations reported that their particular attitudes towards farmers were unique and helped with project success.

Long-term Projects

Increasing awareness of the disadvantages of "projectization" has led to widespread interest in implementing long-term EAS programs. Receiving funding from large donors or through grants can often limit the time and resources an organization can dedicate to a program. A few organizations, however, have been able to carry out long-term projects, often through heavily involving communities in implementation so as to balance out organizations' long-term presence, which can foster dependency. BRAC, for example, has no specified project periods; instead, they work with communities until they no longer see a need for their organization's presence. The Hunger Project plans projects in such a way that communities take on almost all the responsibilities of constructing and managing their Epicenters, but works directly with them by providing support for up to eight years until the centers are

self-sufficient. World Vision's projects often span fifteen or more years, allowing them to build strong relationships with local communities and work to address multiple aspects of development including health, gender, and political issues. They discussed how such longevity in projects allows them to better understand the farmers and communities they work with, thus enabling them to develop more appropriate interventions and ensure sustainable solutions.

Attitudes towards Farmers

Some organizations also noted that their attitudes toward farmers are unique and lead to project success. This trend was not strong; only three organizations mentioned it. However, the organizations that did discuss their unique attitudes towards farmers noted that they are a key practice that allows them to create different relationships with farmers, which ultimately contribute to capacity building and long-term sustainability. DAI, CRS, and The Hunger Project all cited approaches such as treating farmers with respect, respecting and utilizing their traditional knowledge, listening to their feedback throughout the course of a project, and ensuring that staff respects farmers' positions in the community. DAI noted that this practice allows them to form sustainable relationships with farmers; CRS reiterated this point, saying that when projects incorporate farmers' traditional knowledge, farmer ownership of the program increases. These organizations thus felt that they were able to foster stronger relationships with farmers as a result of their unique attitudes; by treating farmers differently, they are able to create projects that are ultimately more successful.

I. Conclusions

Development organizations share a number of common challenges, unique practices, successes, and organizational approaches that define how they work with and relate to farmers. Furthermore, several organizations have unique practices that have led to their success. By synthesizing the responses of nineteen organizations regarding issues in extension practices, we hope that this report will catalyze a discussion on common practices and shared points of success, as well as start a dialogue on what the development community can improve upon in order to better reach farmers.

Facilitating Relationships – Building Trust and Sustainability

Many of the organizations we spoke with considered themselves facilitators of relationships among a diverse set of stakeholders, rather than direct EAS providers. Different organizations focused on building and strengthening relationships between different actors including producers and public extension, though most focused their efforts within local private sector players. This represents a movement away from merely disseminating information, inputs, or technologies to farmers and instead attempting to create mutual benefits for buyers and sellers, as well as enabling participants to take an active role in improving their own livelihoods. Farmers who train with other farmers, through Farmer Field Schools or farmer exchanges, for example, are given the opportunity to communicate with each other about which practices have worked and why and may be able to organize themselves into cooperatives or farmer associations. Closer relationships between farmers and local public extension allows farmers to communicate their needs to those who have the time and resources to develop solutions. Furthermore, public extension often has the leeway to experiment and innovate as they are not as limited by project deadlines as development organizations often are. Finally, facilitating relationships in the private sector often involves building trust and transparency between farmers and input suppliers or buyers, reducing risk for all parties involved, and promoting more stable supplies and incomes. This seems to be a very effective approach to integrating sustainability into project models and fostering a sense of community ownership of development initiatives.

Enhancing Participatory Behavior Change Approaches

Overall, organizations also identified a greater interest in, and increased success due to, participatory approaches to project development and monitoring and evaluation. Organizations are engaging in more formative research and community feedback at the planning stage in order to ensure that projects “get the message right.” Development organizations also utilize more local and informal M&E practices so that stakeholders have input agency at every point of the process. These approaches are particularly innovative and show significant promise.

Developing Local Capacities

A number of organizations exemplified trends regarding developing local capacities. Every organization discussed local capacities in some way, either with respect to local staff capacities, government abilities, or private sector capabilities. Organizations both consider the way that limited local capacities might inhibit project success and actively think about ways to deal with the limited local capacities of these actors. A number of organizations presented innovative solutions to build local capacities, including input service centers and conducting trainings in innovative ways.

Sharing Knowledge

Most organizations saw room for progress and were interested in improving their approaches to extension. The existence of organizations such as MEAS speak to the continuing need to innovate and improve, especially as farmers face increasingly variable and uncertain environmental, economic, and social climates. This variability in local contexts, coupled with the variability increasingly characteristic of the EAS community, highlights the need to share knowledge of effective approaches organizations have employed, the challenges they face, and the lessons they have learned. It is also important that project beneficiaries and other local stakeholders be a part of this dialogue as they can contribute to a deeper understanding of their own needs, assets, and interests.

