



THE MECHANISM OF ACTION RESEARCH: AN EVALUATION OF
LEARNING AND PRACTICE ALLIANCES WITHIN THE GLOBAL
WATER INITIATIVE IN ETHIOPIA AND UGANDA

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Acronyms

| | |
|--------|--|
| AAR | After-action review |
| CAES | College of Agricultural and Environmental Sciences |
| CBO | Community-based organization |
| FGD | Focus group discussion |
| GTP | Growth and Transformation Plan |
| GWI-EA | Global Water Initiative - East Africa |
| HIP | Household Irrigation Program |
| KII | Key informant interview |
| LPA | Learning and Practice Alliance |
| LRA | Lord's Resistance Army |
| MSC | Most significant change |
| NAADS | National Agricultural Advisory Services |
| NGO | Non-governmental organization |
| RiPPLE | Research-inspired Policy and Practice Learning in Ethiopia and the Nile region |
| SWOT | Strengths, weaknesses, opportunities, and threats |
| Ush | Ugandan shilling |
| VSLA | Village savings and loan associations |
| WaSA | Water Smart Agriculture |
| WASH | Water, sanitation and hygiene |
| WHH | Welthungerhilfe |

Executive Summary

Smallholder farmers in East Africa rely heavily on erratic and unpredictable rainfall for their livelihoods. Furthermore, ineffective management of these scarce or unreliable water resources threatens household food security. In an attempt to address these challenges, the Global Water Initiative-East Africa (GWI-EA), a five-year program funded by the Howard G. Buffett Foundation, has established learning and practice alliances (LPAs) in Ethiopia, Tanzania, and Uganda to link farmers, especially women, with local governments, research institutions, and non-governmental organizations (NGOs) through action research. These LPAs are multi-level, multi-stakeholder platforms that use participant-led research to inform interventions. GWI-EA intends to use the LPAs as an evidence base for Water Smart Agriculture (WaSA), a term GWI-EA has coined to encompass the various and essential components of water for food production, which is intended to strengthen the link between water and food production at the policy and practice levels (Global Water Initiative-East Africa (GWI-EA), 2014). By involving stakeholders from different sectors and levels of society in action research, GWI-EA hopes to increase awareness of the challenges farmers face and encourage investment in management of water for smallholder agriculture.

This report focuses on two of the three GWI-EA project areas, Otuke District in Uganda and Dera Woreda (district) in Ethiopia. The Ugandan LPA was launched in February 2014 and the first research cycle was ongoing at the time of writing. There are now 24 Champion Farmers, half of whom are women, in three of Otuke's six subcounties. The LPA has partnered with Welthungerhilfe (WHH), a German international NGO working on food insecurity, to implement soil and water conservation techniques with the Champion Farmers. The LPA in Dera was established in September 2013, and the first research cycle was completed in early 2014. Ultimately, 63 Champion Farmers, over half of which are women, were selected. Action research groups were formed around irrigation technology and improved agronomic practices.

An evaluation was designed to assess the efficacy of the LPA model in bringing diverse stakeholders together to influence change across multiple levels of society and government. The results of this study will help the CARE USA Water Team understand the potential benefits of applying the LPA model in other program areas. Research topics addressed in this report include process, impact, compatibility with program frameworks, enabling factors, and gender. Most significant change (MSC), after-action review (AAR), strengths, weaknesses, opportunities, and threats (SWOT) analysis, and key informant interviews

(KIIs) were used to evaluate the LPA framework implemented by GWI-EA. Champion Farmers, LPA members, and GWI-EA staff participated in the evaluation through individual interviews and focus group discussions (FGDs). Program reports, field observations, and field notes were used to supplement research findings.

Since the LPAs were launched, the program has influenced a number of changes. Champion Farmers have been trained in various farming techniques relevant to their local agro-climatic conditions. In Otuke, large water pits have been dug to collect rainwater for use during the dry season. Farmers in Otuke are also members of village savings and loan associations (VSLAs) and/or farmer groups. These groups are excited that Champion Farmers are able to advocate for them in a public setting. In Dera, Champion Farmers have also received trainings on irrigation agronomy and systems. Certain Champion Farmers and youths in the community have been trained in pump maintenance, saving farmers time and money, while creating employment opportunities for local youths. Several farmers in Ethiopia have already harvested their produce with increased yields and higher selling prices. Champion Farmers in Uganda were just beginning to harvest at the time of writing, but expect to see increased production and profits as well. In both countries, farmers in the communities have expressed interest in the LPA, but adoption has been slow.

Overall, Champion Farmers believe that the LPA has improved their relationship with the local government. This is primarily due to visits from district leadership, officials participating in LPA monitoring, and perceptions that inputs from the LPA are coming from local government. Champion Farmers also believe their engagement in the public sphere has increased, as the LPA gives them a platform to voice their needs. The LPA members and farmers share experiences and work together as a team, creating a sense of unity and membership within the community that did not previously exist. However, interaction among Champion Farmers is fairly low, and those located further from district headquarters report less trust in the government and do not feel as included in the LPA.

The LPA model is a demand-driven approach that allows stakeholders to identify both problems and solutions. GWI-EA staff feel that the facilitation process has gone smoothly; taking a facilitation role rather than directive role has helped create legitimacy for GWI-EA and has cultivated ownership of the project among the government and farmers. Still, some study participants acknowledged that, although the program framework is a demand-driven approach, the LPA was not demanded by the people. Feelings of commitment and ownership are still somewhat lacking, and, at times, GWI-EA staff has had to take a stronger directing role in order to keep the LPA on track.

Gender equity is an issue in both Otuke and Dera, but the LPAs are working to address this challenge. In Otuke, men are requested to bring wives to meetings and women are encouraged to voice themselves during LPA activities, and in Dera GWI-EA organized a women's day for female Champion Farmers. Interviewees in both countries believe that female Champion Farmers will be able to better cover household expenses once they receive profits from their harvests. Female Champion Farmers have become more vocal and opinionated at LPA meetings, and report that their engagement in the public sphere has increased. The visibility of gender issues and the success of female Champion Farmers have improved perceptions of women. However, many interviewees hope that the LPA will do more to advance gender equity. LPA members advocate for financial literacy, adult education, and confidence-building, as well as gender training for both men and women. Several female farmers also mentioned they would like money to start a group business to give them more control over financial resources.

There is a largely positive sentiment regarding the LPAs at this stage, although opinion is divided over whether or not the LPAs can be sustained. Funding and ownership of the LPAs are the main threats to the program's sustainability. Local government support is present, but interviewees agree that the government has not yet taken ownership of the LPAs. Study participants from Otuke suggest holding meetings at the parish level or transforming the LPA into an independent body to increase attendance and interaction. In Dera, scheduling issues have resulted in limited feelings of ownership among the LPA members. Special attention needs to be given to the members' work schedules so that meetings and action research can be planned to maximize attendance. GWI-EA staff and LPA members acknowledge that action research groups cannot be maintained without funding, although common interests between the LPA and government programs may make institutionalization of the LPA fairly easy.

GWI-EA has already achieved a degree of success through the LPA framework. Noteworthy accomplishments to-date include the strengthened relationship between local government and Champion Farmers and new interactions among diverse LPA members. Various challenges can of course arise from multi-stakeholder-driven program approaches, but many of the challenges addressed here are context-specific and broader themes can be used as learning points for future LPAs. In conclusion, the evaluation team believes that the LPA framework is a promising approach for bringing together stakeholders from different sectors and levels of society to increase awareness, investment, and collaboration for a wide range of development issues.

Background

Smallholder farmers in East Africa rely heavily on erratic and unpredictable rainfall for their livelihoods. Furthermore, ineffective management of these scarce or unreliable water resources threatens household food security. In an attempt to address these challenges, GWI-EA, a five-year program funded by the Howard G. Buffett Foundation, theorized that the food security situation in East Africa can be transformed through improved information flow at different levels and increased pressure on policymakers from both insiders and outsiders. The result would be smarter and increased investments in water for agriculture, especially for women farmers, and the overturning of obstacles to water access and its effective use in smallholder agriculture. GWI-EA is using Water Smart Agriculture (WaSA) as an organizing concept to package the various and essential components comprising water for food production. The concept is intended to support clear articulation of water for food production needs at policy and practice levels, and build a greater understanding and interest in the role of water for food security (GWI-EA, 2014). To increase information flows and create evidence-based advocacy, GWI-EA established learning and practice alliances (LPAs) in Ethiopia, Tanzania, and Uganda to link farmers, especially women, with local governments, research institutions, and NGOs through action research.