It is further important that development organizations conduct intra-organizational knowledge sharing. This is a significant opportunity for organizations, particularly with respect to organizational methodologies and gender. There is so much variation in local conditions and contexts that it can be difficult to discuss general methodologies or frameworks within organizations. Indeed, trying to apply an approach to different places in the same way may end in failure. For this reason, some organization staff are only able to discuss the projects on which they work directly. This trend is also problematic. The “projectization” of extension approaches, and the corresponding inability to discuss underlying organizational methodologies, suggests that organizations may not be conducting much internal knowledge sharing. This step is critical for sharing successes, challenges, and unique practices not only between organizations, but between projects in the same organization. This report begins this process.

The lack of intra-organizational knowledge regarding organizational approaches to gender further exemplifies this trend. As stated earlier in this report, many representatives were unable to discuss their gender programs with us, regardless of how developed their organization’s gender methodology might have been. Instead, many respondents suggested that we talk to the gender expert in their office. Organizations need to open dialogues about gender in their extension programs, both internally and externally. Further knowledge-sharing reports such as this one detailing how different organizations incorporate gender into their extension methodologies would also be prescient.

Improving Information Communication Technologies

There also seemed to be an interest in, but lack of knowledge regarding, how ICTs can be used in EAS. Many of the ICTs mentioned are still in piloting phases and their success may be limited by a number of

challenges including lack of internet or electricity access and capacity to develop and use effective platforms. Most ICTs that seem to have been commonly employed and found to be effective are those that increase farmer awareness of market information, promote transparency and trust between buyers and sellers, and can be accessed in a practical way. There is no doubt that ICTs will become more common in extension; this creates a need for more innovation and developing platforms and applications around user needs.

The opportunities and trends above can and should become a part of a larger conversation on how to share knowledge between development organizations as well as different private and public sector actors. As discussed earlier, it is important that local governments, farmer groups, NGOs, financial service providers, and any other interested actors are a part of the discussion on how to improve EAS and improve farmer livelihoods. By continuing to examine and engage in a dialogue about approaches to extension, and creatively think of new approaches, the NGO and public and private sectors can better engage with farmers and other actors in agricultural value chains in order to create sustainable programs and improve rural livelihoods.

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- Sarah Heddon, Aga Khan Development Network
- Thomas Herlehy, Land O'Lakes
- Don Humap, DAI
- Rienzzie Kern, Heifer International
- Ricard Lazibal, Fintrac
- Ben Lentz, DAI
- Greg Luther, AVRDC
- Gitau Mbare, World Vision
- Jen Peterson, TetraTech
- Florence Reed, Sustainable Harvest International
- TJ Ryan, ACDI/Voca
- Kaity Smoot, One Acre Fund
- Amanda Zehner, Sustainable Harvest International

K. Appendices

Appendix 1: Organized Trends Chart

		Abt Associates	ACDI/VOCA	AKDN, Aga Khan Development Network	AVRDC, World Vegetable Center	BRAC	CARANA Corporation
General Information	Size (of EAS division if more than one office)	Medium	Medium	Large	Small	Large	Large
	Type	Consulting Firm	Non-Profit	Non-profit	Non-profit	Non-profit	Consulting firm
	Main Functions (self-identified)	Research and Practice	Value chain development (farmers and coops)	Health, education, rural development, environment, civil society	Research and Development	Empowerment, Financial Services, Capacity Development in Private Ag. Sector	Agribusiness
Trends in Organizational Approaches and Frameworks	Farmer Field School (FFS)		1	1	1		
	Training of Trainers (ToT)	1			1		
	Demonstration Plots	1	1		1	1	1
	Group training and individual follow-up	1					
	Exchange visits (Farmer-Farmer, Farmer-Buyer, etc.)		1				
	Identifying Lead Farmers		1	1	1	1	
	Specialized training for Lead Farmers			1	1	1	
	Training connected to provided inputs		1	1	1	1	
	Financial service provision		1			1	
	Savings initiatives		1	1			
	Noted Value Chain approaches	1	1				1
	ICT for purposes of market access		1	1		1	1
	Organizing / mobilizing producers		1			1	1
	Facilitating relationships		1	1		1	1
	Collaboration with public extension	1		1	1	1	
	Behavior Change Theory	1					

		Abt Associates	ACDI/VOCA	AKDN, Aga Khan Development Network	AVRDC, World Vegetable Center	BRAC	CARANA Corporation
	Local M&E		1	1	1	1	
	Formal (External) M&E		1	1		1	1
Challenges	Limited capacity of public extension system						
	Limited local capacity in field staff		1				
	Translation issues						1
	Limited local capacity in private sector					1	
	Acculturation of staff						
	Getting the message right		1				
	Limited time		1				1
	Trust or building trust						1
	Catalyzing behavior change						1
	Infrastructure					1	
	Dealing with Subsidies	1			1		
	Engaging local private sector, incentivizing participation/ investment			1			
Doing Things Differently	Better engagement of private sector		1	1			
	More and improved formative research		1		1	1	
	Stronger government relations						
	More innovation			1		1	
Identified Successes	Collaboration w/ private sector		1	1	1	1	1
	Capacity development with private sector		1				
	Flexible projects		1	1	1		
	Behavior change and barrier analysis	1					
Unique Practices	Long projects			1		1	
	Attitudes towards farmers						