An LPA is a multi-level, multi-stakeholder platform that uses stakeholder-led research to inform interventions. Action research groups comprised of LPA members research the effectiveness of various water management techniques, which are implemented by Champion Farmers. Champion Farmers are selected by their communities to adopt the new farming techniques and serve as models for other farmers to emulate. The LPAs hold regular meetings and trainings, and at the conclusion of each research cycle, action research groups, Champion Farmers, and other LPA members share their findings and provide feedback on experiences to inform the subsequent research cycle. By involving stakeholders from different institutions and levels of governance in action research, GWI-EA hopes to increase awareness of the challenges that farmers face and encourage investment in management of water for smallholder agriculture.

This report focuses on two of the three GWI-EA project areas, Otuke District in Uganda and Dera Woreda (district) in Ethiopia. Otuke District is located in the Northern Region and receives 1,000 to 1,400 mm of rainfall during its two wet seasons. Following the conflict with the Lord's Resistance Army (LRA) and years of violent cattle rustling by pastoralists from Karamoja, a neighboring sub-region, the current residents are now working to resettle

and recover their livelihoods. The LPA in Otuke is working with Champion Farmers, WHH, research institutions and local and national government officials to learn about and encourage the use of improved water and soil management techniques. Action research is currently underway, with some studies complete and groups expected to present their results in the coming months.

Dera Woreda is located in the Amhara Region on the southeastern edge of Lake Tana, Ethiopia's largest lake and the source of the Blue Nile. The woreda receives 1,000 to 1,600 mm of rainfall annually and has numerous rivers and significant groundwater resources. Despite such abundant water resources, farmers lack effective water harvesting and management technologies and tools, making dry seasons especially difficult. A long history of intensive agriculture has led to land degradation, while rapid population growth has fragmented farmers' holdings. Action research in Dera has focused on irrigation technology and agronomy. This work is supported by the national Household Irrigation Program (HIP).

This evaluation was designed to assess the efficacy of the LPA model in bringing diverse stakeholders together to influence change across multiple levels of society and government.. Research areas addressed in this report include process, impact, compatibility with program frameworks, enabling factors, and gender (see Annex 1 for specific research questions).

Literature Review of Learning Alliances

LPAs, although relatively new, draw heavily upon learning alliances (LAs) and incorporate action research and social learning (Moriarty et al., 2005). LPAs are very similar to LAs, and are sometimes used synonymously. However, GWI EA views them as two distinct platforms. IMAWESA (2011) defines a learning alliance as a “process for identifying, sharing, adopting and implementing good practices –solutions to problems- in the fieldto form a partnership to work and learn together to solve practical development problems.” Verhagen, Butterworth, and Morris (2008) frame LAs in a different light by defining them as “interlinked multi-stakeholder platforms formed at appropriate levels...to do things differently rather than to do different things, in order to have more impact on policy and practice.” According to Lundy (2004), LAs are established with a number of objectives in mind. First, LAs typically seek to use research outputs to bolster or inform existing or planned development interventions. LAs also aim to track “use, adaptations, improvements,

and adoption of methods and tools by users over time.” Further, LAs are used to identify and document outcomes of development projects. Finally, LAs serve to “foster long-term, collaboration and effectiveness, both of development practitioners and researchers” (Lundy, 2004).

Lundy, Gottrett, and Ashby explain the need for LAs in their article “Learning alliances: an approach for building multi-stakeholder innovation systems” (2005). Primarily, LAs help development organizations and research institutes develop and share knowledge about best practices, in addition to strategies that have not worked and the reasons for their failure. LAs also give participants the opportunity to learn from each other despite organizational and geographic boundaries, encouraging broader perspectives on development topics. Furthermore, LAs promote innovation by exposing participants to various successful strategies and interventions and giving them an opportunity to learn why these particular activities worked. De Vries (2007) adds to this discussion by acknowledging that “interventions depend on local biophysical and socio-economic factors, as well as on local institutions and legislation” and therefore a flexible, multi-stakeholder approach like LAs are necessary. Lundy (2004) also highlights the usefulness of LAs in bridging the wide gap that has traditionally occurred between research and practice. LPAs, based on the LA model, are distinguished as global-influencing models fostering innovation and rapid scale-up with a greater emphasis on collaborative learning, both horizontally and vertically, taking various knowledge sets into different decision-making environments (GWI East Africa Team, 2013).

Methodology

Qualitative research methods were used in Uganda and Ethiopia to evaluate the LPA framework implemented by GWI-EA between May and July of 2014. In Uganda, the evaluation was conducted in all three of the project subcounties (Olilim, Orum, Ogor). Data were collected from 18 Champion Farmers (nine women and nine men), 21 LPA members (two women and 19 men¹) and two GWI-EA staff (both women, one of whom is an LPA

¹ In Otuke District and Dera Woreda, very few government positions are held by women, meaning there are few women available to participate in the LPA. In Otuke, three women, in addition to one GWI-EA staff, are members of the LPA, only one of whom was available during data collection. Similarly, there are approximately five women participating in Dera’s LPA, four of whom were interviewed.

member and included in the count of LPA members) (see Annex 2 for a list of study participants). Champion Farmers were interviewed on their farms while LPA members and GWI-EA staff were interviewed in their respective offices.

The LPA in Ethiopia is located in the Amhara region in Dera Woreda, and the evaluation was conducted in four of the six project kebeles (lower districts) (Jigna, Korata, Ema Shenkero, Tebabari). Data were collected from 10 Champion Farmers (five women and five men), 17 LPA members (four women and 13 men¹), and two GWI-EA staff (one man and one woman, both of whom are LPA members and are included in the count of LPA members). Champion Farmers were generally interviewed in public locations in the woreda, with the exception of two farmers interviewed on their farms. LPA members and GWI-EA staff were interviewed in their respective offices.

Champion Farmers, LPA members, and GWI-EA staff participated in the evaluation through individual interviews and focus group discussions. In both countries, sampling was purposive to reflect male and female perspectives when possible. Sampling was also based on availability and convenience as the researchers generally had to move throughout the field with GWI-EA staff and work within the schedules of the LPA members.

The MSC tool (see Annex 3 for research tools) was selected for interviews with Champion Farmers to create a narrative of their experiences in the LPAs. The MSC tool was also selected to explore differences between male and female farmers' experiences and any changes the LPAs may have produced in social capital.

FGDs were held with LPA members and occasionally included GWI-EA staff. AAR and SWOT analysis were conducted during the FGDs, in addition to gender analysis in the case of Ethiopia.² AAR and SWOT are ideal tools for group settings to generate and discuss many ideas in a relatively short period of time. AAR was chosen as a quick and simple method to understand the process of creating the LPAs. AAR was particularly useful in contrasting anticipated versus actual experiences, which is important when evaluating new frameworks such as the LPA. SWOT analysis provided an opportunity to reflect on past experiences while also projecting future threats and opportunities.

KIIs were used with LPA members, GWI-EA staff, and, in the case of Uganda, Champion Farmers. KIIs evoked more in-depth conversations with evaluation participants; question

² Due to various logistical constraints, only one FGD was held in Uganda with an action research group. The FGD was strictly limited to one hour, so gender analysis was not included. However, many of the FGD participants were also part of KIIs, which included gender analysis questions.

topics included impact, gender, and social capital. GWI-EA staff were also questioned about the LPA concept framework. KIIs were reflexive; experiences in earlier interviews informed and enhanced questions used in later interviews. As a result, richer data were gathered as context-specific details emerged in Ethiopia and Uganda. Where FGDs could not be arranged, KIIs also served as a means to deliver AAR, SWOT, and gender analysis questions.

Collected data were first transcribed and then coded using the qualitative data analysis software MAXQDA. Codes were analyzed to reveal themes related to project impact, strengths and opportunities, weaknesses and barriers, gender, social capital, and sustainability within both LPAs. The codes also highlighted discrepancies between the LPAs and differing responses among the various project stakeholders. Program reports, field observations, and field notes were used to supplement research findings.

Limitations

Sample size and participant availability: Participant availability in Uganda limited the possibility to hold FGDs. Only one FGD could be arranged and it was restricted to one hour. This reduced the breadth of information received and limited AAR and SWOT analyses to individual interviews. The original evaluation design for Ethiopia included interviews with at least 20 of the 63 Champion Farmers. However, the evaluation was conducted during the rainy season when farmers were plowing and planting their plots. As a result, farmers' availability was limited and only 10 farmers could be interviewed. Meetings with certain LPA members in both countries were also difficult to arrange due to heavy workloads. Furthermore, there are fewer female LPA members, so sampling included a larger proportion of male participants.