		CNFA, Citizens Network for Foreign Affairs	CRS, Catholic Relief Services	DAI, Development Alternatives Incorporated	FINTRAC	Heifer International	Land O' Lakes, Inc. International Development	Mercy Corps
General Information	Size (of EAS division if more than one office)	Medium	Large	Medium	Medium	Large	Large	Medium
	Type	Non-profit	Non-profit	Consulting Firm	Consulting Firm	Non-profit	Private Cooperative	Non-profit
	Main Functions (self-identified)	Agricultural Development	Humanitarian Aid	Water and natural resources management, energy and climate change, governance and public sector management, private sector development and financial services, economics and trade, agriculture and agribusiness, crisis mitigation and stability operations, and HIV/AIDS and avian influenza control.	Agribusiness	Food Security, Livestock, Agriculture, Value Chains and Farmer Training	Global food security, sustainable agricultural development	Humanitarian Relief
Trends in Organizational Approaches and Frameworks	Farmer Field School (FFS)	1	1	1		1	1	
	Training of Trainers (ToT)	1						
	Demonstration Plots			1		1	1	1
	Group training and individual follow-up			1	1			
	Exchange visits (Farmer-Farmer, Farmer-Buyer, etc.)			1				
	Identifying Lead Farmers			1		1		1
	Specialized training for Lead Farmers					1		
	Training connected to provided inputs	1			1			

		CNFA, Citizens Network for Foreign Affairs	CRS, Catholic Relief Services	DAI, Development Alternatives Incorporated	FINTRAC	Heifer International	Land O' Lakes, Inc. International Development	Mercy Corps
	Financial service provision					1		
	Savings initiatives		1			1		1
	Noted Value Chain approaches	1		1		1	1	
	ICT for purposes of market access	1				1		1
	Organizing / mobilizing producers	1		1			1	1
	Facilitating relationships	1					1	1
	Collaboration with public extension		1			1		1
	Behavior Change Theory							1
	Local M&E	1	1	1		1	1	
	Formal (External) M&E	1	1			1	1	
Challenges	Limited capacity of public extension system	1		1		1		1
	Limited local capacity in field staff		1				1	
	Translation issues				1		1	
	Limited local capacity in private sector	1						
	Acculturation of staff		1	1				
	Getting the message right		1	1				
	Limited time	1				1		
	Trust or building trust			1				1
	Catalyzing behavior change			1		1		
	Infrastructure			1				
	Dealing with Subsidies		1	1				
	Engaging local private sector, incentivizing participation/investment							1
Doing Things Differently	Better engagement of private sector							
	More and improved formative research							

		CNFA, Citizens Network for Foreign Affairs	CRS, Catholic Relief Services	DAI, Development Alternatives Incorporated	FINTRAC	Heifer International	Land O' Lakes, Inc. International Development	Mercy Corps
	Stronger government relations			1		1	1	
	More innovation			1		1		
Identified Successes	Collaboration with private sector	1		1			1	1
	Capacity development with private sector	1				1		
	Flexible projects			1				
	Behavior change and barrier analysis							
Unique Practices	Long projects							
	Attitudes towards farmers		1	1				

		OICI, Opportunities Industrialization Centers International	One Acre Fund	Sustainable Harvest International	Tetra Tech, Associates in Rural Development	The Hunger Project	World Vision	Total Responses
General Information	Size (of EAS division if more than one office)	Small	Small	(Small-) Medium	Large	Small	Large	Large: 8 Medium: 7 Small: 4
	Type	Non-profit	Social Enterprise	Non-profit	Consulting Firm	Non-profit	Non-profit	Non-profits: 12 Consulting: 5 Social Enterprise: 1 Cooperative: 1
	Main Functions (self-identified)	Technical and Vocational Skills Development; Food Security and Agriculture	Private Input Supplier, Technical Assistance	Food Security, Livelihoods, Deforestation	Economic Development	Community Development	Humanitarian Aid	
Trends in Organizational Approaches and Frameworks	Farmer Field School (FFS)	1			1	1	1	12
	Training of Trainers (ToT)							3
	Demonstration Plots	1	1				1	12
	Group training and individual follow-up	1		1			1	6
	Exchange visits (Farmer- Farmer, Farmer-Buyer, etc.)	1			1		1	5
	Identifying Lead Farmers	1	1			1		10
	Specialized training for Lead Farmers	1	1			1		7
	Training connected to provided inputs		1		1			8
	Financial service provision		1		1			5
	Savings initiatives					1	1	7
	Noted Value Chain approaches				1		1	9
	ICT for purposes of market access				1		1	9
	Organizing / mobilizing producers	1					1	9
	Facilitating relationships						1	8
	Collaboration with public extension					1	1	9