Respondent bias: Respondents may have had an interest in providing false answers if they believed that certain responses may lead to increased program support. The objectives of the study were explained to interviewees to help avoid respondent bias. Respondents may have also felt uncomfortable criticizing the LPA in the presence of GWI-EA staff. Researchers tried to minimize the presence of GWI-EA staff during interviews, but in many cases it was unavoidable. In Uganda, a GWI-EA intern was the translator for interviews with Champion Farmers and a GWI-EA staff member participated in the FGD; interviews with LPA members were conducted independently. In Ethiopia, GWI-EA staff were present for

three Champion Farmer interviews and several FGDs. Interviewees' openness to providing both positive and negative feedback was interpreted as an indicator of low respondent bias.

Translation bias: Responses may have been skewed while translating questions and answers between English and the local languages. Although time was given to translate the questions, some aspects of responses may have been lost in the translation process. Using translators that understood the LPA well was important; however, researchers learned that the LPA framework can be difficult to convey across languages.

Research questions: Once data collection began, researchers found some of the research questions were not appropriate for the current stage of the LPA lifecycle. In particular, questions related to long-term impact and the success of the LPA were unsuitable; at the time of writing, the first cycle of the Ethiopian LPA had just concluded and in Uganda it was still underway. Interviewees did not feel comfortable making judgments about impact at such an early stage, particularly given the experimental nature of the program. However, interviewees had many opinions about project sustainability, so aspects of this topic were more readily pursued. The MSC method was also more difficult to implement given the LPA lifecycle, particularly in Uganda. Because a first harvest had not been completed, farmers were not able to provide examples of change beyond knowledge gained from trainings. Instead, discussions typically revolved around expected changes in their lives and households post-harvest.

Process

PROCESS TO DATE

The creation of the LPA in Otuke District has been led by GWI-EA's Local Coordinator, Miriam Imalingat, and Policy and Advocacy Manager, Violet Alinda. The LPA began in February 2014 and the first research cycle was ongoing at the time of writing. An initial meeting was held in Lira with GWI-EA staff and potential LPA members that had been identified from research institutions, local NGO partners, and members of Otuke's local government. The concept of the LPA was discussed, research groups were formed, and roles were defined. Early on, district government officials and 10 of the 13 original Champion Farmers were taken on an exchange visit to Masaka and Rakai, two districts in southwestern Uganda, where they were exposed to agricultural techniques for water conservation. There are now 24 Champion Farmers, half of whom are women, in three of

Otuke's six subcounties. The Otuke in LPA has partnered with WHH, a German international NGO, to implement soil and water conservation techniques with the Champion Farmers. A baseline study on food and water security in Otuke District was completed to bring local political attention to related issues and provide a benchmark to compare future progress.

The creation of the LPA in Dera Woreda in Ethiopia has been facilitated by Bethel Terefe, Program Policy Adviser, and Tesfaye Ewnetie, Research and Learning Adviser. The LPA in Dera was established in September 2013, and the first research cycle was completed prior to data collection. The launch meeting was held in Debre Tabor. Government officials, GWI-EA staff, and individuals from Bahir Dar University and the Amhara Region Agricultural Research Institute attended the meeting. The GWI-EA staff introduced the LPA concept to the participants, research topics were discussed, criteria for site and Champion Farmer selection were agreed upon, and roles were defined. Ultimately, 63 Champion Farmers, over half of whom are women, were selected from six kebeles in discussion with the woreda-level Agriculture Office. Action research groups were formed around irrigation technology and improved agronomic practices. Demonstration plots were established, trainings were provided for the Champion Farmers, and inputs such as seeds, fertilizers, and pumps were distributed. Each action research group produced a report and presented their findings to the LPA in March 2014.

PROCESS: EXPECTED VERSUS ACTUAL EXPERIENCES

In general, few differences between what was anticipated for the LPA and what has actually happened were cited in Otuke District. The LPA is broadly viewed as a fluid learning process where knowledge is learned, questioned, and relearned. For this reason, expectations were not rigidly developed for the LPA. Additionally, a learning platform such as the LPA has not occurred in Otuke. This made the concept somewhat difficult to envision, so participants were initially unsure of what to expect. Overall, interviewees seem satisfied with the LPA results so far. At the onset of the program, some LPA members doubted the LPA would differ from typical NGO interventions. However, due to their participation in the LPA, they now recognize the program as a "value-added" intervention.

Nevertheless, there were a few instances identified when the process of creating the LPA differed from what was expected. In Uganda, the LPA was originally designed with three rigid action research groups tied around capacity building, research, and policy influencing. However, a visit to Research-inspired Policy and Practice Learning in Ethiopia and the Nile region (RiPPLE), a water, sanitation, and hygiene (WASH)-sector LPA created in 2006 in

Ethiopia, revealed that “living structures” that evolve based on interest, topics, themes, and issues at a given point in time are more appropriate. With this in mind, the action research groups were modified to allow for more flexibility.

Moreover, the launching of Otuke’s LPA was delayed for several reasons. First, it was difficult to identify a capable implementing partner due to a limited number of NGOs working in the sector. WHH was eventually identified and is now providing extension services to the Champion Farmers. An additional setback occurred due to the remoteness of Otuke District and seasonal road conditions, but this has been mitigated with early planning of LPA activities. Finally, some LPA members expressed an expectation that the LPA would have reached all six subcounties by this point in the program. This was likely due to unclear communication or misunderstanding of the LPA’s purpose and activities.

In Ethiopia, LPA members explained that, for a number of different reasons, the LPA process has met or exceeded their expectations. As in Uganda, there was uncertainty about what to expect because of the flexibility and novelty of the approach, but they felt that the program has adhered to the plan presented at the launch meeting. A few participants described negative experiences with other NGOs, shaping low expectations for GWI-EA. However, through their involvement with the LPA, they now recognize the value of the participatory, multi-stakeholder approach. One LPA member expressed his initial concern that, like many research projects, the LPA would be theoretical, but was glad that the research has led to tangible interventions. Others were surprised by the scope of the program and appreciated its wide-scale application from the household through the zonal level.

However, the process of creating the Ethiopian LPA was not without issue. Scheduling and coordination were frequently cited by LPA members as areas of concern. GWI-EA staff and research institution members explained that government participation was lower than expected due to other work obligations. Attendance of government officials was high at LPA meetings, but they were frequently absent during action research. Conversely, government officials expressed frustration with the research institutions for scheduling research meetings at inconvenient times. The action research was conducted during one of the busiest times of the year for the agriculture officers, limiting their ability to participate in LPA activities.

Additionally, there was concern that interaction between sectoral offices and action research groups was limited. The GWI-EA staff expected there to be experience sharing and coordination on certain topics between action research groups, neither of which occurred.

The Micro-Finance Office had hoped that there would be more interaction between their office and the woreda Agriculture Office in order to create stronger linkages between farmers and small enterprises.

Impact

ACCOMPLISHMENTS TO DATE

There have been a number of physical impacts that have occurred in Otuke since the LPA's groundbreaking in February. WHH and three interns working as extension agents for GWI-EA have trained Champion Farmers in ridging, mulching, pruning, pesticide spraying, plant-spacing and planting in rows, staking, and composting farmland manure. All Champion Farmers have used these new methods for planting tomatoes and onions, in addition to receiving banana and/or pineapple suckers. Tomatoes and onions have been grown alongside control plots, serving as demonstration sites for visitors to view. For Champion Farmers who are not proximate to a water source, large water pits have been dug to collect rainwater that will be used throughout the dry season. All of the pits have been lined by WHH and the GWI-EA interns, cement and bricks have been supplied to cover the pits, and several of them have already filled with rainwater. Because a first harvest has not been completed, the extent of the impact of these new enterprises is unclear. However, the MSC method revealed that the knowledge and skills acquired from the LPA have been the greatest change for the Champion Farmers. With this knowledge, the Champion Farmers expect the impact to be increased production and profits, which they intend to use to pay school fees, buy food to keep in the house, pay for medication, and eventually build a tin-roofed house.

The impacts in Otuke have also extended to the Champion Farmers' farmer groups and VSLAs. VSLAs have been implemented in the district through previous programs by various NGOs. Farmer groups refer to groups of proximate farmers that share labor on each other's fields; these groups have been internally established by the farmers themselves. Overall, group members have been excited to have a Champion Farmer in their group and see the Champion Farmer as a mouthpiece to express their interests and needs to the local government. The groups have participated in agriculture trainings and Champion Farmers are hosting group seedling plots. One interviewee cited a negative response from his group when he was profiled as a Champion Farmer—they were jealous they would not receive the

same benefits—but feelings were mended when the group plot was formed. These plots are intended to be maintained by the entire group, but a few Champion Farmers discussed issues with getting all group members to share watering and weeding responsibilities. Some group members have begun adopting new farming methods on their own farms, such as mulching, composting, ridging, and digging water pits. There has also been a noticeable interest in the LPA from farmers outside of the farmer and VSLA groups; some Champion Farmers have had as many as 30 neighboring farmers come to see their work. Visitors have expressed a great interest in the new techniques, but few have begun adopting the methods. Reasons given for farmers not adopting include limited access to seeds and inputs, lack of labor and technical skills, and a desire to learn from the first harvest which crops and technologies are most suitable.

In Ethiopia, Champion Farmers have received trainings on irrigation agronomy and systems, water management techniques, seed multiplication and handling, and planting, harvesting, and marketing times for seed varieties introduced for the local agro-climatic conditions. The trainings were given by experts from Bahir Dar University's School of Agriculture and the Amhara Regional Agricultural Research Institute. Plots have been created by the Champion Farmers, utilizing their new skill sets and inputs such as improved seed varieties, fertilizers, and pesticides. Most of the farmers are growing potatoes, tomatoes, onions, and green peppers. There are several farmers who have already harvested their produce with increased yields. These crops have also sold at higher prices, increasing overall incomes. New irrigation techniques have not been required thus far due to sufficient rainfall, but the farmers are looking forward to utilizing these techniques during the dry season. Select plots are being used to demonstrate the new farming techniques to the community, showcasing the higher yields achieved compared to those of traditional methods.

Additionally, farmers outside of the LPA have noticed the success of the Champion Farmers. Such success is expected to attract farmers in the area to adopt the techniques that the Champion Farmers are utilizing. Farmers are particularly interested in the improved seed varieties of potatoes and tomatoes. Only one instance of negative attention was referenced by a Champion Farmer. He explained that some farmers in the community “sabotaged” his cash crops when they became jealous of his success. Left unchecked, such actions could threaten Champion Farmer investments in the new technologies and techniques.

Prior to GWI-EA, water pump maintenance was a major technical challenge for farmers. Pumps had to be taken to Bahir Dar for repair, a city more than 40 km from Dera Woreda.

Certain Champion Farmers and youths in the community have been trained in pump maintenance. This training will allow them to maintain their own pumps and those of other farmers without traveling to Bahir Dar, saving both time and money. Additionally, this training has created employment opportunities for local youths.

SOCIAL CAPITAL

The effects of the LPA on different dimensions of social capital were examined, including changes in trust and relationships among the different types of participants (e.g. champion farmers, government officials, researchers, etc.), champion farmers' perceived representation and voice in the public sphere, and participants' sense of belonging to a network of stakeholders. Changes in relationships between LPA participants and individuals external to the LPA were also explored.

Overall, Champion Farmers in both countries believe that the LPA has improved their relationship with the local government. Reasons for this improvement include more frequent visits from district leadership, district and subcounty officials participating in LPA monitoring, and perceptions that the inputs received through the LPAs are in part coming from local government. Additionally, many farmers report increased trust in local government because it was the government that approved the LPAs. In Uganda, Otuke District recently committed 4 million Ugandan shillings (Ush) to install drip irrigation for one farmer, and in June a group of members of parliament were brought for a field tour of the Champion Farmers' plots to see the impacts of the LPA. Champion Farmers located further away from the subcounty headquarters report less trust in the government and a lesser feeling of membership in the LPA due to infrequent visits from LPA members.

Champion Farmers in Uganda and Ethiopia believe their engagement in the public sphere has increased; the LPA gives them a platform to voice their needs and they now feel that they have representation in the districts through the district officials participating in the LPAs. Champion Farmers report that they have gained recognition both within and outside of their communities as a result of their involvement with the LPA. Several stated that they are now viewed by the public as people who have knowledge, people who support the community, and people who can contribute to the local economy. Champion Farmers' confidence has improved and they are ready to expand their production.

Among LPA members and Champion Farmers there is a unanimous appreciation for the LPA's engagement of a variety of stakeholders. The LPA members and farmers share experiences and work together as a team, creating a sense of unity and membership within

the LPA that did not previously exist. The exchange of indigenous and technical knowledge among farmers, researchers, and politicians was repeatedly cited as a major strength of the LPA. The new knowledge, experiences, and linkages provided by the LPA have benefited both communities and individuals. Some LPA members explained that, prior to joining the LPA, research findings and project outcomes were not shared between institutions and offices. Distance, as well as the frequency of interactions and field visits, are also factors influencing the sense of membership felt by farmers and LPA members.

As discussed, farmer and VSLA groups in Uganda are largely supportive of the Champion Farmers in their groups. The Champion Farmers' demonstration plots have served as educational sites for other farmers in the community. Many of these outside farmers have expressed interest in joining their farmer groups, joining the LPA, and partaking in group trainings facilitated by the Champion Farmers. There are several Champion Farmers that are also LPA members, and they are expected to relay information to the other Champion Farmers. However, interaction among Champion Farmers is fairly low (interviewees interact with fewer than five other Champion Farmers), with distance between farmers being the most common determining factor. All interviewees stated they would like to interact with more Champion Farmers in order to exchange knowledge, skills, and support each other. In Dera Woreda, Champion Farmers typically do not belong to VSLA groups or other types of networks, but many explained that they intend to organize mahiber (VSLA) groups with other Champion Farmers. Female Champion Farmers have tried to create a women's Champion Farmer group; they have so far been unsuccessful but hope to try again.

Compatibility with Program Frameworks

Overall, the GWI-EA staff and LPA members have been pleased with the LPA framework, particularly its participatory nature. For example, the project area, Champion Farmers, action research groups, and the process of data collection and analysis were all identified and agreed upon by the LPAs. GWI-EA staff feel that the facilitation process has gone smoothly; their facilitation has helped create legitimacy for the NGO locally and cultivated ownership of the project among the government and farmers. The facilitation role has helped strengthen relationships among LPA members, which is critical for the sustainability of the program.

The LPA model is a demand-driven approach; it is a participatory platform for identifying both the problems and the solutions. This differs from conventional program frameworks, which tend to be supply-driven with pre-determined solutions. Introducing a new model into the target areas has not gone without complications. One LPA member in Uganda highlighted that, although the program framework “may be a demand-driven approach, the LPA was not demanded by the people.” In other words, nearly all programs in the area are supply-driven by NGOs or the government; implementing the LPA, a program that requires generating demand, has underlined tensions between supply- and demand-driven approaches. This sentiment was echoed by other LPA interviewees who identified a lack of commitment from LPA members and a failure of the district to take ownership of the LPA at this point in time. This commitment may come with time as research results are solidified, but currently people fear “putting all of their eggs in one basket.” This introduces another pressure created by the program framework that was acknowledged by GWI-EA staff and LPA members during interviews—the program is results-based. In other words, action research uses the results of previous research cycles to inform subsequent cycles creating a feedback loop. The issue revealed through data collection is that, once the results are available, a judgment will be rendered, and the degree of success of those results in the eyes of the LPA participants will determine the buy-in of the local government and Champion Farmers for future research cycles.

An additional challenge with this new program framework has been defining what roles GWI-EA staff and the LPA members should play in program facilitation. Due to experience with conventional program frameworks, LPA members did not initially understand why it was their role to control and implement the LPA process. This misunderstanding has required GWI-EA staff to take on a more directive role in order to ensure the completion of LPA activities. However, as results are becoming visible on the farms, levels of commitment and involvement of many LPA members are increasing and it is expected that the LPA will continue to be transferred over to the community with time. For Otuke, it was suggested that a neutral facilitator, possibly from outside of the district, be identified to coordinate and direct LPA meetings. Currently, meetings have agendas but do not have a skilled facilitator to steer conversations. A skilled facilitator could help clarify roles and keep activities moving to increase district uptake of the LPA.

Facilitating the LPA has been more time-consuming than traditional program approaches. In particular, it is difficult to coordinate the various LPA members and have them lead the LPA process. Agreeing on research topics and questions has been a challenge for the GWI-EA staff in Ethiopia. GWI-EA did not have the resources to address all of the research topics

proposed and insisted the first research cycle be more narrowly focused than the LPA members had hoped. Furthermore, the LPA is a large group and members have ongoing obligations with their respective institutions and offices. GWI-EA staff must continually remind members of upcoming meetings and give project and research updates. The GWI-EA staff noted that a more directive role would help avoid some of these issues, but would contradict the participatory nature of the LPA.

Enabling Factors

INSTITUTIONAL FACTORS

Institutional Factors refers to the aspects of formal and informal institutions identified as present or absent in the program areas that facilitate or impede the effectiveness of the LPAs.

The local government of Otuke District is acknowledging the importance of water for production and willingly participating in actions that work toward water and food security. For example, the local government recently allocated Ush 4 million to a farmer in Olilim subcounty to install a drip irrigation system. This type of interaction between farmers and the local government that has not previously occurred. Otuke District has also provided an office for CARE and allows the LPA to convene meetings at the district headquarters. The National Agricultural Advisory Services (NAADS) is a public service that provides advice and extension to local farmers in order to increase agricultural productivity; their vision is much in-line with that of the LPA. NAADS representatives have been participating in the LPA and supporting the LPA efforts on the ground, and the organization has also been recognized by several LPA members as a possible avenue to mainstream the LPA once GWI-EA funding has ended. Although there is support for the LPA from the local government, understaffing is a notable issue in Otuke. This creates limited options for whom to select as LPA members and restricts the availability of LPA members as they try to balance multiple work roles with their roles in the LPA.