		OICI, Opportunities Industrialization Centers International	One Acre Fund	Sustainable Harvest International	Tetra Tech, Associates in Rural Development	The Hunger Project	World Vision	Total Responses
	Behavior Change Theory					1	1	4
	Local M&E	1	1	1		1	1	14
	Formal (External) M&E			1	1	1	1	12
Challenges	Limited capacity of public extension system	1					1	6
	Limited local capacity in field staff		1				1	5
	Translation issues							3
	Limited local capacity in private sector	1			1			4
	Acculturation of staff							2
	Getting the message right					1		4
	Limited time			1				5
	Trust or building trust					1		4
	Catalyzing behavior change					1	1	5
	Infrastructure	1					1	4
	Dealing with Subsidies	1					1	6
	Engaging local private sector, incentivizing participation/investment							2
Doing Things Differently	Better engagement of private sector	1				1	1	5
	More and improved formative research	1				1		5
	Stronger government relations		1				1	5
	More innovation						1	5
Identified Successes	Collaboration with private sector							9
	Capacity development with private sector							3
	Flexible projects	1					1	6
	Behavior change and barrier analysis					1	1	3
Unique Practices	Long projects	1				1	1	5
	Attitudes towards farmers					1		3

Appendix 2: List of Questions

Questions for MEAS Interviews

Extension can be defined as “the facilitation of knowledge access to farmers to improve their livelihoods and sustainability.”

Different organizations use different approaches (although many likely have common elements). This study will collate and synthesize the approaches used by a number of different but major development organizations.

Primary study objectives:

- 1. Understand major approaches to extension (including the pros and cons) used by different organizations to extension.**
- 2. Use that understanding to help guide program implementation.**

Introduction/preamble: USAID have asked us to talk with a number of major development partners and see how each approaches the issue of helping introduce [change and innovation](#) to farmers.

We would like to understand the approach you use and your assessment of the pros and cons of your approach. The aim is to share good practices across development and extension partners.

1. Understanding the organizations general approach to extension/development

1.1 Could you please outline your general approach to extension/development?
(Where extension can be defined as “the facilitation of knowledge access to farmers to improve their livelihoods and sustainability”)

- How would your organization define extension?

1.2 How are users or beneficiaries (or groups of them) selected or prioritized?

- How are current needs or issues identified and prioritized? Does your organization select projects/programs that focus on specific themes/needs/beneficiaries?

1.3 How do you validate services and/or technologies and decide they are appropriate?

1.4 How do you go about 1) packaging your message, 2) bringing it to the farmer’s attention, and 3) facilitating adoption/knowledge transfer?

1.5 How do you see ICT or other modern approaches being used along with more traditional approaches to extension?)

1.6 How do you collect feedback to improve your a.) understanding of the audience’s needs and assets and b.) the impact of the work?

1.7 How is your extension model financed?

2. Priorities in Extension:

2.1 How are current assets, needs or issues identified and prioritized?

2.2 Are the needs/assets of certain groups prioritized over others (e.g., farmers' and processors' over consumers')? (Does your organization focus on any specific groups of stakeholders?)

2.3 Are there specific procedures for these assessments?

3. What do you see as pros and cons of your approach?

3.1 What are the most challenging factors to overcome in exchanging knowledge with farmers?

- How do you – or how would you like to – share information about these challenges across the organization?

3.2 What would you like to do differently in your approach?

3.3 What factors in your approach do you think work really well?

3.4 What are the practices that you think makes your organization's extension unique? How do these practices contribute to your success?

4. Thinking about sustainability and expansion:

4.1 Who are the key players, partners in your model?

- A. How do you involve local partners (i.e. local NGOs, public government extension, etc.)
- B. How does your organization put local collaborators in leadership positions or planning-level roles in the course of a project?
- C. How does your organization work through local collaborators to finance project activities?
- D. How does your organization work to build the capacity of local collaborators?

4.2 What elements of the extension/development approach do you see as sustainable after the project finishes?

4.3 Is climate change addressed as a priority by your organization's extension approach?

4.4 How does the approach address the potential impacts of climate change or changes in social conditions?

4.5 What methods do you use to increase the reach of your extension to include more women? How do you assure that you present topics that are relevant to women's interests? Etc.?

4.6 How scale-able is the extension model? What is/are your organizations method/s for scaling up/ reaching more producers?

- A. What, if any challenges are there to scaling up?

Appendix 3: Works Cited

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