The Champion Farmers' farmer and VSLA groups have allowed knowledge to flow from the LPA to the communities. The groups have provided labor to the Champion Farmers, particularly in digging the water pits, and are eager to bring the new agricultural techniques to their own plots. The VSLA groups can also serve as a means of funding some small agricultural inputs, although they also serve an important funding role for cultural activities during holidays. GWI-EA's partnership with WHH has allowed project activities to

be implemented on the Champion Farmers' plots without requiring GWI-EA to have permanent staff in Otuke. The WHH staff have local experience and knowledge, making them effective agents in the community.

CARE's closest office to Otuke is Gulu, a town that takes several hours to reach. LPA members have expressed concern that GWI-EA does not have permanent staff in Otuke, particularly for the impact this has on the effectiveness of facilitation, and the conservation of time and resources. The research institutions that comprise a large portion of the research group are also located far from Otuke. Despite the important role these institutions play in the LPA, researchers are currently paid for their transportation and time, and it is openly acknowledged that this will likely not be sustained after GWI-EA's funding is no longer available.

In Ethiopia, the government is already tackling issues that GWI-EA hopes to address through the LPA. The government is implementing HIP, a program of the Agricultural Transformation Agency aimed at providing support to smallholders along the household irrigation value chain, and the Growth and Transformation Plan (GTP), a national plan to increase Ethiopia's GDP with an agricultural component focused on increased production of smallholders. The similarities of these national program goals to those of GWI-EA have excited government officials about participating in the LPA. Also, because government officials have participated directly in the LPA process, from defining selection criteria to participating in the action research, they have developed a feeling of ownership in the LPA and the research results. This was a sentiment repeatedly expressed during data collection.

As previously mentioned, Dera's government officials have a number of concurrent programs that have hindered their ability to fully participate in the research process. In future research cycles, it is important that meetings and research are scheduled during times convenient for all stakeholders. Commitment from government officers was discussed a number of times during data collection. For various scheduling and compensation reasons, government offices will alternate who is sent for LPA meetings and action research, despite GWI-EA staff requesting attendance from the same individuals. Furthermore, high turnover in the local government results in a loss of institutional knowledge, and orienting replacement members poses its own set of challenges. Lastly, GWI-EA is the sole NGO participating in the LPA. World Vision, the only other NGO operating in Dera, declined an invitation to join the LPA. Several other institutional concerns were expressed by study participants. There is an absence of suppliers in the target areas of both LPAs. Farmers in Otuke have a difficult time accessing fertilizers, pesticides, seeds, and

other inputs from within the district. In Dera, there is a lack of seed multiplication organizations and input suppliers. This limits the ability of non-champion farmers to adopt the new farming methods and the ability of Champion Farmers to maintain them. In the future, the LPAs will need to address this institutional challenge by identifying and linking more members of the supply chain to farmers.

INDIVIDUAL FACTORS

Individual Factors refers to specific individuals or groups of individuals whose particular behaviors, perspectives, or positions of power have enabled them to influence the effectiveness of the LPAs.

In Otuke District, GWI-EA has hired three interns to serve as extension workers to the Champion Farmers. These individuals live within Otuke during their contract, which allows them to work with the schedules of the farmers and communicate with each farmer on a weekly basis. Interviews revealed that these interns are the main point of contact between the Champion Farmers and the LPA. Interestingly, no Champion Farmer interviewees cited other Champion Farmers as their point of contact, and only those Champion Farmers that serve in the LPA cited other LPA members as their point of contact. The interns are also the only individuals who know the locations of all of the Champion Farmers within their respective subcounties and are required to move with research groups and staff that visit. These interns have been essential to implementing on-farm interventions and cultivating meaningful relationships between the LPA and the farmers. It is unclear what will happen to the lines of communication once these individuals have completed their contracts.

The Champion Farmers themselves are also enabling factors for the LPAs. They are very enthusiastic about the new methods being implemented on their farms. They are receptive to repeated visits from a variety of outsiders and are glad to mobilize their farmer and VSLA groups for trainings. Due to the insecurities that have taken place in Otuke over the past few decades, the Champion Farmers there are excited to make up for lost time and have an opportunity to improve their livelihoods. However, the Champion Farmers in both countries still lack a strong understanding of the LPA beyond the new methodologies they are implementing on their farms. For example, Champion Farmers in Dera call the LPA by a number of names, including “committee,” “organization,” and “government.” In Otuke, LPA meetings happen in English and the project documents have not been translated into the local language; there is not a term in their language for the LPA. As a result, interviews with

Champion Farmers required a significant amount of preparation by the translator before they were able to speak about the LPA.

Another issue that was repeatedly raised in Ethiopia and Uganda was the range of commitment levels of the various LPA members. Other work commitments, distance, and the voluntary nature of their membership were given as reasons for not prioritizing LPA activities. Ideally, individuals would join the LPA based on interest, but low government staffing means that some individuals have fallen into the LPA by default. There were a few suggestions given by interviewees to increase commitment levels. For example, the LPA may need to seek alternative promotional avenues, such as radio or newspaper inserts, to attract a wider audience of potential stakeholders. Creating open meetings with a theme that can be advertised in advance may also attract individuals with an interest in particular focus areas of the LPA. Stakeholders should be made more aware of the action research process and included in on-the-ground activities so that they are kept abreast of what is happening in the LPA and develop a greater interest in the program. One particular suggestion for Otuke is to create more institutional rather than individual linkages. For example, a terms of reference could be devised for each department that is involved in the LPA, rather than individual officers, so that duties can be shared and the effects of member turnover can be minimized.

FINANCIAL RESOURCES

Financial Resources refers to current and potential funds available from GWI-EA and/or other sources to support LPA activities. Financial resources also refers to perceived or projected financial limitations that may arise as the LPA evolves.

GWI-EA's financial resources are both enabling and disabling factors for the LPAs. GWI-EA pays for meetings, transportation for LPA members and farmers as necessary, per diems for meetings and research days, and the salaries for the staff that make the LPAs possible. Without this funding there would be no LPA. There are indications that some stakeholders are willing to contribute financial resources. As described previously, the district government in Otuke has committed Ush 4 million to one farmer for drip irrigation. In both countries, LPA members have acknowledged that certain portions of the LPAs could be easily adopted where there is overlap with government agriculture programs. Still, substantial financial support from the LPA stakeholders is required before GWI-EA can transfer leadership of the LPAs to the districts. Support from the central government for smallholder farmers and water for production is also an issue. For example, Otuke District

is a new district with limited funds. The funding that is received from the central government is small and generally comes with conditions. In Dera, there is currently no government funding for fruits and vegetables (the main crops promoted by the LPA), only staple crops such as teff and maize. The hope for the LPA is that it will be able to address some of these issues by advocating for favorable policies and increased funding. GWI-EA needs to strategically phase down its funding to allow the LPAs to become self-sustaining. LPA members from both Uganda and Ethiopia have acknowledged this issue and expressed their concern about the sustainability of the program. The funding issue, like with most programs, will likely be one of the most important challenges that GWI-EA will face as the program continues.

NON-FINANCIAL RESOURCES

Non-Financial Resources refers to non-monetary assets either present or absent in the program areas, internal or external to the LPAs, which may enable or disable LPA activities. This section also considers the degree of access to non-financial resources that are present.

In Otuke, district vehicles and meeting spaces were provided as enabling resources for the LPA. District vehicles incur no additional costs to the LPA and vehicle access can help sustain contact between district officials and the Champion Farmers. Land was also discussed as an enabling resource; in general, the Champion Farmers have large amounts of land that are not being cultivated, so there is ample room for controls and demonstration plots. However, this also means that Champion Farmers are located far from one another and from government offices. GWI-EA is implementing farming techniques that generally utilize resources locally available to the farmers. For example, compost is made from farmland manure, and mulch and shade structures are made from local grasses. Researchers in the LPA are also tapping into indigenous knowledge to search for natural pest solutions.

Compared to many woredas in Ethiopia, Dera is endowed with plentiful water resources. There are approximately 170 perennial and ephemeral rivers and streams, in addition to two major rivers, the Blue Nile and Gumera, which border the woreda. Dera also borders Lake Tana, the largest lake in Ethiopia. Such resources have certainly contributed to GWI-EA's accomplishments in this region. Many farmers used irrigation and/or pumps prior to GWI-EA, giving the project another advantage as these farmers readily accepted new technology. Compared to Uganda, the close proximity of three research institutions is also a

major advantage. Each institution has close ties to the area and does not have to travel far to conduct research.

A number of non-financial resource limitations were also identified by interviewees. In Dera and Otuke, tools and high-yielding seeds are not readily available to farmers through local markets. Lining, bricks, and cement were all used to finish the water pits dug by Otuke's Champion Farmers, resources that are difficult and costly to access. Similarly, in Dera, farmers cannot afford the tools required to maintain the pumps provided by GWI-EA, and are not interested in participating in credit schemes to cover these costs. More affordable water harvesting techniques and a context-specific distribution system for pumps and maintenance tools may need to be researched for easier uptake by other farmers. Other resource issues in Dera include GWI-EA's occasionally limited vehicle access and the increasingly small size of farms due to population growth and the lack of training for extension agents in some of the water management techniques that the LPA is advocating. . Finally, several Champion Farmers in Otuke cited labor as a resource constraint for maintaining the LPA projects. The LPA research group will be investigating the labor hours required for implementing and maintaining the various projects, and these results should inform which practices are most reasonable to implement.

SOCIAL NORMS AND CULTURE

Social Norms and Culture refers to the values, beliefs, attitudes, and behaviors reinforced by the societies of the program areas that influence the effectiveness of the LPAs. In addition to the social and cultural norms described here, others have been identified and grouped under the Gender and Social Capital sections of this report.

According to interviewees, farmers typically “believe by seeing.” This indicates the importance of having strong results from the first action research cycle in order to promote the uptake of methods by more farmers. Many Champion Farmers said that outside visitors and farmer or VSLA group members were waiting to observe the results of their first harvest before trying the methods on their own plots. Believing by seeing means farmers may be cautious with the time they are willing to commit to demonstration plots compared to the regular crops they grow. Careful investment of time and energy can be a survival tactic for areas that experience regular food scarcity, but it may be interpreted as laziness from an outsider's perspective. “Lazy farmers” was a challenge cited by LPA members and staff in Uganda. Efforts should be taken to understand more deeply what is causing behaviors that may be easily interpreted as lazy to non-farmers.

Gender

Gendered household and farming roles and patriarchic cultures in Otuke and Dera have raised challenges for the LPA. Women are disproportionately overburdened with tending to gardens, cooking, cleaning, and raising children. They have limited control over finances and household decision-making. In groups of men and women, men tend to dominate conversations while women take a more passive position, even physically situating themselves outside of the group. Moreover, discussions in Otuke also recognized a large degree of gender-based violence and male alcoholism within households. This section considers issues of gender equity within the LPAs, including the different experiences of male and female participants, current and proposed actions to address gender equity, and the engagement of women in the public sphere through the LPAs.

DIFFERENCES BETWEEN MEN'S AND WOMEN'S EXPERIENCES OF THE LPA

GWIEA staff believe there are differences between men's and women's experiences of the LPA due to the large household responsibilities of females that affect their ability to engage in LPA activities. However, the farmers themselves, both male and female, feel there are not gender differences in how the LPA is experienced, agreeing that all are capable farmers and all are receiving the same knowledge. In Otuke, LPA members recognize a general tendency for women farmers to work harder and follow the new farming practices with greater vigor and quality than men. LPA members in Otuke and Dera have noticed female Champion Farmers becoming more openly opinionated and vocal at meetings, which they credit to the LPA. Within the LPAs there are far fewer women than men serving as LPA members, largely due to a lower number of women working in the government.

ADDRESSING ISSUES OF GENDER EQUITY

Women comprise 50% of the Champion Farmers in both Otuke District and Dera Woreda. Otuke's District Agricultural Officer explained that the inclusion of women in the LPA is slowly being addressed; currently, the LPA requests that men bring wives to meetings and encourages women to voice themselves during LPA activities. Initially, in Dera, there was resistance by male LPA members to have 50% female farmers. However, female LPA members pushed for this representation and there is now growing acceptance of this decision. The female Champion Farmers even held a women's day, coordinated by GWIEA, where the women farmers shared experiences with one another about their involvement in

different trainings. Other than these examples, interviewees agree that the LPAs do not typically take direct action to address equity in gender relationships.

However, a common response from interviewees was that both LPAs are indirectly addressing issues of equity in gender relationships. When female Champion Farmers receive profits from their harvests, interviewees believe they will be able to use this money to cover household expenses that fall under the responsibility of women, including paying for school fees, keeping food in the house, and paying for medication. In Otuke, farmer and VSLA groups have more female than male participants, so the quantity of women engaged by the LPA is thought to be greater than that of men. The action research groups do not currently consider gender, but there was discussion during data collection to measure how female Champion Farmers balance and control time and resources. In Dera, interviewees explained that women LPA members are strong participants and are influencing the direction of the LPA towards more gender-specific issues.

In Otuke District, interviewees were divided over whether or not the LPA should do more to address gender equity at this time. A few LPA members believe the LPA should not address gender issues directly until people are settled into the LPA. They argue that mindsets and social norms change slowly, so the current status of gender equity within the LPA is acceptable. However, in both countries, most LPA members, as well as male and female Champion Farmers, expressed a desire for the LPAs to do more in this area, and they were eager to provide suggestions. Champion Farmers described gender-specific challenges both in the field and the household. They believe the LPA could help with these challenges by training them in resource use, financial literacy, and “how to live more harmoniously within a household.” Several female Champion Farmers also mentioned they would like to have money to start up a group business to have greater control over resources. Multiple LPA members advocate for a component of the LPA to address financial literacy, adult education, and confidence-building; gender training to teach men and women how to divide roles and responsibilities both in general and for water harvesting in particular; and targeting men with sensitization to understand the family benefits received from supporting women in agriculture. In the future, LPA meetings may need to happen at the village level at a time and location determined by the women, and the nature of meetings may need to be rethought to be more conducive to women’s work. Further, more could be done to target specific categories of vulnerable farmers, such as widows or widowers and single parents.

ENGAGEMENT OF WOMEN IN THE PUBLIC SPHERE

Female Champion Farmers in Otuke and Dera report that their engagement in the public sphere has increased with the LPA. Initially, female Champion Farmers were quieter and did not express their opinions, concerns, and challenges as strongly as male Champion Farmers. LPA members have noticed that women are beginning to feel more comfortable speaking up during meetings because of encouragement by the LPA. The inclusion of female farmers has highlighted the work ethic and capabilities of women. The visibility of gender issues and the success of female Champion Farmers have improved perceptions of women within households and communities. One LPA member stated that, due to the LPA, “now we know that there are serious women farmers.” The Women Councilor for Ogor subcounty in Otuke District believes that the engagement of women in the LPA is inspiring change at the household level. She described recent instances where women have negotiated with their husbands to keep a portion of food within the household for food security, rather than selling it all. In Otuke and Dera, the public attention brought to Champion Farmers has encouraged some men to actively share in laboring over the new farming methods, participate in conversations when visitors come to their farms, or take up some of the household chores. The LPA members within the Dera Woreda’s Woman and Children Affairs Office stated that their office has received increased recognition due to their active participation within the LPA.

Lessons Learned

With the LPAs only in their first year on the ground, it is really too soon to confidently project the overall success of the approach. Although there is a largely positive sentiment regarding the LPAs at this stage, there seems to be a relatively even division in personal opinion over whether the LPAs will or will not be sustained. In another year, LPA stakeholders should have a much clearer idea of what techniques work best for managing the LPAs and implementing on-farm interventions. In Uganda, Champion Farmer selection criteria is already being reviewed so that the next cycle of the LPA can be even more robust, and indicators for measuring impact are currently being designed. The results of the first action research cycle will need to be of high quality and well-presented to maintain and attract LPA commitment. In Ethiopia, the first action research cycle has been completed and the results have been shared with the rest of the LPA members. It remains to be seen whether or not the government will allocate funding for practices advocated by the LPA.

The GWI-EA staff in Ethiopia are currently preparing for the second cycle of action research and trying to overcome scheduling issues that arose during the first cycle. Despite these uncertainties about the future, there are already lessons regarding success and sustainability to be learned and issues on the horizon that the LPAs will soon begin preparing for.

Factors that may prohibit the LPAs from being successful and sustained beyond GWI-EA hinge largely upon LPA ownership and funding. From data collection in both Uganda and Ethiopia, it appears that support for the LPAs from local governments is present—officials see the LPAs touching lives within the communities and interaction with the local government is slowly creating district buy-in—but GWI-EA staff, LPA members and researchers agree that the government has not yet taken ownership of the LPAs. As one LPA member put it, the LPAs are still seen as an “NGO push.”

As discussed, distance of LPA members from Otuke has been a factor affecting commitment and participation levels. Distance within Otuke District has also posed challenges, as farmers and LPA members have expressed difficulty moving from the villages to the subcounties and district headquarters. One suggestion is for LPA meetings to happen at the parish level (one level below the subcounty) to increase attendance and levels of interaction. Another suggestion supported by several interviewees in Otuke is for the LPA to become an independent body, either an NGO or community-based organization (CBO) created within Otuke and distinct from CARE and GWI-EA to function in a politically neutral manner and with greater power given to the farmers.

In Dera, scheduling logistics is one of the major factors limiting engagement in the LPA. Special attention needs to be given to the members’ work schedules, and meetings and action research times need to be planned to accommodate as many members as possible. GWI-EA staff have frequently suggested the importance of limiting the number of LPA members, which would make coordination and scheduling of meetings more manageable. On the other hand, LPA members suggested that multiple representatives from each office be elected as LPA members so that scheduling conflicts and turnover do not result in limited engagement or loss of knowledge.

As previously discussed, funding is a critical challenge faced by the LPAs. In both countries, the action research groups and the participation of research institutions are essential to the LPAs, but GWI-EA staff and LPA members acknowledge that these groups cannot be maintained without funding. By the third year of the LPAs, new funding sources need to be actively sought out. Ideally, funding would come from a government budget allocation, but

whether or not this will be possible remains unclear. Resources can be conserved if the LPAs are incorporated into the local government's normal extension practices. Common interests between the LPAs and government programs may make LPA institutionalization fairly easy. For example, NAADS in Uganda is providing extension services in all districts and subcounties to improve access to agricultural information and improved technologies. GTP in Ethiopia is also working to expand extension services, improve smallholder production, and strengthen agricultural market systems. As the LPAs are transferred from GWI-EA to the government another necessary component recognized in interviews is the empowerment of farmers. For the LPAs to function more independently, farmers will need to develop the confidence to speak out and seek advice directly from district officials, rather than through field staff or interns alone. Final factors identified as necessary for sustaining both LPAs are advocacy for by-laws that promote water-smart agriculture and use of water for production, as well as establishing linkages and creating support along the supply chain for agriculture inputs, service providers, value-added processing, and market access.

Conclusion

As this report illustrates, GWI-EA has already achieved a degree of success through the LPA framework. The relationship between local government and Champion Farmers has been strengthened noticeably, and new relationships have been established among LPA members who previously did not interact. From the evaluation team's perspective, these are noteworthy accomplishments and strong indicators of sustainability. Clearly, various challenges can arise from multi-stakeholder-driven program approaches, but many of the issues discussed in this report are context-specific and broader points can be taken from the LPAs analyzed here to serve as learning opportunities for future LPAs. Additionally, GWI EA will be able to use learning from the LPAs to date to further inform and promote WaSA at the local, national, and regional levels. In conclusion, the evaluation team believes that the LPA framework is a promising approach for bringing together stakeholders from different sectors and levels of society to increase awareness, investment, and collaboration for a wide range of development issues.

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Annexes

ANNEX 1: SCOPE OF WORK

Scope of Work for Learning and Practice Alliance Research
CARE, Global Water Initiative East Africa

Background

A learning and practice alliance is a facilitative learning approach developed by the RiPPLE³ consortium in Ethiopia. It is based on the learning alliance model, which is similarly a multi-level, multi-stakeholder platform for learning, but with more emphasis on the use of the learning. The basic philosophy of an LPA is that learning to achieve results (meaning positive changes for target beneficiaries) is essentially (or should be) a collaborative project, drawing together stakeholders with knowledge and experience, different skills sets and capacity to take knowledge into different decision-making environments.

At the same time, this process is problem-oriented and seeks to achieve change through supporting the identification and, where feasible, the implementation of practical solutions. In the case of GWI-EA the focus is on challenges that smallholder farmers face due to variable rainfall and barriers to water capture, storage and distribution. Water is a key constraint to sustainable agricultural production at a local level and how this constraint may be overcome through investments in better resource access, storage, distribution and management, as well as associated interventions that address soil moisture management, are central to our purpose.

Given the complex nature of these water management challenges for smallholder farmers, an LPA provides breadth of experience and depth of knowledge, and, it is anticipated, can help achieve sustainable solutions for smallholder farmers and ones that are embedded in and derived from the local social and institutional environment.

At CARE, we have a vision for ambitious levels of change at national and global levels and believe that learning and practice alliances are a promising structure to bring multiple actors together in service of change at this level. In addition, given the low levels of female

³ www.rippleethiopia.org

involvement in learning and decision-making bodies and the gendered nature of water+, we believe that a gender-focused approach to learning alliances is much needed. The intended research within GWI-EA constitutes the first and most significant contribution to a global learning agenda on learning and practice alliances and similar approaches within the water+⁴ sector at CARE

Researchers

The researchers for this assignment are Jillian Kenny, Nathan Kennedy, and Biruh Zegeye, three first-year masters in development practice students at Emory University.

Activities

The assignment will be divided into two components:

The researchers will visit the GWI-EA programs in Ethiopia and Uganda over a 10 week period to address questions 1, 2, 4, 5 and 6 from the Global Learning Agenda on Learning and Practice Alliances (Appendix A). They will use the following research methods:

Key informant interviews with Most Significant Change component (relevant to all questions in the learning agenda)

Outcome mapping - secondary data (all questions)

After Action Review (question 5)

Customized survey with Most Significant Change component (all questions)

Social network analysis (all questions)

Problem tree analysis (question 2)

Desk review of project documents and budgets and grey literature regarding learning alliances (all questions)

Focus group discussions with LPA members, with GWI-EA team, etc. (all questions)

In addition, the researchers will devote 30% of their time to provide research and communications-related support to the GWI-EA programs in Ethiopia and Uganda as dictated by the ongoing needs of the program.

The assignment will be carried out in four phases:

⁴ A term referring to work both in water, sanitation and hygiene (WASH) and water resource management.

Preparation (Present to May 22). The researchers may be contacted to meet with the primary supervisor in order to discuss research tools and logistics. They may be asked to give feedback on tools or conduct some light research about the tools within the limits of their ongoing academic schedules.

Phase 1 (May 21-June 4) – Induction. This period will be used to learn more about the program in the respective countries and regionally, consult with key staff, refine and test the research methods and revise the logistics plan. Both researchers will start this phase in Ethiopia, through attendance at the GWI-EA Annual regional meeting. Nathan will continue on to Uganda within 10 days.

Phase 2 (June 5 – July 9) – Data collection. This period will be focused on data collection using the refined tools. The researchers will spend this period in their respective research countries.

Phase 3 (July 10-July 30) – Synthesis and report writing. The researchers may chose to spend part of this phase in their respective research countries, or together in Uganda at the CARE GWI-EA office. They will be expected to discuss and cross-reference findings in order to inform a synthesis report of the two countries which also includes country-specific findings.

Other communications and research related support not directly related to the LPA research will cut across all three phases.

Deliverables

A synthesis report of findings with outline to be shared in advance with the primary supervisor. This report will consolidate findings from both countries but also identify country specific findings as appropriate

A catalog of all raw data

A suite of “Stories of Change”

Photo albums of the respective research projects

Appendix A

Global Learning Agenda on Learning and Practice Alliances at CARE

CARE Water Team

Last Modified 4/13/2014

Questions

Impact

What is the best way to measure 1) long term outcomes 2) intermediate outcomes 3) outputs accomplished by learning and practice alliances?

What has been accomplished by the learning and practice alliance so far?

Which of these accomplishments are intended and which unintended?

Is the learning and practice alliance an effective approach for reaching the intended impacts?

Compatibility with Program Frameworks

Conventional program frameworks tend to be supply driven (solutions are pre-determined through project activities) whereas at the heart of LPA's is a demand driven approach (creating a participatory platform for identifying both the problems and solutions). How have these tensions been managed within the LPA?

Models

What variations of the learning and practice alliance model exist in the CARE world (e.g. learning alliances, innovation platforms)

What is their optimal use if any within the following modalities:

Standard service delivery projects

Action-research projects

Advocacy projects

Capacity building projects

What is unique about learning alliances in the water sector?

Enabling Factors

What are the key enabling and disabling factors for learning and practice alliances in terms of

Institutions

Individuals

Resources (financial)

Resources (non-financial)

Social norms and Culture

Timelines

How can the barriers to each of these enabling factors be reduced or eliminated?

To what extent does the project design allow for adjustments that address these barriers?

Process

What has been the process to date of creating the learning and practice alliance.

How did it differ from what was anticipated?

What explains this difference between the planned and the actual experience?

How has this learning been fed back into the process?

Gender

What are the differences between men's and women's experiences of the LPA?

To what extent does the LPA address issues of equity in gender relationships?

Does the LPA increase the engagement of women in the public sphere and if so what are effects?

Sustainability

What are the key factors for sustainability of a learning and practice alliance?

What are the key factors for sustainability of the impacts of a learning and practice alliance?

When has a learning and practice alliance outlived its usefulness?

What steps should be taken to phase out or evolve a learning alliance?

Toolkit

The following are a list of suggested research tools and methods for answering the learning agenda questions:

Key informant interviews with Most Significant Change component (all questions)

Outcome mapping (all questions)

After Action Review (question 5)

Customized survey with Most Significant Change component (all questions)

Social network analysis (all questions)

Problem tree analysis (question 2)

Desk review of project documents and budgets and grey literature regarding learning alliances (all questions)

Focus group discussions with LPA members, with GWI-EA team, etc. (all questions)

ANNEX 2: STUDY PARTICIPANTS

| CHAMPION FARMERS INTERVIEWED | |
|------------------------------|-----------------|
| Uganda | Ethiopia |
| Agnes Atim | Abay Wale |
| Celestino Atupa | Ager Meherit |
| Florence Akello | Alemu Chanie |
| Jacinta Angom | Anguach Sendek |
| Jacinta Okullo | Gebeye Yirsaw |
| John Ango | Nibretu Gelaw |
| John Bosco | Seye Yiman |
| John Odongo | Sisay Walelign |
| John Ojur | Tigabu Demissie |
| Kelle Anyess | Tsehay Takele |
| Lilly Obua | |
| Martha Okech | |
| Mary Okullo | |
| Milton Ocen | |
| Patrick Aluk | |
| Peter Okello | |
| Santa Acen | |
| Sophie Acen | |

| GWI-EA STAFF INTERVIEWED | |
|--------------------------|---|
| Bethel Terefe | Program Policy Adviser - GWI-EA Ethiopia |
| Miriam Imalingat | Local Coordinator - GWI-EA Uganda |
| Tesfaye Ewnetie | Research and Learning Adviser - GWI-EA Ethiopia |
| Violet Alinda | Policy and Advocacy Manager - GWI-EA Uganda |

| LPA MEMBERS INTERVIEWED | |
|-------------------------|--|
| Ethiopia | |
| Anteneh Gelaye | CARE - North Program Office Project Manager |
| Birhanu Kebede | Bahir Dar University - Lecturer |
| Dagnenet Sultan | Bahir Dar University College of Agricultural and Environmental Sciences (CAES) |
| Embet Adane | Micro-Enterprise Office - Service and Business Officer |
| Eneye Asefa | South Gonder Zone Agriculture Office - Irrigation Agronomist |
| Getahun Tiruneh | Dera Woreda Agriculture Office - Crop Production Expert |
| Hailu Mazengia | Bahir Dar University - Vice Dean of CAES |
| Hunegnaw Andargie | South Gonder Zone Agriculture Office - Geologist |
| Jemal Umar | Dera Woreda Agriculture Office - Vice Head Officer |
| Mengistu Zewdu | Dera Woreda Agriculture Office - Officer |
| Metadel Taye | Dera Women, Youth, and Children Affairs Office - Office Head |
| Mucheye Asfaw | South Gonder Zone Agriculture Office - Soil and Water |
| Mulat Siraj | Dera Woreda Agriculture Office - AGP Coordinator |
| Tedla Derso | Dera Woreda Cooperation Office - Office Head |
| Tesfahun Fentahun | Debre Tabor University - Lecturer |
| Tesfaye Molla | Debre Tabor University - Research Director |
| Waga Asefa | Dera Women, Youth, and Children Affairs Office |
| Uganda | |
| Benson Ogwang | Otuke District Chairperson |
| Bonny Ojuka | Olilim subcounty Farmer Forum Chairperson |
| Bosco Omeid | Orum subcounty NAADS Coordinator |
| Daniel Odyng | Orum subcounty NAADS Coordinator |
| Denis Odur | Ogor subcounty Chief |
| Edison Obango | Welthunger Hilfe Field Officer |
| Geoffrey Bomi | Gulu University |
| Godfrey Otim | Ngetta ZARDI Research Officer |
| Hellen Beatrice Anyait | Orum subcounty Women Councillor |
| Miriam Imalingat | Local Coordinator- GWI-EA Uganda |
| Jasper Okengo | Ogor subcounty Local Council III Chairperson |
| Joseph Atia | Otuke District Assistant Chief Administrative Officer |

| | |
|----------------|---|
| Lawrence Otim | Olilim subcounty NAADS Coordinator |
| Martin Nyero | Gulu University Lecturer of Biosystems Engineering |
| Moses Ogwan | Olilim subcounty Agricultural Officer |
| Patrick Omedi | Welthunger Hilfe Field Officer |
| Robin Okello | Ngetta ZARDI Researcher |
| Samuel Ebonga | Otuke District Agricultural Officer |
| Stephen Otim | Agricultural Communication Network in Northern Uganda |
| Sylvester Ocen | Otuke District Community Development Officer |
| Thomas Anyuru | Otuke District Production Coordinator |

ANNEX 3: EVALUATION TOOLS

Most Significant Change Form Participant #: ___

Name of Interviewee: _____ Sex: _____ Age: ___

Household Size: ___ Type: _____ Village: _____ Kebele/Parish: _____

Size of land: _____ Area under crop cultivation: _____

Do you the storyteller:

Want to have your name on the story? Yes: ___ No: ___

Consent to us using your story for publication? Yes: ___ No: ___

Consent to us audio recording your story? Yes: ___ No: ___

1) Tell me what it has been like being a Champion Farmer so far.

2) Since becoming a Champion Farmer, describe the most significant change in your life.

3) Why is this most significant to you?

Focus Group Discussion AAR/SWOT Question Set

What is a Learning and Practice Alliance?

What has been your role in the LPA?

Have there been any differences in what you expected to happen with the LPA and what has actually happened? What are they and why do you think they happened?

What would you say are the strengths of the LPA? Why? Can you give examples of what has worked well with the LPA? Why do you think these aspects worked well?

What would you say are the weaknesses of the LPA? Why? Can you give examples of what has not worked well with the LPA? Why do you think these aspects didn't work well?

What have you learned while participating in the LPA? How can you use this learning as the LPA progresses?

What opportunities exist for the LPA to scale up or expand?

Do you see any barriers that limit the LPA's ability to scale up or expand?

How can these barriers be reduced or mitigated? Does the LPA adapt well to such challenges?

How do you think the LPA will evolve over the next five years? Do you think it can be sustained after GWI-EA has ended?

Key Informant Interview Question Sets

Impact

How do you measure long term and intermediate outcomes?

How do you measure outputs of the LPA?

What are the intended impacts of the LPA? Have these been achieved?

Do you feel that the LPA is an effective approach for reaching the intended impacts?

Have there been any unintended impacts of the LPA? Why did they occur?

Compatibility with Program Frameworks

In developing the LPA, CARE has played the role of facilitator and has allowed LPA members to identify both the problems and their solutions. Has this caused any tensions or challenges?

How have these tensions or challenges been managed?

What are the benefits of this strategy? What are the drawbacks?

Gender

Do you think there are differences between men's and women's experiences of the LPA?

What are they?

Does the LPA platform increase the engagement of women farmers in the public sphere? If so, what are the effects of this engagement?

To what extent does the LPA address issues of equity in gender relationships?

Is there anything you think the LPA could do to address issues of gender equity more? To engage women more?

Social Capital

To what extent has the LPA increased a sense of membership and belonging (to an association or network) among the participants?

To what extent has the LPA increased trust among LPA members?

To what extent has the LPA increased adherence to norms among LPA members?

Who do you feel the LPA belongs to?

Who do you give/receive information to/from about the LPA?

To what extent has the LPA increased the engagement of farmers in the public sphere?

To what extent has the LPA altered the relationship between the local government and farmers? Have you noticed effects on cooperation or levels of trust?

Additional Questions Used with Champion Farmers in Uganda

Can you tell me about the farmer/VSLA groups you are a part of?

What was the group response to you becoming a Champion Farmer? (negative/positive)

Have any group members adopted your new farming practices on their farms?

If yes, which methods? If no, why not?

Are there any farmers outside of your groups that you have come to see your new farming practices?

Have any of these farmers adopted? If yes, which methods? If no, why not?

How many other Champion Farmers do you interact with? Why does it help to interact with Champion Farmers? Would it help to interact with more Champion Farmers?

ANNEX 4: SOURCES CONSULTED

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Moriarty, P., Fonseca, C., Smits, S. & Schouten, T. (2005). Background paper for the symposium: learning alliances for scaling up innovative approaches in the water and sanitation sector. [Report] Delft, The Netherlands: International Water and Sanitation Center (IRC), pp. 1-52.

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